

PLAN FOR THE IMPROVEMENT OF THE NUTRITION COMPONENT OF THE

TITLE II PL-480 PROGRAM IN THE DOMINICAN REPUBLIC

(1984-1986)

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### Acknowledgements.

This consultancy has come toward the end of a long process of examination of the PL-480 Title II program which began with the evaluation of the program last August. The process has been participatory, calling for the cooperation and collaboration of many different institutions with different viewpoints. In the formulation of the nutrition program, we tried to continue the process. To accomplish this we needed the time, patience and good faith of the personnel of each agency and their counterparts to work through the details of the existing programs and to plan for a strategic reorientation of the program from one of feeding to one of development. At times, we are sure, the discussions were repetitive, and the questions seemed to have no end, but hopefully some of the discussions were valuable as true interchanges of ideas and thoughtful considerations of new alternatives.

We would like to thank all who worked closely with us in the formulation of this plan. We want to acknowledge that the ideas presented in these plans represent not only those of the consultant team but those of the entire working group (CARE, CRS, CWS, SESPAS, SEEBAC, CARITAS, SSID and USAID). Also, we would like to express our appreciation particularly to Jose Rodriguez (AID/W) and Don Soules (AID/DR) who supported the consultancy most importantly with unflinching optimism for the potential of the three year planning process and the reorientation of the program. We are grateful also to Fanny de Toribio for excellent secretarial support.

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GLOSSARY OF ABBREVIATIONS AND TERMS

ANEP	Applied Nutrition Education Program.
CEA	State Sugar Council.
Charla	A short lecture.
CONANI	Child Welfare Council.
CONAPOFA	National Family Planning Council.
FUDECO	Foundation for Community Development.
INDOTEC	Dominican Institute of Industrial Technology.
INESPRE	Institute of Price Stabilization.
MCH	Maternal and Child Health.
ONPLAN	National Planning Office.
PIA/PNAN	Interagency Program on Nutrition Policies.
PVO	Private Voluntary Organization.
RADECO	Community Radio Education.
SBS	Basic Health Service.
SEEBAC	Education and Fine Arts Secretariat.
SESPAS	Public Health and Social Security Secretariat.
SSID	Social Service Programs of the Dominican Churches.

I. BACKGROUND AND SCOPE OF WORK.

A two person consultant team, in collaboration with Food for Peace staff member from Washington was requested to work in the Dominican Republic for four weeks to aid the Mission, the private voluntary organizations (PVOs) handling PL-480 Title II food and their counterparts to design the nutrition component of the Mission's Three Year Plan (FY'1984-FY'1986). The special consultant team was brought to the Dominican Republic because the Mission has committed itself to a reorientation of the PL-480 Title II program from one of feeding to one of development, headed toward self sufficiency. The need for this new strategy became evident after the evaluation and audit of the program last year. Both of these reviews indicated that the existing program was having negligible impact of the nutritional status of the beneficiaries and the development goals of program communities.

Currently, the Three Year Plan has two major components: rural development and nutrition. This consultant team concentrated on the nutrition program which covers those projects with a nutrition improvement objective: mother-child health projects and nutrition recuperation centers, as well as projects with social development implications: non-formal education projects and institutional feeding. In addition to the nutrition projects, we reviewed the rural development projects and believe that the two components should be brought more closely together by 1) combining projects in the same community and 2) integrating basic nutrition education concepts with rural development projects particularly the food production and conservation projects.

The team met together or individually with a variety of individuals working in PL-480 Title II programs or related projects (see Appendix A). We spent six days visiting project sites to understand program realities, actual procedures and level of achievement of individual programs. We also spent a week in joint working group sessions with the PVO's and their counterparts. \* These three types of activities were necessary to complete the scopes of work:

- Nutrition Planner:
- 1) Integrate all PVO operational plans and other documentation on future PL-480/Title II nutrition related projects into a comprehensive detailed Three Year Plan for the nutrition component.
  - 2) Synthesize nutrition data and information and the GODR Development Plan as background for the Three Year Plan.
  - 3) Assess the nutrition recuperation/education activities (systems) of the PVOs and SESPAS. Define a recommended system.
  - 4) Assess the current surveillance and monitoring system of the SBS, PVOs, and define a practical, reliable system to be adopted for implementation by all agencies. Advise on a data management system.

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\*) Appendix B contains an agenda for the Workshop and a list of Participants.

- 5) Direct the group discussions on the definition of nutrition related interventions to be implemented by the three PVOs on an integrated program basis. Define the integrated plan in detail (goals, specific objectives, and roles of each of the PVOs).
  
- 6) To conduct working sessions with all involved agencies (in coordination with the Nutrition Education Advisor), results of which will be the basis for the preparation of the nutrition component of the Three Year Plan.

Nutrition Communicator:

- (1) To assist with the preparation of a detailed Three Year PVO Nutrition Program Plan.
  
- (2) To synthesize the PVO, SESPAS, and other agency background information on former nutrition education activities implemented in the Dominican Republic.
  
- (3) To assess the USAID/Education Nutrition Project in the Southwest region (Radio Educativo/Comunitario (RADECO) PL-480 Title II.
  
- (4) To develop with the three PVOs a Nutrition Education Plan that incorporates realistic, measurable educational goals, and objectives for each component within the Three Year Nutrition Program Plan.

The plan is to include training workshops, technical assistance needs, preparation of materials, etc.

- (5) To assist in planning and conducting working sessions with all appropriate agencies.
- (6) To assist the drafting of the final report of the consultant team, by preparing the nutrition/education component in close coordination with PVOs and SESPAS.

In addition to these items, the team was also asked to review and comment on the Operational Program Grant request from CRS for ANEP (Applied Nutrition Education Program). Since the ANEP has the potential to be closely united with the CRS/CARITAS Title II activities, this review provided us with an opportunity to see a model of what the PL-480 Title II Program might become as communities are prepared to "graduate" from the program. The major recommendation of the team for the OPG<sup>1</sup> was to strengthen education efforts and provide for additional money to allow for experimentation with new materials and methods.

## II. GENERAL DIAGNOSIS OF THE HEALTH AND EDUCATION SITUATION IN THE DOMINICAN REPUBLIC

### A. Health and Education Infrastructure

The Dominican Republic--like most developing countries--faces serious health and nutrition problems, particularly affecting children and pregnant and nursing women. A high percentage of this segment of the population suffers from undernourishment, chronic malnutrition and poor health and, therefore, has a high mortality rate at an early age.

The implementation of programs aimed at improving the health and nutrition situation requires, above all, the existence of basic health and education infrastructures which are efficient, have wide coverage and reach the different social strata. Unfortunately, production and service structures are characterized by their inefficiency--and this is typical in a situation of underdevelopment. This is particularly true in the areas of health and education. Therefore, failure often accompanies interventions which are well designed and have been tested at the local level or in pilot areas.

The Dominican Republic is no exception and has been shown to have many deficiencies and limitations in the health and nutrition field. The analysis of P. L. 480 Title II programs as well as other programs requires a careful analysis of the situation in order to identify the number and extent of these deficiencies and to explore the possibility of correcting them through the programs.

1. Health Infrastructure

The Public Health and Social Security Secretariat (SESPAS), administered by the Ministry of Public Health, is the government agency responsible for health care. Historically, the physical and personnel facilities have been concentrated in the capital (Santo Domingo) and in some urban centers such as Santiago. Rural Centers are usually operated by health workers with minimum supervision, even though theoretically this personnel should work under medical supervision (World Bank Report, November, 1982).

It is estimated that, at present, 60% of the population is covered by health services but the quality and quantity of these services leaves a lot to be desired.

The country has 40 hospitals, 314 rural clinics and 53 sub-centers or polyclinics, in addition to 8 specialized hospitals. There are 1.3 beds available per 100 population at the public hospitals, a figure which places the Dominican Republic at one of the lowest levels among the Latin American countries (according to PAHO statistics).

There are 6 doctors per 10,000 population, which is also low in comparison to other Latin American nations. The quality of medical training varies but is, for the most part, deficient. In addition to the National University (Universidad Autónoma de Santo Domingo) School of Medicine, there are other Schools (12) at several private universities, which operate completely

uncontrolled by the State. Close to 90% of the faculty works part-time, and basic applied research is negligible. In most private universities, instruction is only theoretical and there is no regular contact with the hospitals.

There is no training for intermediate health professionals such as nurses, nutritionists, midwives or lab technicians. Nutrition is excluded from most medical curricula, and there are no institutions to provide public health training.

There are 0.7 trained nurses per 10,000 population--the lowest number in Latin America according to PAHO.

Rural Clinics have a doctor and a nursing assistant. In general, the doctor is a recent graduate who must fulfill a one-year residence requirement in a Rural Clinic. The rural population makes little use of these clinics-- a situation explained by the lack of drugs (in most cases patients do not have the money to buy them), vaccines and minimum essential health care facilities. Two of the four clinics visited in the preparation of this report did not have water or electricity even though the utility connections had been installed and the physical facilities were adequate.

The physical facilities of the new Rural Clinics are of acceptable quality; however, the salaries paid to doctors are low and insufficient to support their families (US\$200 a month).

In an effort to increase health coverage in the rural areas, SESPAS

has initiated a "Health Promoters" Program. The women who take part in the program are chosen in the community and must pay periodic visits (twice a month) to 80-100 families. They receive a monthly salary of US\$20.00, and most of them know how to read and write even though the majority has a low level of education (2 to 4 years of primary school).

In accordance with SESPAS guidelines, these promoters must:

a) immunize the children; b) provide nutrition education, periodically weigh and measure community children; c) control of care for newborns by teaching the mothers rules of hygiene and health education, and detect symptoms of disease; d) detect diarrhea and provide oral rehydration using a pre-prepared saline solution when necessary; e) control and detect infectious diseases and prescribe the use of aspirin when necessary; f) promote water sanitation through boiling; g) detect pregnancies through visual exams for referral to rural clinics, and detect symptoms of disease in pregnant women; h) manage and control the use of reversible contraceptives; i) manage and control breastfeeding, and j) provide first aid in case of accidents, intoxications, shocks, acute diseases, etc.

The number of responsibilities is in sharp contrast with the time devoted to train the personnel who will accomplish them: two weeks plus 3 days for nutrition and monitoring instruction.

There are 5,182 health promoters at present in the Dominican Republic but

according to a recent report published by Management Science for Health (May, 1983, Boston, Massachusetts), "many of them have not had initial training and have been appointed by political reasons."

According to Antonio Ugalde, <sup>1/</sup> immunization is the only type of work efficiently accomplished by the promoters." Apparently, they also collect information on children's weight for the nutrition monitoring program (as stated by Dr. Rondón, SESPAS).

It is difficult to determine the number of referrals to rural clinics which are the direct result of the promoters' actions and the relationships existing between the promoters and the doctors working at the clinics. However, during our visit we observed that, on several occasions, children had been referred to Nutrition Rehabilitation Centers upon discovery of malnutrition by the promoters and that apparently the centers had established a relationship with the promoters.

## 2. Education Infrastructure

There is a public and private educational sector. The private sector operates without any supervision or control from a central agency. Public financial and secondary education is administered by the Education and Fine Arts Secretariat (SEEBAC), which provides 80% of primary education and 76% of secondary education.

Public primary and secondary education is free, and primary education

<sup>1/</sup> Antonio Ugalde, Second Report for the Pre-feasibility Study of a Prepayment System for Primary Health Care in the Dominican Republic, March, 1983.

is compulsory. However, the law is not enforced on account of the insufficient number of educational facilities for all of the school-age population. The existing facilities can cover only 80% of the children between 7 and 12 years of age. This means that approximately 280,000 children in this age bracket cannot go to primary school. According to SEEBAC data, at present, 30% of the Dominican population has no education at all and 50% has attended but failed to complete primary school.

As a result, the illiteracy rate is estimated at 30% in the 15-to-39-year-old population, and this figure is higher as age increases. The highest level of illiteracy is found in the rural areas. A very high percentage of the school population (70%) drops out in the first years of study or repeats courses (26%, 15% and 11% in grades 1, 2 and 3, respectively). This inefficiency in primary education is attributable to many factors, specifically, low qualifications of the teachers, failure of the schools to offer instruction for all primary grades (only 15% of the schools offer instruction for grades 1 through 6), inability of the student to respond to educational demands and lack of teaching materials.

The inefficiency is more noticeable in the rural areas as compared to the urban areas. The average number of years of primary education in the rural areas is only 2.6, a figure which contrasts with 5.2 in the urban areas.

Secondary education presents serious problems too. The curriculum is oriented towards the humanities and little attention is given to practical and productive teaching. There is lack of educational materials. The teachers

receive very low pay and must moonlight. They have low qualifications and do not have any alternatives nor encouragement for better training.

College education is in a critical situation. As a result of the establishment of the "Open University," an excessive number of universities (13) have begun operations and this has doubled the number of students in the 1978-1982 period. This development has taken place without the necessary physical facilities and qualified faculty. Most universities do not conduct any type of (basic or applied) research. More than 80% of the faculty works part-time.<sup>1/</sup>

The result of this system may be an excessive number of poorly qualified graduates who may not find a job. There is a large number of students in humanities and medicine and a small number in geology, agronomy and industrial engineering, for instance. There is a definite lack of correlation between the graduates and the real or potential needs of the job market.\*

B. Nutrition, Health and Environmental Health Situation.

Children and pregnant and nursing women are the groups specifically affected by poor health and nutrition. This is reflected in the high percentage of children under six suffering from malnutrition, in the high percentage of

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<sup>1/</sup> All the information included here has been obtained from SEEBAC official publications.

newborns with low birth weight (maternal malnutrition), and in the high mortality rate among infants and pre-school children.

1. Mortality at an early age

The official figures for 1982 report a mortality rate at an early age of 40 per 1000 population. However, it is believed that these figures have been underestimated, on account of the poor quality of birth and death registration records, particularly in the rural areas. In some areas where Basic Health Services are more efficient, better information has been collected which leads to estimates of child mortality at 80 per 1000. In a survey of 40 mothers contacted during our visit to the area of Barahona, which is one of the poorest, mothers were asked how many children they had and how many had died before their first year of life. Their answers would lead to an infant mortality rate of approximately 250 per 1000.

The pre-school age (1-4 years) mortality rate is also high and the official figures of the Basic Health Services report 10 per 1000.

In any case, infant and pre-school age mortality is one of the highest in Latin America, according to PAHO.

2. Maternal Nutrition Situation

There is very little information on the nutrition situation of pregnant and nursing mothers even though, according to official statistics, 50% of pregnant women in the rural areas and 100% of those in the urban areas undergo prenatal control. It is estimated that 70% of all births take place in

hospitals or clinics, and the rest, outside these institutions.

The information available on birth weight, collected at selected hospitals (SESPAS), indicates that 18% of newborns weigh less than 2.5 kg. It is assumed that the average is higher than this figure and that, therefore, a high percentage of the mothers are malnourished during their pregnancy.

Twenty-five percent of the children treated at SESPAS Nutrition Rehabilitation Centers have had low birth weight (less than 2.5 kg), which indicates that malnutrition started during intrauterine life. In other words, malnutrition affects an important percentage of pregnant women.

### 3. Nutrition Situation of the 0-to-6-Year-Old Population

Weight verification may point to a high degree of malnutrition (first, second and third-degree according to the Gomez' classification). In the past 20 years, many of the surveys conducted have included information on the weight of the 0-to-6-year-old population. Despite the difference in samples and the diverse circumstances surrounding the studies, the data seem to indicate that the nutrition situation of this group has not changed much and, in fact, is becoming worse.

A nutrition monitoring program has been initiated in the rural areas, with information gathered by health promoters. In a sample which covers from 10 to 50% of all the children between 0 and 6 years of age, the percentage of malnutrition fluctuates between 35% and 65% (Table 2).

PERCENTAGE OF NORMAL PRE-SCHOOLERS AND OF CHILDREN WITH FIRST, SECOND AND THIRD-DEGREE  
MALNUTRITION - 1962-1980

SURVEYS	YEAR	SAMPLE SIZE	NORMAL	FIRST-DEGREE MALNUTRITION	SECOND-DEGREE MALNUTRITION	THIRD-DEGREE MALNUTRITION	TOTAL
into Cerro and Barranca	1962		60.9	18.5	15.2	5.4	39.1
	1967						
os Mina	1968	1,167	61.0	28.5	9.3	1.2	39.0
	1967						
in Cristóbal	1968	329	48.0	35.5	12.7	3.8	52.0
	1967						
in Pedro de Macorís	1968	1,246	58.6	26.4	13.5	1.5	41.4
	1967						
irahona	1968	4,092	69.6	20.8	7.7	1.9	30.4
	1967						
uerto Plata	1968	3,199	63.4	24.2	7.0	5.4	36.6
	1967						
ational Nutrition Survey	1969	1,100	24.6	48.6	22.8	4.0	75.4
	1974	2,057	41.5	40.0	16.5	2.0	58.7
arabacoa	1976	3,181	48.5	30.8	16.5	4.2	51.5
ARITAS	1976	12,335	34.0	42.0	20.0	4.0	66.0
ARE, Food Program Participants	1976	1,198	51.8	37.8	9.2	1.2	48.2
ARE, Non-Participants	1976	320	49.9	39.4	9.1	1.6	50.1
as Tablas	1977	77	53.0	30.0	17.0	-	47.0
a Romana - SESPAS	1980	16,856	59.7	28.6	9.2	2.5	40.3

SOURCES: Modified table based on data published in "Situación Alimentaria Nutricional." PLANDES 37, ONAPLAN, Dec., 1978.

SESPAS Nutrition Division.

DIAGNOSIS OF THE RURAL CHILD POPULATION  
RURAL POPULATION INCLUDED IN THE NUTRITION MONITORING  
SYSTEM IN 1982

REGION	PROVINCE	0-TO-5-YEAR-OLD POPULATION*	PERCENTAGE MONITORED	MALNUTRITION RATES**
I	National District			
	San Cristóbal	49,996	14.7	48.6
	Peravia	19,171	-	-
II	Santiago	39,602	10.0	41.9
	La Vega	20,389	32.6	44.7
	Puerto Plata	23,513	17.8	39.0
	Españat	21,268	27.3	37.9
III	Duarte	25,385	33.2	48.4
	Salcedo	13,923	21.3	41.4
	Sánchez Ramírez	16,822	17.6	46.3
	Samaná	8,673	-	-
	María T. Sánchez	13,928	10.8	47.8
IV	Barahona	9,832	10.9	66.5
	Bahoruco	7,455	17.0	51.4
	Pedernales	1,279	-	-
	Independencia	2,967	38.0	63.5
V	San Pedro de Macorís	11,900	26.5	34.6
	La Romana	2,699	31.5	41.0
	El Seybo	17,834	53.4	48.4
	La Altagracia	10,730	31.7	37.1
VI	Azua	13,898	-	-
	San Juan	27,270	-	-
	Elías Piña	8,745	-	-
VII	Monte Cristi	8,805	28.7	36.3
	Dajabón	6,743	47.2	52.8
	Santiago Rodríguez	6,890	5.7	50.3
	Valverde	4,439	-	-

SOURCE: \*Based on 16.9% of the total rural population reported in the 1981 census.

\*\*Nutrition Monitoring System

Nutrition Division, Public Health and Social Security Secretariat (SESPAS).

According to the same source, 31% of the rural children are affected by first-degree malnutrition, 10% by second-degree malnutrition and 2% by third-degree malnutrition (Table 3).

No recent information is available on the nutrition situation of pre-school children in the urban areas; however, 90% of the children requiring hospitalization have some degree of malnutrition (first, second or third), which suggests that there is a high prevalence of malnutrition among children from 0 to 6 years of age in the urban areas, specifically in the City of Santo Domingo.

#### 4. Food availability

The study of food availability, based on food inventories at different times (Flandes, 1974), shows an average consumption of 2,150 calories per person per day and 45 grams of protein per person per day. Apparently, the figures did not improve during the period 1964-1974 (Table 4).

A recent study made by the Central Bank of the Dominican Republic concludes that 50% of the population consumes 1,424 calories and 28 grams of protein per day. Twenty-five percent of the population consumes 2,054 calories and 51 grams of protein per day. Both figures are below the recommended minimum daily consumption.

These figures and the data on child weight confirm the existence of a serious nutritional problem affecting mainly children and, to a lesser extent, adults.

NUTRITIONAL STATUS OF THE INFANT AND PRE-SCHOOL POPULATION  
BY REGIONS - 1982

REGION	LESS THAN 5-YEAR-OLD POPULATION				: MONIT. CHIL. :		NUTRITIONAL STATUS							TOTAL MALNUT. %		
	TOTAL	URBAN	RURAL	%	TOTAL	%	NORMAL	%	I DEG.	%	II DEG.	%	III DEG.		%	
REGION I	103,819	34,641	69,178	66.6	8,117	11.7	4,251	52.4	2,566	31.6	1,082	13.3	218	2.7	3,866	47.
REGION II	184,916	80,144	104,772	56.7	20,614	19.7	12,147	58.8	6,345	30.8	1,859	9.0	263	1.3	8,467	41.
REGION III	108,097	29,366	78,731	72.8	14,051	17.8	7,726	55.0	4,604	32.8	1,448	10.3	273	1.9	6,325	45.
REGION IV	45,896	24,362	21,534	46.9	3,467	16.1	1,387	40.0	1,383	40.0	598	17.2	99	2.9	2,080	60.
REGION V	87,988	48,823	43,165	49.1	16,930	39.2	10,107	59.7	4,842	28.6	1,625	9.6	356	2.1	6,823	40.
REGION VI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
REGION VII	39,151	15,579	23,572	60.2	6,366	27.0	3,454	54.3	2,245	35.3	570	8.9	97	1.5	2,912	45.
TOTAL	569,867	232,915	340,952	59.8	69,545	20.4	39,072	56.2	21,985	31.6	7,182	10.3	1,306	1.9	30,473	43.

SOURCE: Nutrition Monitoring System (SISVAN)

National Statistics Office (ONE)

Note: Excludes the National District

NATIONAL AVERAGE CONSUMPTION ACCORDING TO THE INFORMATION SUPPLIED BY THE CALORIE-PROTEIN BALANCE SHEETS FOR  
1964, 1968 AND 1974

	<u>1964</u>	<u>1968</u>	<u>1974</u>
Available calories (calories/person/day)	2,265	2,154	2,155
Available protein (total g/day)	54	51	45
Animal protein (g/day)	22	21	18

SOURCE: Situación Alimenticia y Nutricional, Plandes 37, page 67.

## 5. Environmental Health

Environmental health is closely related to child nutrition. Poor environmental health aggravates malnutrition which causes a high incidence of infectious diseases, particularly diarrhea. Low food intake is coupled with nutrient loss through the stools.

The information available from the Basic Health Services indicates that environmental health conditions are very deficient. In 1982, 85% of the urban population had access to drinking water but only 60% were provided drinking water through home connections. The rest (25%) has to carry water in cans for two or more blocks. Others (15%) do not have any water at all and must buy it from distributors.

The rural population's water supply comes, for the most part, from rivers or streams which are normally contaminated. Water must be carried.

The disposal of excreta is also very deficient. Only 25% of the urban population has sewerage services. Sixty percent of the rural population has latrines and 40%, no disposal system.

There is no waste treatment system in the cities, and collection is inadequate especially in the poor districts. Waste accumulation leads to proliferation of flies, rodents and other vectors.

## 6. Other Negative Factors

Population growth is very high. According to the latest report from the World Bank (November, 1982), the average growth rate is 3% per year. If this trend were to continue, the population would double in the next 23 years. At present, 48% of the population is under 15 years of age.

On the other hand, the job situation is critical. There is chronic unemployment, and in 1970, 23% of the 15-year-old or older population was unemployed. In 1979, ONAPLAN estimated unemployment at 20% in Santo Domingo and at 19% in Santiago (the second largest city in the country). Thirty-eight percent of the people who had jobs were underemployed and had an income which was insufficient to meet their minimum needs (less than 25 Dominican pesos per month).

The world recession and the decrease in the prices of sugar, coffee and other export products have contributed to worsen the situation. According to the World Bank, at present, 44% of the population does not earn enough to maintain a minimum standard of living.

## C. Health and Education Policy and Programs Being Implemented

The above indicates that the Dominican Republic faces a serious nutrition and poverty problem which affects a very high percentage of its population and represents a major obstacle to development. The adverse conditions described cause physical and psychological damage to the people and keep them from becoming useful and efficient members of society. This situation forms

a vicious cycle of malnutrition-poverty-underdevelopment which is difficult to avoid.

The basic causes of underdevelopment lie on the inefficiency of the entire production and services systems. These cannot be easily improved if half of the population is limited in the achievement of their full genetic potential. The avoidance of damage seems to be a first priority to introduce development and break the vicious cycle. This can only be done in an adequate environment, with a good health and nutrition situation and with educational opportunities.

In an underdeveloped environment, malnutrition has many direct causes:

- a. Low family income.
- b. Poor health conditions which cause nutrient loss and high prevalence of infectious diseases.
- c. Ignorance which leads to poor utilization of limited resources.
- d. Inefficiency of the food production, distribution and marketing system.

An analysis of these causes has led planners, in the last few years, to insist upon the need to develop multisectoral and interdisciplinary nutrition policies. However, while it is possible to develop them, it is almost impossible to implement them. With support from international organizations (UNICEF, FAO, AID),

most Latin American countries have established nutritional planning agencies and developed intersectoral policies. Nevertheless, implementation has been unsuccessful and agencies have become useless or have disappeared (Brazil, Chile, Colombia, Paraguay, etc.). The Dominican Republic has been no exception. The National Food and Nutrition Technical Commission was established by Decree n° 128 in 1964 but it never operated. Later, at the initiative of the Public Health and Social Security Secretariat (SESPAS), a project proposal was made for the establishment of the National Food and Nutrition Council which never got off the ground. In 1974, with support from the U. S. Agency for International Development, the Office of Nutritional Coordination was established attached to SESPAS and to the State Agricultural Secretariat, and in 1975 a technical cooperation agreement was signed with UNICEF's Inter-Agency Program for the Promotion of National Food and Nutrition Policies (PIA/PNAN). Both institutions were able to diagnose the country's food and nutrition situation; however, it was impossible to continue the work.

From a technical standpoint, it would be advisable to continue to think in terms of intersectoral and multidisciplinary planning but experience indicates otherwise.

In fact, some Latin American countries with a more pragmatic attitude have shown how to be successful. We refer to the possibility of working through specific sectors such as health and education. Countries such as Cuba, Chile and Costa Rica

have considerably improved their nutrition situation by improving the efficiency and coverage of the health and education sectors and incorporating adequate nutritional components, for instance, design of specific projects for target groups, food delivery and distribution, and nutrition education. It would be possible to influence the agricultural, industrial and foreign trade sectors, among others, in the future.

In our opinion, this strategy would be the most adequate for the Dominican Republic. As previously pointed out, the health and education infrastructures have serious deficiencies which could be corrected if the decision were made to do so. The nutrition component and specifically the P.L. 480 Title II food included in such a policy would not only constitute a direct nutritional objective but would also contribute to improve the structure. Despite the long period (20 years) of implementation of Title II programs in the country, no evaluation has been made of their impact on the nutrition situation. It would not be risky to assume that there has been little or no impact. Title II programs, however, could have a significant impact if they were integrated in, and contributed to improve, health and education actions which the State is trying to implement.

#### 1. Present Health Policy

SESPAS was organized in 1978 in accordance with proposals presented many years before with the help of PAHO, AID and other international organizations. Preventive medicine was the main health objective. Emphasis was

given to the improvement and extension of primary health care in the rural areas, and a new health structure was developed for this purpose.

This new health structure has three levels of care and different levels of complexity (Table 5).

Primary level. This level includes the integration of maternal and child health care services and family planning services, is of low complexity, and represents the entry to the health care system. Simple health problems are solved here. An effort is made to secure active community participation in health promotion, prevention and solution of uncomplicated medical problems.

Secondary level. This level includes intermediate maternal and child health care offered in health sub-centers. The medical and health problems of outpatients are solved here. These sub-centers have beds available for health care related to internal medicine, surgery, gynecology and obstetrics, and pediatrics. Patients are referred by the primary-level services.

Tertiary level. This level is responsible for highly complex maternal and child pathology. Care is given in high-density hospitals (Santo Domingo, Santiago, San Francisco de Macorís). Infrequent and complex problems are solved, which require the participation of specialized personnel and the use of high technology. Patients are referred from previously-mentioned levels.

In accordance with the scheme described, the primary level is the basis of the health system. It has a so-called "Rural Clinic" staffed by a doctor and a nursing assistant. At present, there are 300 of these clinics and the projected total is expected to be 500.

The "Health Promoters," who have the previously-described functions and responsibilities, work directly with the community and closely with the respective Rural Clinic.

The promoters must visit the families. Each one is assigned approximately 100 families for control in an effort to cover the entire rural population. At present, there are some 5,200 promoters in the field.

The promoters must work in the area of nutrition, among others, providing nutrition education and participating in the nutrition monitoring system. They must make home visits, measure and weigh periodically all children under six years of age with the objective of implementing the nutrition monitoring system and detecting malnutrition.

Malnourished children should be referred to the Rural Clinics for medical follow-up and receive food to take home with them. This would be P.L. 480 Title II food. The process of nutrition integration in the Rural Clinics is in its initial stages.

Any child with advanced malnutrition detected by the promoters must be referred to SESPAS Nutrition Rehabilitation Centers. These are outpatient treatment centers where children should receive medical attention, food and physical-motivational stimulation and perform physical exercises and where mothers should learn to care for their children and receive nutrition education.

Since these are centers for outpatients only, services are provided only to those families that do not have to travel more than an hour. The children will receive two meals that will meet close to 60% of their daily nutritive requirements.

Comments:

The design of the present health policy seems to be adequate for a country such as the Dominican Republic with a large rural population (50%) and serious health, hygiene and nutrition problems. Obviously, policy implementation is not easy in view of the country's limited resources and the enormous deficiency of qualified human resources at all levels.

An approach designed to improve health coverage, with emphasis on primary health care on the first stages of implementation especially in the poorest regions, seems to be most adequate. Likewise, priority should be given to the control of the high population growth rate through an adequate family planning policy. Finally, the prevention and treatment of malnutrition among children, and pregnant and nursing women is of utmost importance and must be integrated to health actions.

If P. L. 480 Title II food were used to support this policy, nutrition could be improved and health infrastructures could be developed and strengthened. Isolated food distribution programs which do not take health care into account would be of little benefit.

## 2. Present Education Policy

The Government of the Dominican Republic is determined to reduce illiteracy and to increase primary education coverage. At present, close to 250,000 children between 7 and 12 years of age have no access to primary school. In the past decade, educational resources have been expanded in an effort to reach all segments of the population. In this period, enrollment exceeded population growth by two thirds, and the government's budget for education rose from 14% of expenditure allocation (1978) to 15.3% in 1982. Near 40% of this budgetary allocation was used to finance primary education. In future programs (1982-1985), education expenditures are expected to increase to 20.7%. However, perhaps the main deficiency does not lie on primary education coverage but on primary education quality. About 50% of the primary school teachers have not received any training. Undoubtedly, a major effort should be made to solve this particular problem. It does not make any sense to open new schools with unqualified teachers.

In view of the high drop-out and failure rate, SEEBAC is testing a pre-school education program at the regional level. The southwestern region of the country has been chosen because it is the poorest of all.

The program, called "Pre-School, Non-Formal Education," has been established to prepare children for primary education. The philosophy behind it is that through early stimulation and feeding techniques, the damage caused by poverty and malnutrition may be prevented (60% of the children suffer from some degree of malnutrition). This would give the children access to primary education with higher possibilities of success.

Comment

Undoubtedly, SEEBAC's emphasis on primary education and control of illiteracy is of utmost importance. ...As in the case of health, the possibilities of success are limited here by the lack of economic resources and qualified personnel for policy implementation.

The pre-school education and nutrition trials underway seem to be very interesting because it is obvious that primary education failure is caused by the damage suffered by children in their first years of life. Other countries such as Chile and Cuba have had very positive results with this kind of action program.

P. L. 480 Title II food which would be widely used in these programs, would supplement actions by improving assistance and pre-schooler acceptance (it would be something attractive) and would improve the nutritional status.

### III. PRESENT SITUATION OF THE NUTRITIONAL COMPONENTS OF P.L. 480 TITLE II PROGRAMS

#### A. General Observations

Based on direct observation of the programs during field visits (Table 6), several interviews with various people, and the activities of the work groups, some general comments can be made.

The P.L. 480 Title II programs are varied, are not interconnected and do not have a previously-designed common strategy. The only point they have in common is the utilization (at least theoretically) of food to feed children or pregnant women of a very low socioeconomic level. Volunteer agencies have developed and implemented programs individually, without coordination, in the way deemed most feasible and convenient.

Because of this lack of strategy, it is impossible to evaluate the impact that these programs might have at the national level, especially taking into account that the amount of food distributed meets only a small fraction of the enormous national needs.

In the different programs, the "food" component is perhaps the major contribution, since physical facilities where the programs are implemented are very poor (except in SESPAS programs in Rural Clinics and Rehabilitation Centers) and the salaries paid to program administrators are very low.

PLACES VISITED

<u>Type of Project</u>	<u>Volunteer Agency</u>		
	<u>SSID</u>	<u>CARITAS</u>	<u>CARE</u>
<u>CHILD-MATERNAL HEALTH</u>			
Rehabilitation Centers		1	3
Integrated Rural Clinics			3
Food Distribution Centers (dry and prepared food)			
<u>EDUCATION</u>			
Pre-school			3
<u>WITHOUT FOOD</u>			
ANEP		2	

Another program which does not use food:

PLAN SIERRA

Note: Field visits were made to the regions of Barahona and Samaná and to the central area. Programs were also visited in the City of Santo Domingo.

Evaluation of each program is also difficult because no follow-up parameters have been established and objectives have not been clearly defined.

The efficiency of the programs is limited because of lack of funds to improve or expand their actions and lack of qualified personnel to undertake programmed activities.

Finally, it must be emphasized that the Volunteer Agencies follow different strategies. CARE's actions are accomplished through governmental institutions and consist of assistance in food distribution. CRS works through CARITAS which, in turn, utilizes its own religious structures (dioceses and parishes). SSID develops its own programs.

Some programs developed by Volunteer Agencies are conceptually similar but because of lack of coordination in the use of similar parameters and procedures they cannot be evaluated together.

#### B. Comments on Specific Projects

Volunteer Agencies using P. L. 480 Title II food develop activities which may be gathered into four areas, in accordance with the objectives established:

- 1) Programs aimed at improving the nutritional status of children.
  - a. Food distribution programs for the children of poor families and for malnourished children.
  - b. Rehabilitation programs for severely malnourished children.

2) Education support programs.

- a. Pre-school education program.
- b. Primary education using radio (RADECO). (The program has already started but no P. L. 480 Title II food has been distributed yet).

3) Institutional support programs aimed at the care of institutionalized children (children with social or legal problems).

The following comments are made based on the information gathered from each one of these programs:

1) Programs of food distribution to poor families and to families of malnourished children.

CARITAS has a broad food distribution program in different parts of the country, for children under six and pregnant and nursing women (Table 7). Parochial committees are in charge of selecting the beneficiaries.

It is difficult to measure the impact of this program for obvious reasons. The effort is limited to the delivery of food which the mothers take home with them.

NUTRITION PROGRAMS USING P.L. 480 TITLE II FOOD

AGENCY	CARITAS	SSID	C A R E		
			Rural Clinics	CEA*	IAD*
<u>1. Food distribution sites</u>					
Number of sites	200	10	206	196	36
Beneficiaries	32,000	600	2,000	22,000	14,000
<u>2. Nutrition Rehabilitation Centers</u>					
Number of centers	4	5	25		
Beneficiaries	200	300	750		
<u>3. Pre-school centers</u>					
Number of centers		—			450
Beneficiaries					13,500

\* ) CEA: State Sugar Council  
 \* ) IAD: Dominican Agrarian Institute  
 \* ) SE: Education Secretariat

There are no definite objectives and the beneficiaries have not been specified. (The term used for these is "need people" or "the poorest people.") Therefore, there is no evaluation system.

Undoubtedly, this program could be improved if clearer objectives and better-defined selection criteria were established (for instance, families with malnourished children, high-risk families, etc.) and, at the same time, evaluation and follow-up parameters were developed. The simple distribution of food will have a very limited effect if no other components are simultaneously delivered, for instance, health actions and nutrition information aimed at changing habits and attitudes.

CARITAS has shown interest in introducing any recommended changes but is limited by the lack of resources. The introduction of health and/or education components will imply more availability of funds and qualified personnel, which do not exist at present.

SSID has a similar program of a more limited scope. The comments made regarding the CARITAS program are applicable to this program.

CARE works through different government agencies and delivers food to be distributed through several channels: The Dominican Agrarian Institute (IAD), the Secretariat of Agriculture, the State Sugar Council (CEA) and the Public Health and Social Security Secretariat (SESPAS). IAD distributes the food in communities which have sugar mills operated by the State. The food

received by IAD is distributed to the children of the farmers settled in new lands awarded by the Agrarian Reform Program. SESPAS distributes the food through the Rural Clinics being developed around the country.

Under the present circumstances, these programs can have a very limited favorable impact because they are isolated interventions, without a definite objective, with little possibility of evaluation and even less possibility of a cost-benefit estimate.

We believe, however, that the programs would be very useful if the health infrastructure were used for food distribution and if the latter were integrated with other components such as nutrition and health education. As previously described, primary health care actions in the rural area are being emphasized in the present health policy. With that in mind, Rural Clinics have been established, properly equipped with physical facilities and staffed with a doctor and a nursing assistant. Undoubtedly, this would be the ideal point to integrate nutrition with health and education. Food delivery to beneficiaries previously selected in accordance with their nutritional status (families of malnourished children) could be complementary to other actions and it would strengthen them. In this case, in addition to being something useful for child nutrition, food would be an attractive means for the integration of the mother into health and education actions.

This policy is of great interest to SESPAS and there is a willingness to introduce the necessary changes for the selection of beneficiaries and the control and evaluation of the program. Furthermore, SESPAS is considering the gradual absorption of the food distribution programs implemented by CEA and AID in order to integrate them to the Rural Clinic Programs. Finally, it should be underlined that in order to

introduce the necessary changes, the health personnel must receive proper training (promoters, nursing assistants and doctors).

2) Program of Rehabilitation of Severely Malnourished Children

Both CARITAS and SSID are developing programs aimed at the rehabilitation of children with severe malnutrition. The theoretical concept of these programs is perfectly justifiable as long as the program is part of a health and malnutrition prevention policy which provides wide coverage.

However, the program does not have a significant impact in the way it is being implemented. It is estimated that children with third-degree malnutrition total between 50,000 and 80,000, therefore, the capacity to treat 1,200 beneficiaries (CARITAS, SSID and SESPAS - Table 7) is not significant in the effort to decrease severe malnutrition.

The centers operate only during certain hours of the day and provide part of the nutritive requirements by furnishing P. L. 480 Title II food. The physical facilities (except at the SESPAS centers visited) are very poor and food processing is accomplished in a primitive way, by unskilled personnel using unsanitary methods.

Child  
/weight control is accomplished in a disorderly manner and with little or no medical assistance. Most of the time, the rest of the family is not paid any attention and the nutrition education component is negligible. There is

no control, rehabilitation evaluation, determination of the center's performance or follow-up of the children.

SESPAS Centers have better physical facilities but operational guidelines, though existent, are not taken into account.

Programs aimed at the rehabilitation of children with severe malnutrition such as this, are undoubtedly useful within the context of a global effort to prevent malnutrition. However, their implementation requires an adequate physical and sanitary environment as well as widespread and direct interventions aimed at the family and accomplished by highly-qualified personnel.

CARITAS, SSID and SESPAS are willing to make the necessary changes but, as in the program previously described, there are financial and personnel limitations.

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### 3) Pre-School Program

CARE is currently covering 13,350 beneficiaries enrolled in a pre-school program run by SEEBAC (Secretaria de Educacion). The pre-school project is being initiated on a pilot basis in the Southwestern region of the country. This is the poorest area of the Dominican Republic and has the weakest infrastructure. In 500 preschool centers (40% covered with CARE food), SEEBAC is attempting through a non-formal preschool curriculum to prepare children for primary school so that school desertion in the first years of primary school will decrease. SEEBAC wants to use the food supplement as an incentive for children to attend the preschool.

The administrative and curriculum areas of the preschool program are run directly by the Preschool Division in SEEBAC. Approximately, DR\$500,000 was received from UNICEF in 1982 to support personnel and provide equipment for the program. The Student Welfare Division in SEEBAC has created a nutrition division specifically to handle the food aspects of the project and to work with CARE. The Student Welfare Division provides cooking utensils, plates, etc., to the Centers; is responsible for training the preschool promoters in food preparation; and will be in charge of nutrition training for the promoters. This division has provided 20 scales to the regional supervisors, each of whom are responsible to visit 18 preschools once every two months and weigh and calculate the nutritional status of the children.

At each center there is the promotor who should have approximately 30 students. On the day we visited centers, not one had 30 students even though stated enrollment was between 30 and 40 children. Actual attendance on the day of our visit varied between 7 and 25 children.

The preschool centers vary from being a screened area next to the promoters house with plastic on the ground for the children, to being a separate building with desks. Food preparation facilities are minimal at the centers. The children are in the school only 2 hours per day - 9-11 a.m.. During these hours, the children are given a prepared snack which should provide approximately 580 kcal and 25g of protein, 30% of the daily requirements of the children.

The promoters responsible for the program have only limited orientation in pre-school education and no clear idea about the psychomotor or physical development of the children for whom they are responsible. Therefore, the quality of the program varies tremendously depending on the formal schooling of the promoter. The promoters are chosen by their community and are paid \$40 pesos (US\$33/month). The level of the promoters' formal schooling ranges from 5th to slightly more than 12th grade, the mean is eighth grade. One center visited in Azua was dynamic and had a teacher who was studying in the local university. At the other extreme was a center in Batey Central "B", where children were unoccupied when we arrived and UNICEF toys were still in boxes in the back of the classroom. The promotor had little formal schooling and was substituting (permanently) for someone else. At this center, the CARE supervisor could find no attendance records.

SESPAS estimates that about 75% of the preschool children in this SW region are malnourished. The Student Welfare Division estimates that 60% of the children in the preschools are malnourished. The difference in those statistics confirms our assumptions and observations that those who attend the preschools are children from families with some resources. This enrollment is due to many

factors, not the least of which may be that children need clothes and shoes to go to the school and most of the children we saw in communities in SW, were in scant clothing or without clothes.

Although children in the program may not be as malnourished as the general population, there are still significant numbers in the programs with nutrition problems and probable health complications. Collaboration between SESPAS rural clinics and the preschool is important. Currently this collaboration is only theoretical.

The fact that children of families who may have some expendible income are attending the preschool is not a criticism of the program but an observation which provoked questions about outreach and recruitment to the program: What is the coverage of the preschool in a community? What happens when there are more preschoolers than room in the center? When a child stops coming, is there an attempt to recruit a new child? In one center we were told that there were approximately 100 preschoolers in the community, but only one preschool, so selection was based on age: those close to entering primary school were taken first. However, the day we visited the preschool, there were 25 children rather than the 40 enrolled. We were told this was unusual. However, it appears that there is no attempt to keep the enrollment level at 40. The problem of recruitment could be addressed through more community promotion and a more active parents' organization. Currently, parents' participation in the center is seen as the weakest element of the program from the standpoint of SEEBAC. The community is responsible for finding a site and selecting a promotor for the center. The parents group is to provide continuing support to the center, sugar and spices for the snack and a volunteer to prepare it. The parents' group is also to receive orientation from the promotor. For the majority of the centers, the parents' group seldom meets and infrequently has volunteers preparing the snack.

In summary, our impression of the project was that it is one with potential for improving school performance of the participants, and is worth supporting with the snack, as long as parents realize that the snack does not substitute for a meal at home and that program evaluators are clear about the impossibility of much nutritional impact from only the addition of a snack. A great deal could be done to improve the performance of the promoter requiring more training particularly in child stimulation. Area supervisors should have more responsibility for community organization and criteria should be established and enforced for parent's participation along with recruitment of students. The children in the program should be weighed regularly to detect problems and visits of a doctor to the center or the children to the clinic should be arranged. Area supervisors and promoters should receive specific tasks oriented toward nutrition and communications training for their work with parents groups.

Cont ...

4) Program of support to institutionalized children (other than child health support)

CARE distributes food to children who have been institutionalized by reasons of disease or legal or social problems. The program covers 76 institutions with a total of 3,000 beneficiaries. The institutions are supervised by the Public Health Sector and food delivery is considered a contribution towards the decrease of operational costs. Also included in this program is the food distributed on week-ends to the families of children admitted to Rehabilitation Centers. This type of distribution is included in this program because the age of the beneficiaries prevents them from participating in other maternal and child care programs.

C. Status of Nutrition Education.

The evaluation of the PL-480 Title II program conducted in August, 1982, mentions the need to strengthen nutrition education in the food program if it is to become more development oriented. However, existing nutrition education activities are not detailed. During this consultancy, a rapid assessment was undertaken of nutrition education activities not only in food programs, but also in non-food programs to define the existing basis from which to begin the Three Year Plan. The assessment includes interviews and participatory working sessions with heads of programs in institutions with nutrition education responsibilities. Visits were made to program sites and persons directly responsible for education and a few beneficiaries of the program were interviewed.

1. The Activities of the PVOs and Counterparts:

An overview of the existing nutrition education activities of the private voluntary agencies and their counterparts is given in Table 8.

This table summarizes the descriptions given by each agency at a joint working meeting. After reviewing these summaries, the conclusions of the groups were:

a) Nutrition education is a necessity for every project.

b) Nutrition education is being done throughout the country by one or another agency sometimes with duplication, but never in coordination or in a systematic way. Although people felt it is important to consider regional differences when designing nutrition education materials, no materials have been tailored to address these differences, even for the border provinces where many efforts are concentrated.

c) The programs of all the agencies have the same intended audience: women of child-bearing age with limited resources and formal

education. Often this audience is segmented further - pregnant women, lactating women mothers of children under 5 years or mothers of malnourished children. In a few instances, fathers are included in the intended audience. The audience is also divided between peri-urban and rural areas.

d) The major objective of all programs is to change practices related to poor nutrition. No priority has been given to specific topics or problems. At this time, there is no clear understanding of nutrition problems in attitudinal or behavioral terms; therefore, few programs have specific objectives. (Only one food program has as its objective to teach women about the donated food).

e) All programs rely heavily on interpersonal communications, although most have had some radio experience. People recognize the need to improve the interpersonal communications, particularly the transmission of the message from the promotor to the mother. Training of personnel in nutrition and communication is a priority.

f) The need to formulate messages carefully is recognized by all programs. None of the programs have formulated messages or pretested materials with the intended audience. There was agreement that existing materials can be improved - - messages be more practical, simpler and clearer.

g) Although materials are shared among groups, there has been no attempt to standardize messages or unify educational material. A nutrition education group with representation from all agencies was formed to work on a basic nutrition education plan that can be implemented by programs using or not using PL-480 Title II foods.

TABLE 8: NUTRITION EDUCATION ACTIVITIES OF PVOs AND THEIR COUNTERPARTS

AGENCY: SESPAS / SESPAS-CARE

PROGRAM: MOTHER CHILD HEALTH			NUTRITION RECUPERATION CENTERS.	PERI-URBAN
	Rural Clinics with and without food.	Communities with Promotor with or without food.	Communities without Promotor but with food.	
LOCATION:	National - (Rural)		National /25 Centers.	National (Urban Barrios)
INTENDED AUDIENCE:	Pregnant women. Lactating women. Mother of children under 5 years.	NO EDUCATION ↓		Mothers of Malnourished children under 5 years. Community Groups.
EDUCATIONAL OR BEHAVIOR CHANGE OBJECTIVES:	Generally change food habits - clear priorities and objectives not established.		Generally, change food habits	Generally, change food habits.
MEDIA:				
Interpersonal:	Auxiliary Nurses.	Promotor.	Director of the Center	Auxiliaries.
Mass:	Posters (2 sets).	Radio - (in the past).		Movies/Posters.
MATERIALS:	Flipchart and Manual.	Growth Charts.	Non-formal, Participatory Materials: Unserialized posters, Flexiflans, Puppets. Growth Charts.	
CONTENT:	Flipchart and Manual : General advice on diet during pregnancy, lactation, child feeding in the first year of life, in years 1-5, 3 food groups and breast feeding promotion.		Non-formal materials have no specific content.	General info. on nutrients and foods.
CONCEPTS OR MATERIALS TESTED WITH AUDIENCE:	N O		Yes, materials tested.	No.
PROGRAM EVALUATED:	No, but general feeling about the materials is that they should be more practical, clearer.		Yes, but results unavailable.	No.
TRAINING FOR EDUCATION AGENTS:	Auxiliaries - training in school (25 hours). Promotor - general institution training - 3 days- includes use of Flipchart.  Developing a course for promotors with materials made by a group from Michigan - Course concentrates on foods - There are six units which are being adapted to the Dominican Republic but are not coordinated with the flip-chart and manual the promotors use.		Director - one time training.	Auxiliaries training in school (25hrs)

TABLE 3 (Cont'd)

<u>AGENCY:</u>	<u>CRS/CARITAS</u>	<u>Nutrition Recuperation Centers.</u>	<u>Applied Nutrition Education Program (without food).</u>	<u>Food for Work</u>
<u>PROGRAM:</u>	MOTHER CHILD HEALTH			
<u>LOCATION:</u>	National.	2 Centers in Bani. 2 Centers in Santo Domingo.	National - 7 Dioceses	National
<u>INTENDED AUDIENCE:</u>	Pregnant women. Lactating women. Mothers of Children under 5.	Mothers of malnourished children.	Pregnant women Lactating women Mothers of children under 5.	NO EDUCATION. ↓
<u>EDUCATIONAL OR BEHAVIOR CHANGE OBJECTIVES:</u>	Generally to change food habits.	Generally to change food habits.	Generally to change food habits with emphasis on: eating foods from each food group at every meal. Beginning breast feeding.	
<u>MEDIA: Interpersonal:</u>	Community volunteers or ANEP promotor (14 only).	Directors of the Centers.	Growing a home vegetable garden. Promotor (47) Area Directors (7) Posters, movies, some Radio.	
<u>Mass:</u>				
<u>MATERIALS:</u>	Only have materials if they are ANEP productor (see ANEP).	Most of ANEP materials.	SESPAS flipchart and manual calendar - Bulletins - Pamphlets (themes of the month for promotor).	
<u>CONTENT:</u>	See ANEP for those communities where there is overlap otherwise nutrition education is almost non-existent.	See ANEP.	Covers content listed for SESPAS plus information on foods and their production and nutritive value.	
<u>CONCEPTS OF MATERIALS TESTED WITH AUDIENCE:</u>	N O	N O	N O	
<u>PROGRAM EVALUATED:</u>	N O	N O	Has been evaluated generally and shown to reduce malnutrition.	
<u>TRAINING FOR EDUCATION AGENTS:</u>	Volunteers receive orientation on administration of the program - none on nutrition education.	Directors of Centers receive some training mostly in the administration of the center.	Promotors trained over a year period between classroom and on-the-job training. They receive general nutrition training.	

AGENCY:	CWS/SSID	<u>CARE</u>	
<u>PROGRAM:</u>	<u>NUTRITION AND HEALTH</u>	<u>FOOD FOR WORK - FISH PONDS - WELLS</u>	<u>PRE-SCHOOL</u>
<u>LOCATION:</u>	Border Provinces.	Border Provinces	Southwestern Province.
<u>INTENDED AUDIENCE:</u>	Pregnant women. Lactating women. Mothers of malnourished children.	Families involved in the projects or organized in a group.	Parents.
<u>EDUCATIONAL OR BEHAVIOR CHANGE OBJECTIVES:</u>	Generally change food habits - a major objective is that people will increase consumption of fruits and vegetables.	(same)	Generally change food habits - Change attitudes about the donated food used on the program.
<u>MEDIA:</u> <u>Interpersonal</u>  <u>Mass:</u>	Promotors Directors of Centers Posters - Films	Promotors Volunteer project leaders (same)	Promotors
<u>MATERIALS:</u>	SESPAS Flipchart and manual World Neighbors flipchart and filmstrips - Flannelgraph - Grow Chart (different from SESPAS).	(same, however, if there is no nutrition center, then children are not weighed).	SESPAS Flipchart and Manual Recipe Book.
<u>CONTENT:</u>	COVERS content listed for SESPAS plus information on gardens, water supplying and hygiene.	(same)	covers content listed for SESPAS.
<u>CONCEPTS OR MATERIALS TESTED WITH AUDIENCE:</u>	N O	N O	N O
<u>PROGRAM EVALUATED:</u>	N O	N O	N O
<u>TRAINING FOR EDUCATION</u>	Promotors: nine months of general training-give mini courses in nutrition (1 promotor for each border (3). Directors of Centers: 2 weeks/year training mostly involves administration and preparation of food.	same	pre-school promotors, a major emphasis of the Dept. of Stud Welfare of the Ministry/Educ. is on trg. the promotors in nutrition. They have a 3-day nutrition course twice a year. They will include nutrition education because they want more involvement of the families.

2. Nutrition Education in PL-480 Title II MCH Projects.

What was seen during visits to the projects corroborates the conclusions of the joint work meeting: Nutrition education is not being done in a systematic way by any agency connected with PL-480 Title II in their food or non-food programs. SESPAS, the CARITAS ANEP and the SSID projects have attempted to provide educational materials to community workers. However, during the visits not one SESPAS flipchart or manual was evident; ANEP promoters had mimeographed lists of topics and advice but no support materials; and, only a few homemade posters were seen in SSID nutrition centers.

The only food distribution sites with education materials were the nutrition recuperation centers. The centers under SESPAS usually had posters of the three basic food groups; a chart indicating the month during a child's first year of life when different foods should be introduced, and the non-formal participatory materials from the FUDECO project. <sup>1/</sup>

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<sup>1/</sup> The FUDECO project was carried out under a matching grant with Save the Children Federation. In this project a set of materials was designed for use by promoters to stimulate the planning and implementation of nutrition projects in a community. The materials were developed with promoters during a series of three Workshops. The materials designed by them were reproduced and distributed to the various community workers and the directors of nutrition rehabilitation centers. From what could be gathered during the visits, the materials produced in this project are underutilized because there is not a clear understanding of how they are to be used - or what the objective is for each of the different participatory techniques. The experience of this consultant is that the application of this participatory methodology requires highly skilled promoters and careful supervision. At this time there has not been adequate training nor a supervision good enough to ensure proper utilization of these materials. In the future with more training, these techniques and materials can be incorporated into the repertoire of basic nutrition education materials.

.In the CARITAS center there were food pictures and the chart of child feeding in the first year of life.

When promoters, nurses or persons in charge of centers were questioned about nutrition education activities, they all said that they give Charlas (talks), but no one could give a clear statement about what is covered in these Charlas. The response from those working in food distribution centers as well as recuperation centers was, "we say that children must eat a balanced diet; more fruits and vegetables, eggs, beans, meat and milk, so they will be strong." Although everyone says they give charlas all health workers talked about the difficulty they have in getting mothers to come to the centers. Therefore, it is doubtful that without support materials, without a clear idea of what to say, and with mothers anxious to leave the centers, that any progress is made with the nutrition education.

The few examples that we saw where charlas were at least given with some frequency were when the promotor or center director worked with a mothers club or community groups organized for other purposes than just to receive food. In Vicente Noble the recuperation center is located next to the Mothers' Club and the Director uses gatherings organized to each serving to talk to all mothers about the health of their children. At this center, there seemed to be more outreach and follow-up than anything else.

Because group charlas seem an ineffective mechanism by which to impart information intended to alter daily dietary patterns, during the visits we looked for a mechanism to deliver specific messages to the mother individually. It is possible that the nutrition surveillance/screening program in place in several programs could be modified to make this activity a time for educating the mother/-family specifically about their child.

Growth charts are being used periodically in a number of community and nutrition recuperation programs. In the recuperacion centers, the child's

growth is monitored, but the results are used only by the Director of the center. In the community, child weighing is done only for the purpose of surveillance or screening.\* If growthcards were standardized and weighing undertaken on a more regular basis, this activity could become a forum for education.

The chart used in SESPAS centers by SESPAS promoters and in CARITAS recuperation centers is the SESPAS chart (see Appendix C). SSID uses a Road to Health Chart (and weighs children about twice a year), while the CARITAS community programs do not weight children. None of the growth charts used in the programs have been designed for educational purposes. The chart is for the health worker and in all projects we visited the charts remained in the center or with the promotor. The chart has no educational messages or guide for how to interpret the results.

If the child weighing activity is to be used as an educational forum, it must be adapted. At this time, because weighing is only viewed as a surveillance/screening activity, emphasis is placed on a child's nutritional status rather than the child's progress over time. This would need to change --now the advice given to a mother/family when the child is weighed is the same if the child is severely malnourished or moderately underweight, gaining weight, or losing weight: eat more fruits and vegetables, meat, and eggs... Advice would need to be carefully tailored according to the child's progress and age.

In most cases, nutrition education messages are so general as to be of little consequence, but some of the messages seen in print materials or

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\*) Although SESPAS norms state that promoters are to weigh children once a month, and report the weighing once every three months, the recent MSH evaluation of the program stated that most growth charts kept by the promotor, had no more than two prints plotted.

cited by health workers were inaccurate and dangerously inappropriate for the intended audience. Examples include the following recommendations:

- to give a child fruit juice at two months of age;
- to stop both food and breastfeeding during diarrheal episodes; and
- to feed children donated foods prepared as cereal mixes in bottles.

Observations in the maternal-child health projects indicated that all messages and materials should be carefully reworked in light of the most recent recommendations for maternal-child feeding and diarrhea prevention and treatment and in light of the realities of the families for whom the education is intended. This will be a slow process, which at times may create controversy. For example, the idea of stressing food quantity (using more of what is available in the house--rice, beans, sweet potatoes and platano) as a message for older children met with considerable resistance at the central level. However, if the education is to have an impact, messages need to be "actionable" and address the major nutrition problems associated with adequate caloric intake, not vitamin deficiencies.

### 3. Nutrition Education in PL-480 Title II Education Projects

At this time the only education project using PL-480 Title II foods is the CARE preschool project.\* However, in October, the RADECO\*\* project will begin to use PL-480 Title II food in its radio centers. At the time of our visit, neither project had any nutrition education activities, although both are planning to include them in the next year. Since both education projects operate in the southwest region of the country, it would be valuable to combine resources in research and conceptual formulation for any nutrition education effort.

In preparation for nutrition education activities with parents groups next year, the Nutrition Unit in the Student Welfare Division of the Secretariat of Education has designed a three-day nutrition training program for the promoters in the preschool centers. Similar to education/training in the MCH projects, the content of the course for the preschool promoters is very general, reflecting no regional or job-related priorities. What this indicates is that the education given to parents groups will also be unspecific. There was one exception: everyone agreed that it is important to inform parents about the foods their children receive in school and to stress that the food is a snack, not a meal, so that these children will continue to eat all the meals their families eat.

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\* For a description of the preschool project, see page 40.

\*\* The RADECO project is difficult to assess, since it has just begun transmitting its first lessons. RADECO is a pilot project designed to teach primary school curriculum concepts (reading and math) via radio. RADECO is currently in 23 communities that are not covered by any government social services. For about an hour and a half each day, a radio auxiliary gathers together the RADECO students (children between 7 and 14) for the one-hour broadcast. RADECO has asked CARE to provide food for a snack to these children. This project has been approved and seems justified. However, whoever evaluates the success of the feeding component should be realistic about the nutrition impact to be achieved by providing only a snack to children 7 to 14 years old.

The RADECO has many project resources, including personnel who have received some communications training. Soon they will also have an extensive infrastructure and experience with radio production. As its plans for nutrition education develop, RADECO should be able to benefit from some of the experiences of the other PL-480 Title II efforts and, in turn, offer guidance to them in script writing and radio production. Although RADECO is not interested in undertaking adult education, it may be possible to use its infrastructure in the region to reach families who have not been exposed previously to any nutrition concepts.

#### 4. Activities of Other Agencies

Aside from the programs directly linked to the PL-480 Title II program, agencies with nutrition education responsibilities and programs within the agencies handling food were investigated in the search for an experience that could serve as a beginning for an education project. After a cursory review, it seems that none has a strong nutrition education program on which the Title II program can build. However, areas for collaboration between programs are abundant. A summary of the programs of other agencies is given in Table 9. Brief descriptions of the types of collaboration that could be possible between programs follow.

##### a) Plan Sierra

This regional development program covers three provinces in the mountainous central area of the country. The program has two principal goals: to decrease soil erosion through a process of reforestation and to improve the standard of living of families in the region. Most of the efforts to improve the standard of living have been implemented through community groups and have been oriented toward improving production. Through women's clubs the program

TABLE 9.

AGENCY	Plan Sierra	CONAMI	INESPPE
PROGRAM	Health and women's promotion	Nutrition and health	Popular food stores
LOCATION	Three provinces--central western zone	National--peri-urban	National--rural and peri-urban
INTENDED AUDIENCE	Rural families, women	Mothers of children under 6, parents of children 7 to 14, children 7 to 14	Low-income families
EDUCATIONAL OBJECTIVES	Generally to change food habits; increase awareness of value of foods families produce to increase household consumption of foods	Generally change food habits	Increase consumption of beans; increase consumption of fruits and vegetables; increase consumption of eggs; improve interfamily food distribution
MEDIA: INTERPERSONAL	Promoters, leaders of womens clubs	Nurses, auxiliary nurses, promoters	Staff of national office--demonstrations
MASS		Films and posters	TV, radio, posters
MATERIALS	Flipchart and manual developed by SESPAS	SESPAS flipchart and manual, guide to health prepared for promoters	
CONTENT	Covers content listed for SESPAS. Plan Sierra has additional concepts on gardens and chicken raising	Covers content listed for SESPAS	Content related to specific foods in program
TESTED WITH INTENDED AUDIENCE	No	No	No
EVALUATED	No--not education component	No	
TRAINING	Health promoters (SESPAS) have basic training plus special training from Plan Sierra; little on nutrition or communications concepts; club leaders receive 3 days of training; general nutrition concepts included	Nurses and auxiliaries trained in formal schooling; promoters receive brief training; and currently promoter course described under SESPAS is also being incorporated into the CONAMI program	

has initiated gardens (6,000), chicken, fish, orchard and cattle projects. Education has been dedicated almost exclusively to these projects and has not been oriented toward changes in the feeding practices of families with malnourished children or to other basic changes related to the treatment of diarrhea or the promotion of breastfeeding.

It would be advantageous to involve Plan Sierra when Title II activities for the area (central mountain area) are planned--if possible, at the beginning of the general planning process--so that its experiences with community organization, motivation and training can be utilized. Additionally, when education modules on food production are being considered, Plan Sierra could be consulted for its experience with gardens, orchards and chickens. It is also possible that if Plan Sierra participates in the formulation of the basic nutrition education materials that it may be interested in using the materials with its mothers groups and may pay to print the materials for its projects.

b) Consejo Nacional para la Niñez (CONANI)

CONANI works in the urban areas with groups of mothers and school-age children. CONANI has not developed education materials itself; it uses SESPAS materials for nutrition education with mothers groups. In the future CONANI may be able to collaborate with a PL-480 Title II team to explore the need to tailor messages for urban audiences. CONANI has a nutritionist who is eager to work on nutrition education. CONANI could be another institution to use the basic education materials made by the PL-480 Title II group and materials created for use with preschool and primary school children.

c) Instituto de Estabilizacion de Precios (INESPRE)

Currently INESPRES promotes single commodities on radio, TV and through local markets (tiendas populares). The consumption of basic food stuffs, such as beans and potatoes, is encouraged by INESPRES when there is a surplus and

prices are low. At this time the "campaigns" of INESPRES come and go; there are no products that it promotes continuously. Nor does INESPRES offer nutrition information beyond the nutrition content of its commodities. However, its experience in producing radio programs, securing media time and monitoring the broadcasts may be useful to the PL-480 Title II program. In addition, it may be possible to interest INESPRES in incorporating some basic nutrition education concepts into its radio broadcasts by working with the staff nutritionist.

d) Radio Santa Maria

During this consultancy, we were unable to obtain an interview with the project directors. Thus, our information is limited, but the project should be mentioned. Radio Santa Maria provides adult education. The program is constructed on modules designed around themes selected by program participants. Nutrition has been touched on, but the scope and depth of coverage could not be ascertained. Radio Santa Maria's experiences in designing programs with the communities it serves and its collaboration in airing some material could be valuable to the Title II program.

e) Applied Nutrition Education Program (ANEP)

This non-food program run by CARITAS is described in Table 8. An operational program grant was just awarded to CRS/CARITAS for ANEP. Sufficient money has been programmed for the next three years for a well designed radio education program, interpersonal and training materials. It is possible that this project, which will stress production activities, could begin to develop some of the materials which later could be used by the PL-480 Title II program to encourage local food production. In addition, materials made in the PL-480 Title II program could be used by ANEP. Close collaboration should be maintained

between the two programs, especially to facilitate the steps of audience research and promoter training.

f) Campaign to Protect Breastfeeding

At this time the planning process for the campaign is just beginning. Strong professional support for a nationwide campaign was manifested at a breastfeeding conference held during our consultancy. Once political support and resources have been obtained, the planning group in the Nutrition Division of SESPAS will consolidate existing plans.

Currently SESPAS and Consejo Nacional de Población y la Familia (CONAPOFA) collaborate on a small breastfeeding education effort. The Canadian International Development Agency is planning to support a project in two public maternity hospitals in Santo Domingo. Technical assistance and financial support will be sought from INCAP for the overall project. If the interest in breastfeeding education could be consolidated into a national action program and appropriate, well targeted materials designed and produced, then the PL-480 Title II program could use these in its basic nutrition education program.

5. Training of Personnel in the PL-480 Title II Program

The minimum preparation that personnel working at all levels in the Title II program have had to fulfill their specific job responsibilities will be reiterated in this report. Nutrition education is no exception. At best, workers at the community level have had a few hours of instruction covering basic nutrition principles (the one exception is the ANEP promoters), and no one has been trained in how to communicate this information to families: how to ask questions, how to listen, and how to offer advice.

The lack of preparation in communications techniques extends through the system to the central level, where no subject matter specialist has ever received training in communications. What they know is what they have observed--in this case, all didactic, classroom-style lectures. The inclination is to approach nutrition education as nutritionists, to think only of nutrition facts and concepts, rather than approaching it as communicators or educators, who are concerned with how to express basic concepts to trainees so that they will learn and be able to teach them to others.

In most of the Title II program, there are three levels of personnel who need basic job-related communications training. The first is the central level, where projects are outlined and decisions made about content and methodology. The second is the level of regional or area supervisors, who have both training and educational responsibilities. The third is the level of promoters, or center workers, who are responsible for communicating directly with families. Each of these groups needs specific training in communications. Part of the training can be achieved by having these people participate in the planning and design stages of any future Title II education work. However, the lack of formal academic training is evident and cannot be remedied by merely participating in a project. One or two individuals must have some intense communications orientation outside the Dominican Republic.

In summary, nutrition education components of Title II programs and other health or education projects are extremely weak. There has been an inclination to adhere to traditional methods, such as short nutrition talks, and to conventional themes, like the three or four basic food groups. While people in the program are interested in improving it, progress will be slow because there are no models to use or professionals with training and experience

in nutrition or communications, nor are there national institutions where personnel can receive this preparation.

A few projects have attempted to implement new concepts or methodologies, but they were shortlived and have not left those responsible for nutrition education with a clear idea of the different alternatives and the potential for change inherent in a well-run, carefully designed education program. For the Title II program to undertake nutrition education in a serious way, a basic nutrition education component must be formed, beginning at the first stage with an audience evaluation, and working cautiously through each step: establishing thematic priorities in agreement with major problems; identifying for each theme the major resistance points to changing practices; and from these, the set of basic educational objectives. Next, messages can be designed, media selected and materials prepared for each medium. Following the last step, tracking studies should be undertaken to monitor progress. At the same time that the communications component is being designed and implemented, a training program for each level of worker must be undertaken. This training should not be a single session in which participants are exposed to the entire process of materials design, but should be a series of working sessions in which they learn to formulate good materials and to communicate ideas clearly and appropriately.

IV. Recommended Three-Year Plan for the Nutrition Component of the P. L. 480

Title II Program

A workshop was held from May 30 to June 1 with representatives of the three voluntary organizations and their counterparts and of SESPAS. The objective was to analyze the work accomplished through the P. L. 480 Title II Program and to agree on any necessary amendments for the reorientation of the program.

The recommendations listed herein were expressed in detail by the participants and represent their thoughts.

A. Recommendations affecting all the programs

1. Need for coordination

Up to now all agencies have worked separately and the only thing they have had in common has been the receipt of P. L. 480 Title II food. Their activities have been uncoordinated and none of them knows what the others do. From the beginning of the workshop it was obvious that in order to have some degree of impact at the national level, common objectives and strategies would have to be developed. The agencies agreed that their activities had to be perfectly coordinated and should conform to health, nutrition and education policies being implemented by the State. Furthermore, specific programs being developed by different agencies should also be adapted to common guidelines and have clearly designed objectives, and similar implementation and evaluation procedures. The common objective is to improve the nutritional status of children and the achievement of this objective implies coordinated action in three areas: nutrition, health and education.

For purposes of future coordination, a committee was formed and given the responsibility of working during the entire period of program implementation. This committee, composed of representatives of Voluntary Agencies, SESPAS and the Secretariat of Education, would be in charge of the permanent coordination of activities in order to avoid duplications, make better utilization of available resources and adhere to common objectives and procedures. The committee should have an executive secretary who does not belong to any agency, who is knowledgeable in the field of nutrition and public health and is a well-known professional, and who can act as advisor to the program.

2. Training

The achievement of the objectives for the reorientation of the programs is essential for the continuous improvement of training, especially of the people directly in charge of field activities (promoters and program administrators).

A human resource training program must be developed in accordance with project needs; deficiencies in this particular case are serious. Adequate funding is necessary for this type of activities.

3. Nutrition Education

All of the participants in the planning process felt strongly that a well conceived and executed nutrition education program is fundamental to their activities, especially as they try to reorient them to ones which will promote self-sufficiency among beneficiaries. In fact, nutrition education was mentioned so frequently that it is feared that people will consider education as a solution to all their problems and, therefore, will overload the education component or expect to achieve unrealistic changes

through education alone. Hopefully this tendency can be avoided when work begins on the formulation of the strategy. At this time, education is an exciting new element of the program, one which should be able to achieve some success within the context of a food program especially if the program can move toward a goal of self-sufficiency, graduating families and/or communities from the feeding program. Education in the context of the food program will promote those actions which are

necessary for change at the household level to achieve any improvement in the nutritional status of the child. The actions promoted in the education component should be practices which the family is obligated to try, the success of which will be measured by the rate of improvement in a child's nutritional status. After analyzing the nutrition education efforts of each agency and institution, and realizing that educational goals were shared, a decision was made to form an education group consisting of one or two representatives of each PL-480/Title II and counter part agencies and representatives of other interested institutions \*. This group would work under the general coordinating committee for the nutrition program. The education group would pool resources (personnel, money and production facilities), work together to produce the materials and implement the program in a coordinated way which is crucial if mass media will be used to reinforce concepts transmitted by the promoters. This group hopes that the materials they produce together can become the basis for nutrition education activities in all of their programs. They also realize that alone they don't have the resources to do more than what is currently programmed, but together they can tackle the complex of activities which constitutes a serious communications effort. Additionally if everyone "buys into" the same program the cost of producing materials is decreased tremendously.

Another benefit of the working group approach for the design and implementation of the nutrition education component is that it may be easier to introduce education components to the Food for Work (Rural Development) Program. It is important that at least the projects working in food production and preservation begin to integrate basic nutrition concepts into their work with organized community groups. Work credit can be given for attending education sessions and if a plan for training field personnel is already underway it will be relatively inexpensive to include rural development promoters. The idea would be to

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INESPRE, CONANI and ANEP have already shown interest in collaborating.

forge a close working relationship between the two programs at the end of the three years so that all communities receiving P. L. 480 Title II food from one or another program would have received a basic nutrition education package which will include education for small production projects which would be aided by the rural development program.

4. Human Resources and Materials

To date, CARITAS and SSID have been developing their activities with very limited resources and this situation has prevented them from accomplishing efficient work.

The Nutrition Rehabilitation Centers have almost no physical or health facilities. Food is prepared on a fire made with branches and there is no running water to wash cooking utensils. Under these conditions, it is practically impossible to work efficiently in the rehabilitation process.

The Centers must be made more attractive. They do not have any toys, teaching materials or any materials for physical-motivational stimulation.

Likewise, there are no measurement instruments (scales, index cards or index-card cabinets) and, therefore, it is impossible to quantify results.

Finally, many centers are administered by one person who is unqualified and cannot perform all the functions assigned such as food preparation and distribution, physical-motivational stimulation, nutrition education, work with the families, etc. The mothers can help but specific functions demand trained personnel. This means payment of adequate salaries which, at present, are non-existent.

Similar deficiencies, though less serious, may be observed also in

centers administered by SESPAS which receive P. L. 480 Title II food through CARE. The centers visited have better physical facilities. The personnel seems to be better qualified too. Each center has an administrator, a stimulation specialist and a cook.

##### 5. Weaning foods

Incentives should be offered for the local production of weaning foods which are rich in protein of high biological value, and vitamins and minerals to meet the infant's nutritional requirements. The Health Secretariat and SESPAS, in particular, are interested in this type of production because, at present, these foods are non-existent or very expensive. Pre-school children have high protein and energy requirements and the limited income of poor families prevents them from meeting the requirements with traditional food. On the other hand, iron deficiency affects nearly 80% of pre-school children (according to a SESPAS study) and presumably there is also a high vitamin A deficiency. A weaning food could be a source of vitamin A and iron. The idea of promoting the development and production of this type of food seems to be beneficial to help the country find its own solutions instead of depending indefinitely on food donated through P. L. 480 Title II.

Apparently, the country has the technological capability to develop this type of food. INDOTEC (Dominican Institute of Industrial Technology), one of the institutions visited, is believed to have the necessary human resources and materials to develop this product. In the initial stages, production could be stimulated through the utilization of P. L. 480 Title II food as raw material for the product in question. Once the industrial capacity is developed, formulas could be prepared with locally-produced raw materials.

B. Recommendations for specific projects within the nutrition improvement program

The following section has been prepared based on sub-programs and projects under a global program: Nutrition Improvement, included by USAID/DR in the Three-Year Plan. The following components were analyzed:

1. Sub-program: Nutritional Status Improvement of Young Children, Pregnant and Nursing Mothers.  
Project A - Growth Monitoring and Nutrition Education for High-Risk Families.  
Project B - Rehabilitation of Severely Malnourished Children.
2. Sub-program: Non-Formal Education.  
Project A - Non-Formal Pre-School Education in Priority Rural Areas.  
Project B - Non-Formal Primary Education Using Radio (RADECO)
3. Sub-program: Feeding of Disadvantaged Youth in Institutions.
  - 1) Sub-program: Nutritional Status Improvement of Young Children, Pregnant and Nursing Mothers.
    - a. Project: Growth Monitoring and Nutrition Education for High-Risk Families.

Background: The Dominican Republic has a high percentage of children with retarded growth caused by malnutrition. According to previously-cited statistics, between 30% and 80% of children under five are presently malnourished to some extent. This varies from one region to another and in accordance with the degree of poverty of each region.

Malnutrition factors include low income (unemployment), poor sanitary conditions, excessive number of children, ignorance and family distortion (teen-age/single mothers, absence of the

father, etc.). The existence of one or more malnourished children is generally due to the algebraic sum of all these factors. In a primary health care policy for the entire population, high-risk families must be selected in order to concentrate the major efforts on them. The nutritional status of the children is perhaps the best indicator of high-risk families.

In addition to health care, other actions seem to be important for family groups, for instance, food distribution, nutrition education, child care education and, if possible (in rural areas), promotion of food production and self-sufficiency.

Objective: To select the rural families most in need in order to improve the nutritional status of children under 5 years of age through the distribution of P. L. 480 Title II food and nutrition education.

The program also focuses on high-risk pregnant women through food distribution and nutrition education, with the objective of preventing low birth weight (intrauterine malnutrition).

In both cases, nutrition education shall be used as a means to achieve behavioral changes in the daily utilization of food for family consumption.

Selection of beneficiaries: The beneficiaries will be the families that have one or more children under five years of age, with some degree of malnutrition according to the Gómez' classification (first, second and third degree). Considering that the number of malnourished children is high, it is necessary to apply other criteria in order to give preference to high-risk families. Preference will be given

to families of children with first or second-degree malnutrition or to those having more than one malnourished child under five years of age.

The number of children is another criteria for the selection of high-risk families. Priority will be given, furthermore, to families that have three or more children under five years of age.

The nutritional status will be considered in the selection of high-risk pregnant women. Since in practice there is no prenatal control, the arm circumference should be measured. Teen-age and shortly-spaced pregnancies are also high risks. Therefore, pregnant mothers with more than 3 or 4 children under five years of age should be included in the selection criteria.

The selection of beneficiaries should be accomplished by the health promoters, if possible, and this will direct the beneficiaries to the respective center (CARITAS rural clinics or SSID centers).

If there are no health promoters in the area, voluntary agencies should train their own. Doctors and nursing assistants could also select the beneficiaries, following the established criteria.

### Methodology

1. In order to reach high-risk families effectively, nutrition and social monitoring of the community should be accomplished twice a year. If there are health promoters (SESPAS) and each one is in charge of 100 families, each one should keep a record of each family which includes

the age of the mother; the number of children under five; the weight and age of each child; the marital status of the mother (single, married, abandoned, common-law wife), and finally the father's occupation.

2. Once the selection is completed, the family will be referred to the Rural Clinic or to the Voluntary Agency Centers for registration.
3. A family card will be filled out at the Rural Clinic or Center, giving information for the entire family. Each child must have a separate card indicating the date of birth, birth weight in kilograms (if known), duration of breastfeeding, vaccinations received, etc.) These cards must also have the weight/age curves, with lines indicating the different degrees of malnutrition and an average good nutritional status (Gomez' classification).
4. High-risk pregnant women selected must fill out the Clinic's control card. If there is no Rural Clinic, the Voluntary Agency Centers should have the same card.
5. The mother should go to the Rural Clinic or the Center every two weeks for food distribution. If she lives more than 5 km away, the distribution will take place once a month. The mother should receive the necessary P. L. 480 Title II food for her malnourished children as well as for all her children under five years of age. This food will meet 40% of their protein and energy requirements.
6. In case of a high-risk pregnancy, the mother shall receive an amount of food equivalent to 1000 daily calories. The food will be delivered every two weeks or every month, depending on how far away she lives.

7. Each child shall receive vitamin A and iron during the first six months of life.
8. All family members should be treated for the most common parasites at the beginning of the control period and every six months thereafter.
9. All children under five should be weighed each month and their weight should be registered on their card. Pregnant mothers registered in the Rural Clinic program should also be weighed monthly.
10. If the child of a nursing mother happens to be malnourished, the mother shall receive a sufficient amount of food to complete 1000 calories per day.

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11. Nutrition Education Activities

All beneficiary families enrolled in the program will receive nutrition education via a health worker at least three times per month. In addition to personal instruction, the family will be exposed to the same concepts broadcast on the radio. Twice a month beneficiary families will be required to come to the rural clinics to receive food. On each of these occasions specific recommendations will be discussed with the family representative (mother or father) for changes in daily food practices and health behaviors that will impact on the nutritional status of women and of children under five. Additionally, once a month the promoter (SESPAS, CARITAS or SSID) will visit the houses of those enrolled in the program with the intention of reinforcing the advice offered at the rural clinic.

The messages and materials designed for this program will follow a strategy that will be both curative and preventive to achieve improved nutritional status in women and in children under five. The principal objectives of the education will be:

- o to link child growth with adequate food intake;
- o to prolong breastfeeding;
- o to improve the nutritional value of foods offered to the weaning-age child (probably recommending a specific recipe for a calorie dense, homemade food);
- o to improve feeding practices of older children (two to five years) through specific recommendations on ways to increase food intake;
- o to correct feeding practices during illness, particularly during diarrhea; and
- o to initiate a home food production or preservation activity.

The ultimate measure of whether these objectives have been achieved will be the improvement in the nutritional status of the children. However in this program it will be difficult to separate the different interventions to determine the relative importance of the nutrition education activities. Therefore, knowledge, attitude, and behavior changes will be measured to assess the impact of the nutrition education activities; nutritional status change will be used to assess the impact of the total program.

To measure the program's effectiveness, baseline data will be needed. It may be possible to include three different populations in the baseline: beneficiary families; families in the same communities as the beneficiaries who would be exposed to the education but not to the food program; and families in communities not covered by the Title II program. At the end of the program's three years of operation, these populations would be surveyed again for knowledge, attitudes, and practices relating to key nutrition concepts and for changes in nutritional status.

In addition to an impact evaluation, a process evaluation will be conducted at the end of the first and second years to assess the effectiveness of the distribution system, the quality of the interpersonal education, and the reactions of the beneficiaries to the concepts presented.

The methodology for carrying out the educational activities in this project was described briefly at the beginning of this section, and other information is available in Appendix E. The plan is to develop thematic modules with materials for the major media: health workers and radio. There will be two types of materials for health workers: first, materials for them to give to families at monthly weighing sessions, which would contain age-specific suggestions about what a family could do at home to ensure

that each child gains the proper amount of weight; second, materials to use in group discussions of important nutrition concepts.

The specific materials for growth monitoring sessions would be used initially only at the clinic by the auxiliary nurse and/or the person in charge of the food program. Individual counseling has been chosen as the most appropriate format for delivering advice to families at weighing sessions, because it will decrease the amount of time families have to stay at the center and will link specific dietary changes to growth results. If the materials are successful for the program in the clinic, they may be used by the community promoters.

The group discussions will take place on the days families come to the rural clinic to pick up food--days other than weighing days. Special materials designed for adults with low literacy skills will be used by either the auxiliary nurse or the person responsible for the food programs. These materials will be broader in scope, providing more information about the messages given individually at weighing sessions. The materials also will be available to community health promoters, who will use them with program families either in their houses or during monthly group sessions at the clinic.

Short radio spots and, perhaps, longer programs for both families and health promoters will reinforce the basic messages of all educational modules.

12. The Rural Clinics or the Agency Centers should inform the promoters periodically of the evolution and progress of the program; this information will allow them to reinforce the health and nutrition concepts during their monthly visits to the families.
13. Duration of the food distribution program will be one year. At that time, progress among the families will be evaluated. If the Rural Clinic doctor or the Center administrator believe that the family is still at risk but is progressing, food distribution and control will be continued but only half of the amount previously assigned will be distributed. This new distribution period shall not exceed one year.
14. At the end of the program the mother shall receive a certificate for enrollment and attendance in the program.
15. When the program is completed, the Voluntary Agencies will make the necessary efforts to incorporate these families in food-for-work programs or any other programs of community development and food production for self-sufficiency.

#### Evaluation

The evaluation must be accomplished on a continuous basis keeping a record of the number of children recovered, the number of relapses and the time necessary to attain full rehabilitation.

A tentative evaluation must be made of the impact that the program may have had on the community by improving health and nutrition indicators (the number of malnourished children before and after program implementation, decrease in infant and pre-schooler mortality, changes in the percentage of low-birth-weight children, etc.).

It must be underlined that the effect expected on the community will be limited unless the program has a wider coverage. According to the health

policy in effect, every Rural Center ought to cover a population of 12,000. It has been calculated that there should around 2,800 children under five in a population of that size. Assuming that half of them are malnourished, theoretically, each Health Center should enroll 1,400 children in the program. However, the P. L. 480 Title II program calls for food distribution to 200 children in each Health Center, and this figure is less than 20% of the total.

Ideally, coverage should be offered to all the children who need it. In order to increase coverage it is essential to stimulate the local production of weaning foods (see chapter on general recommendations). If the program is successful for the children enrolled, it will become an incentive for the State's acceptance of this responsibility and the expansion of coverage. This task would be easier if the production of weaning food and of food for 2-to-5-year-old children were fully operational.

#### Equipment and drug needs

In addition to basic infrastructure, the implementation of this program requires equipment and other materials:

- a. Scales which will be furnished to Rural Clinics and Voluntary Agency Centers to weigh pre-school children (under five) and others suitable for pregnant women.
- b. Development and printing of family and individual control cards for each child under five and for pregnant women.
- c. Parasitocides, vitamin A capsules, iron and oral rehydration salts in case of diarrhea.
- d. Educational material: At this time, it is contemplated that worksheets will be distributed to beneficiary families each month at the weighing session. Enough worksheets will be needed for all families in the program, one-two per month. Additionally, flipcharts and guides will be needed for

all the centers and all the promoters working in the program. Radio spots and longer programs will be produced, recorded and distributed to the most appropriate radio stations. Other materials including guides for supervisor staff are recommended.

b. Project: Rehabilitation for Severely Malnourished Children

Background

According to available statistics, approximately 5 to 10% of all children under five suffer from severe malnutrition (third degree), and require special and intensive treatment. They have a high risk of contracting disease or dying because of digestive or respiratory disorders and must be treated promptly

On the other hand, physical growth and physical-motivational development is impaired in these children. For this reason, they require treatment with techniques of early, physical, chemical and affective stimulation.

Ideally, these children should be treated in enclosed centers where the child is interned and isolated from a contaminated environment under medical control. Unfortunately, this is an expensive procedure and cannot be recommended for a country that has approximately 100,000 children with third-degree malnutrition.

Therefore, an intermediate solution must be found which allows the child to remain all day (from 8 a.m. to 4 p.m.) in a clean and stimulating place. This also requires adequate hygienic conditions and facilities for food preparation (clean kitchens and cooking utensils) and personnel to develop each of the activities necessary for rehabilitation. Such a place must also have the necessary facilities to give nutrition education to the parents.

The severely malnourished child reflects a critical intrafamily situation which cannot be ignored. This means that nothing would be accomplished if the

the program were aimed at treating the child without taking the family into consideration. The treatment and care of the family must be included, of necessity, especially that of siblings under five who, if not already malnourished, are at a high risk of malnutrition.

At present, SESPAS operates 25 Centers, with a capacity for treating 750 children and the Voluntary Agencies as a whole, 9 more centers with a capacity for treating 500 children. This means that the available infrastructure is very limited in the face of the enormous needs. In order to increase coverage, two alternatives should be considered which are not mutually exclusive: a) to increase the number of Rehabilitation Centers and b) to treat the severely malnourished children within the previously described program, which will probably be less efficient.

CARITAS is thinking of increasing the number of Centers to 20 mobile units in the next three years. Even then, that number will be insufficient to meet the real needs of the country.

#### Objective

To design and improve a system of centers aimed at the recovery of severely malnourished children, from the standpoint of nutrition and of physical-motivational development.

To provide care to the entire family in order to prevent relapse and to ensure normal development.

#### Beneficiaries

All the children under five years of age who are not breastfed and are severely malnourished (third-degree malnutrition according to the Gómez classification)

At times when the children suffer from clinical edema, weight monitoring may not be useful because the accumulation of liquid may lead to false information. If that were to happen, the child will be admitted to the program even though his/her weight may not correspond to the weight specified for third-degree malnutrition.

Likewise, a child should be admitted when he/she has signs of protein deficiency (thin or fragile hair and skin and mucose injuries).

As in the former program, children will be selected by SESPAS or Voluntary Agency health promoters. They may also be selected by the doctor or the health worker.

#### Methodology

1. The children should be taken to the Center every day except Sunday and must remain there from 8 a.m. to 4 p.m.
2. The Centers should start a family card like the one described in the former program. They should also have a card for each child containing his/her date and place of birth, birth weight in kilograms (if known), length of breastfeeding, vaccinations received, diseases suffered, and weight/age curves with lines showing the different degrees of malnutrition (first, second and third) and the median good nutritional status (according to the Gómez' classification). Siblings under five should have a similar card which must be kept with the family card at the Center.
3. The children taken to the Center shall receive 100% of the nutritive requirements for their age.
4. Once recovery starts, they will receive a daily dose of vitamin A (drops) and iron for three months.
5. The child will be examined by a doctor once a month and must be treated for any skin infections or minor diseases he/she may have. In the case of diarrhea, an oral rehydration solution will be used.
6. A specific individual and group stimulation program will be developed and will be implemented all day except at meal times and when the child is asleep.
7. The mothers must participate in the program and should stay at the Center at least one day a week. They must cooperate in the Center's activities and actively participate in the physical-motivational and affective stimulation programs. They will be trained in these techniques in order to be able to apply

them when the child is discharged.

8. Food will be distributed each week to all siblings under five years of age. The amount distributed will meet 40% of each child's needs.
9. Information on the evolution of the child will be reported to the promoter who will reinforce the concepts of health care and nutrition education during her periodical visits to the family.
10. When the child has begun to recover (and has no edema) he/she must be given be treated for the most common parasites. The family should receive an equal treatment simultaneously.
11. Nutrition education activities:

Either parent of a malnourished child will participate once a week in a group education session during the six months the child is in the program. The parent also will receive "on-the-job" training during the full or half day per week that s/he works at the center. On the day that all of the children in a family are weighed, specific, individualized recommendations for each child will be made to the parent. The recommendations made on the weighing day will be repeated on Friday, when the parent picks up food for the weekend. Also during Friday visits, the staff will stress the importance of parents continuing the rehabilitative treatment of malnourished children through the weekend.

The objectives of the nutrition education activities in this project are the same as those of the growth monitoring and nutrition education project (see page 72). The strategy will be to recommend immediate remedies for the critically malnourished child and behaviorally oriented, but more broadly applicable, preventive advice for siblings.

The educational goals of this project can be evaluated by examining the nutritional improvement of all of the children in a family. It is hoped that during the six months that a child is in the center, the child's recuperation and the specific changes

recommended for daily feeding practices will have immediate as well as longer term effects on the rest of the family. Careful follow up should be done with families in the program to monitor changes in all siblings, including those born after the family's participation in the program.

In addition to recording a child's nutritional status when s/he enters and leaves the center, an assessment of the mother's competency in basic feeding and nutrition skills can be made. The same assessment can be done one year after the child has left the center.

At least initially, the methodology and materials used by the rural clinic workers and promoters will be used by the staffs of the rehabilitation centers to train parents. (See discussion on page 72 and in Annex E) Some materials specifically for the rehabilitation centers might be added to the basic education modules. For example, a guide for parents might be written to describe their responsibilities on the days they work at the center; activities should include child stimulation exercises and food preparation. Also, because there will only be about 50 rehabilitation centers, it would be feasible to supply each of them with tape players, so that radio spots and longer programs could be played at group sessions. This use of the taped messages would decrease message distortion and make the sessions more entertaining.

Follow-up and Evaluation

At the time of admission, the child will be carefully weighed and his/her weight will be recorded on the curve. Weight will be monitored every 15 days and recorded to follow its evolution on the curve.

Also at the time of admission, a simplified, physical-motivational development test will be given to the child to evaluate growth retardation, and the test results will be recorded. The test should be repeated every two months and at the time of discharge.

The child may be discharged when malnutrition reaches the second-degree stage but the treatment must be continued. In any case, no treatment will be administered at the Center for more than six months.

Follow-up must continue at home until a one-year treatment is completed even if the child has normal weight. Food should be distributed during this time to the rehabilitated child and to his/her siblings.

At the end of this period, the child may continue to receive half of the ration for another year if the doctor deems it advisable or re-enter the respective Rural Clinic.

During this period, the child must be weighed at the Center every month, and his/her weight registered on the curve. All siblings under five years of age should undergo the same procedure.

Mothers should participate in Nutrition Education programs during the time of the children's enrollment in the program.

Physical, Equipment and Personnel Needs

Physical Needs

The Centers must fulfill several minimum requirements. They must be clean and paved and must provide each child with 1.5 square meters of space inside. No Center should lodge more than 50 children.

The Centers should also have a place where the children can take a nap. A small mattress or a mat should be made available. The Centers should also have space for training and nutrition education of the mothers. If no other space is available, use may be made of the place where the children sleep.

The Centers should be painted in bright colors and the walls should be decorated with children's drawings. Wooden or plastic toys and hanging mobiles should be available.

The Centers should have running water (faucet in the kitchen) and (clean) kitchen facilities for the hygienic preparation of food. They should have cooking utensils and these should be washed daily. These should be kept in an enclosed area to avoid contamination by flies.

The Centers should have toilet services connected to a septic tank.

#### Equipment Needs

There should be scales to weigh the children, in addition to a table, a desk, a stretcher for examination and a cabinet to keep individual and family cards.

The Centers should have a supply of parasiticides, iron, vitamin A (drops), rehydration solutions, antibiotic powder for local use, dressings, and non-absorbable sulpha drugs for treatment of intestinal infections.

Adequate nutrition education materials include worksheets for parents, flipcharts and guidebooks and tape players with the "nutrition" cassettes.

#### Personnel Needs

At least three people should work at the Center:

- a. An administrator in charge of the Center, child care, administration of medicine when necessary and development of individual and

group nutrition education programs for the mothers. The administrator

should also weigh the children and keep their index cards up to date.

She may be helped by the mothers who take turns at the Center.

- b. A person especially trained in the methodology of physical-motivational stimulation, who will be in charge of giving the physical-motivational evaluation tests. This person will also be responsible for cooperating in other activities of the Center (care, hygiene and feeding).
- c. A cook who can keep the kitchen clean, prepare food properly and control and organize the warehouse where the food is kept.

2. Sub-Program: Non-Formal Education

a) Project: Non-Formal Pre-School Education in Priority Rural Areas

Background

There is a high drop-out rate in primary school and of every 100 children who enroll only 10 finish. One of the main causes of this high rate is apparently the damage suffered by children during their first years of life on account of malnutrition and poverty.

The drop-out rate is higher in rural areas, especially in the poorest. For this reason, SEEBAC is implementing an experimental Non-Formal Pre-School Education Program in the rural areas of the southeast which are the most deprived.

Physical-motivational and social stimulation is combined with nutrition in this particular program.

Objectives

The objective is to prevent impairment of the physical and psychological development of pre-schoolers in poor areas in order to improve the efficiency of primary education.

Beneficiaries

All pre-school children between 3 and 6 years of age, who live in the community, should be the beneficiaries of the program, regardless of their degree of poverty and nutritional status.

The enrollment of and assistance to all the children is the responsibility of the Pre-School Center Administrator who will be supported by the promoters.

### Procedure

From 8 a.m. to 12 noon the children participate in a physical-motivational stimulation program and are taught basic skills.

During this time they receive P.L. 480 Title II food only as an incentive for attendance. They are provided a snack consisting of 480 calories and 20 grams of protein.

It would be important to monitor the nutritional status of the children--even though this is not done--through weighing and use of an individual card. The card may be used in the other programs. Control would be the responsibility of SESPAS promoters.

### Nutrition Education Activities

Pre-school promoters will discuss nutrition concepts with parents at monthly meetings. The concepts discussed will all have an action component-- recommendations for what parents can do at home to improve their children's health and nutrition status.

Nutrition will be introduced to the pre-schoolers via games, which will be modeled on child-to-child materials produced in other countries.

Some pre-schools will be selected as model centers on a pilot basis.

At these schools, gardens will be started to produce foods for the school and to serve as a stimulus for home food production.

The first priority in the area of nutrition education for the preschool program is to work with parents groups. The Student Welfare Unit of the Secretariat of Education is currently training promoters in nutrition. It is their belief that this training will be sufficient for the promoters to begin activities with parents. However, the content of the training is general, and no materials are being produced to aid communication between promoters and parents. The Student Welfare Unit approved the recom-

mentation that their representatives work in the nutrition education group to produce the basic nutrition education materials (probably flipcharts) for all promoters to use with community groups. The hope is that standardizing the messages and materials will facilitate collaboration between SESPAS and Education promoters in each community.

The educational objectives for the parents groups are the same as those listed for the growth monitoring and nutrition education project. Although feeding of children between three and six years of age will be stressed, everyone agreed that all of the basic concepts of infant and child feeding were important to convey to the parents, especially because these families may be models and important disseminators of information in their communities.

In the second or third year of the project, materials on health and nutrition will be made for the pre-school children. The materials will be simple games, illustrating different activities the child might try at home or practices which he/she should try to do more often.

#### Evaluation

Since this is not specifically a nutritional program, it would not be appropriate to evaluate it from this standpoint. However, if an educational component were added, it would be interesting to perform a nutritional evaluation. The children would have to be weighed periodically (every three months) and the impact on their physical development would have to be analyzed.

Likewise, programs related to physical-motivation development should be analyzed using the same tests administered in the Rehabilitation Center Program.

#### Equipment Needs

This program would require only individual cards. The children could be weighed at the Rural Clinics or by the promoters to avoid duplication of work.

Sufficient flipcharts and manuals for all promoters will be needed. Additionally, as the model schools are selected, they will need equipment for the school gardens.

Teaching materials have been donated by UNICEF and a new supply of these could

be provided by SEEBAC.

b) Project: Non-Formal Primary Education Using Radio

Background

At present, there is an insufficient number of primary schools for the 9-to-12-year-old population. The capacity of the schools covers only 80% of this group. This means that close to 280,000 children cannot enroll in primary school.

The worst deficiencies occur in the rural areas, especially in the poorest and the agricultural areas where children must work with their parents, do not have the opportunity of attending school regularly and are, therefore, out of the system.

For these reasons, a primary education system was established using radio. A basic first-grade curriculum has been prepared for an hour's broadcast. All first-grade programs are being developed this year and it is expected that after three years there will be a daily three-hour broadcast, one hour each for first, second and third grades. Nutrition concepts are being considered for inclusion in the mathematics and literacy program.

Objective

To bridge the structural gap in primary education through the use of radio. To provide P. L. 480 Title II food to the children enrolling in the program as an incentive for attendance. The authors believe that there would also be a nutritional objective since the food would improve the children's performance at school.

We do not think that the amount of food to be distributed (a snack once a day for five days) will have any noticeable effect, particularly if the children are over eight years of age.

Selection of Beneficiaries

The program is being developed in the rural areas where there are no schools. The beneficiaries are children from 7 to 14 years of age, who have not attended primary school and wish to enroll in the course.

Program assistants take a census of the child population and work actively in their enrollment.

#### Procedure

Children from different communities gather daily to listen to the educational program. The community furnishes an appropriate place with a radio and chairs or benches.

A snack is distributed before the program starts, using P. L. 480 Title II food.

In this new teaching system, we believe it is important to use nutrition concepts which can be practiced by the children at home (something similar to the Child-to-Child Program). The materials would be developed in collaboration with the Secretariat of Education's pre-school program. At this time RADECO does not want to get involved in adult nutrition education.

#### Evaluation

The program has an adequate (AID) budget which will be used to evaluate the impact of food distribution on school performance. An evaluation will be made of the nutritional status before and after each year of program implementation.

### 3. Sub-Program: Feeding of Disadvantaged Youth in Institutions

#### Background

This program distributes P.L. 480 Title II food to children who have been institutionalized because of social or legal reasons. These include children in orphanages and correctional centers, abandoned children or mentally impaired children. Many private or state institutions receive food through CARE to supplement the normal diet. At present, there are approximately 1,000 beneficiaries.

#### Selection of Beneficiaries

The beneficiaries must be welfare institutions which lodge children facing legal or social problems or suffering from mental or physical impairment.

These institutions must confirm the number of admitted children, describe the types of activity developed and indicate if they receive state or private funding.

So far, this program has also been delivering food to children's and other hospitals and to patients participating in different campaigns, such as the campaign against tuberculosis. In accordance with P. L. 480 Title II, these beneficiaries should be eliminated.

#### Methodology

Since this is not only a nutrition program but also a program of assistance to children's institutions, the only appropriate methodology would be the control and good use of the food distributed.

#### 4. Training of Program Personnel

The success of these programs depends, of necessity, on the training of the people directly responsible for their implementation.

This involves the following levels:

- a. Training at the central level
- b. Training at the area/regional level
- c. Training at the community level

#### a. Training at the central level

Training of nutritionists, social communicators, child educators, evaluators, and administrators is urgently needed. The country lacks the necessary facilities to achieve this training and, therefore, it must be undertaken in well-known foreign institutions which have the required experience in personnel training and community work.

During the three-year program, annual workshops must be held in order to analyze several aspects of the program: nutrition education, advances in child and maternal nutrition, and program methodology and evaluation.

- o The technical assistance offered to the program over the three years will be not only to orient the activities of different stages but also to train a small group of professionals at the central level. For example, one or two people currently involved with the program will be selected to function as the counterparts of the nutrition education consultant. Through periodic contact over three years these persons will be trained in the overall process of nutrition education strategy design, implementation and evaluation. Hopefully, the same close working and training relationship can be established between the nutrition planning consultant and those responsible for the program in the PVO as well as the counterpart institutions.
  - o In the first year of the program, a national nutrition education training workshop lasting at least two weeks is recommended for the core group who will work in nutrition education. Later in the first year or early in the second year, it may be important to hold another workshop in Santo Domingo to which nutrition and broadcast people are invited.
- b. Training at the area/regional level
- o Training is required for the people in charge of programs at the area level, such as Voluntary Agency supervisors as well as SESPAS and SEEBAC supervisors. Training must take place annually to allow this personnel to learn the general objectives of the programs and methods of supervision and implementation.
  - o It is essential to train the medical doctors in charge of the Rural Clinics, especially in the health care of children and pregnant and nursing women, and to give them advanced instruction in nutrition.
  - o Training of the auxiliary nurse in the rural clinic is critical to the success of the Growth Monitoring and Nutrition Education Project since she will need to shoulder most of the responsibility for proper implementation

at the clinic and for ensuring good outreach via the promoters in the community. Since the auxiliary nurse has limited formal training, it will be important to undertake comprehensive, competency-based training with this group to ensure that the skills they need for good project implementation have been presented to them. Inclusion of some of the directors of the rehabilitation centers in this course should be considered.

- o All supervisory level personnel will receive a special orientation to the nutrition education activities. This orientation will be in the form of two or three workshops over the course of the three years. The workshops will provide every supervisor (SESPAS, SEEBAC, directors of rehabilitation centers, and doctors and nurses at rural clinics) with background on the design of the education component and the idea for its implementation. Care will be taken to ensure that supervisory staff fully understand and are in agreement with the basic messages. Communications techniques will be taught to them in the same manner but they are to teach them to the promoters. They will be given ample opportunity to practice using the materials with individuals and community groups. Also, hopefully some regional personnel of the PVO's and/or the counterpart organizations can be involved in developing the communications strategy particularly the stages involving field work: the household investigations or focus group interviews; the pre-testing of messages and materials; the regional distribution plan for the materials, and the monitoring of materials distribution, particularly radio schedules.

#### Training at the community level

The efficiency of the program will ultimately depend on the degree of training of the personnel in direct contact with the community, particularly, the promoters, and the administrators of food programs and nutrition rehabilita-

tion centers who must clearly understand the content and objectives of the messages they communicate. Likewise, they must be trained in the procedures and techniques needed to develop their activities. This requires training at least twice a year.

- One of the annual training sessions will include procedures to be followed and the use of forms for nutrition and growth monitoring.
- The other training each year for community workers and the heads of the food distribution programs will be on nutrition education. This training should be at least three days and will include a thorough explanation of the major messages in the modules which they will be using and supervised practice in the use of the materials and in interpersonal communications techniques. The pre-school and health promoters will learn how to ask questions, how to listen to ideas suggested by women and men that have come from their own experiences and how to use these observations in conveying the nutrition messages.

In summary, the training requirements for the nutrition education activities over three years are:

### Personnel

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- Central level:
- training outside the country in social communications
  - on the job training for a core group of project managers
  - two-three week nutrition education workshop
  - one-two week nutrition and media workshop
  - three day nutrition education assessment workshop
- Regional level:
- orientation of key regional personnel
  - orientation of clinic doctors
  - orientation of auxiliary nurses
  - orientation of auxiliary nurses
  - orientation of auxiliary nurses
  - one week nutrition education workshop for supervisors
  - one week nutrition education workshop for supervisors
- Community level:
- continual involvement of the key regional people in development of nutrition communication strategy
  - 3-4 day nutrition education training
  - 3-4 day nutrition education training
  - 3-4 day nutrition education training
-

## 5. Technical Assistance Needs

Over the next three years the PL 480 Title II program in the Dominican Republic will require periodic technical assistance that will serve both to guide the program and to train a few individuals in program planning, management, and evaluation. The technical assistance should be consistent. The confusion brought on by a stream of technical consultants who represented different viewpoints and who never reconciled their ideas with existing guidelines or plans was evident at both the AID Mission and at the Secretariat of Health. As a consequence, the people responsible for programs were left with general impressions of what to do and sometimes with new ideas, but not with a mechanism to evaluate the ideas, to distinguish viewpoints, or to truly manage their projects.

The technical assistance requirements for the program, listed below, are high in Year One but reduced in Years Two and Three. The list does not detail the technical advisers who should be requested in Year Three for the overall program evaluation.

### Year One

### CONSULTANT TIME

- Orientation to program planning and management.  
Detail first year plan immediately after program approval (work with information specialist). 3 Weeks
- Information specialist--review all information collection instruments and redesign if necessary; establish information flow. 3 Weeks
- Survey/evaluation specialist--to help design and collect baseline information. 4 Weeks
- Specialist in early childhood stimulation. 8 Weeks
- Consultant on the commercialization of weaning food using PL 480 Title II Food (optional). 4 Weeks

Year One continued...

CONSULTANT TIME

- Orientation for nutrition education work and design and supervision of initial information collection (concept testing). 6 Weeks (2 Trips)
- Message and materials design with national and possibly regional workshops. 5 Weeks
- Pretesting. 2 Weeks
- Media plan and monitoring system. 3 Weeks
- Training--regional and community levels. 6 Weeks

Year Two

- Follow-up visit of nutrition planner to monitor all aspects of program and assist planning of second year program. 3 - 4 Weeks
- Survey/evaluation specialist--to review work to date. 3 Weeks
- Nutrition education process evaluation and plan for second year. 3 Weeks
- Message and materials design with national and possibly regional workshops (second wave of messages). 4 Weeks
- Pretesting. 2 Weeks
- Media plan and monitoring system. 2 Weeks

Year Two continued...

- |  | <u>CONSULTANT TIME</u> |
|--|------------------------|
| ● Training--regional and community levels. | 5 - 6 Weeks            |

Year Three

- |  |             |
|--|-------------|
| ● Follow up visit of nutrition planner to monitor all aspects of program and to assist planning of third year program. | 3 - 4 Weeks |
| ● Survey/evaluation specialist to review work to date.   | 2 Weeks     |
| ● Nutrition education process evaluation and plan for third year.  | 3 Weeks     |
| ● Community investigation for food production messages (concept testing).  | 3 Weeks     |
| ● Message and materials design with national and regional workshops.   | 3 Weeks     |
| ● Pretesting.  | 2 Weeks     |
| ● Media plan and monitoring system.  | 2 Weeks     |
| ● Training--regional and community levels.   | 5 - 6 Weeks |
| ● Evaluation.  | 6 - 8 Weeks |

APPENDIX A

PERSONS CONTACTED

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Persons Contacted

SESPAS (Public Health and Social Security Secretariat)

Victor Suero, Advisor to the Minister  
Haydeé Rondón, Chief, Nutrition Division  
Carmen Gravely, Nutrition Division  
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Mercedes de Santos, Regional Nutritionist, San Francisco de Macoris  
Personnel, Rural Clinic, , Mella, Barahona  
Personnel, Rural Clinic, Sabana Grande de Hostos, San Francisco de Macoris  
Personnel, Rural Clinic, Samaná  
Personnel, Nutrition Recuperation and Education Center, Mella and  
Vicente Noble, Barahona  
Health Promotor, Los Ríos, Barahona  
Aguacate, Nagua  
Heina, Santo Domingo

SEEBAC (Education and Fine Arts Secretariat)

Nelson Ferrero, Director, Student Welfare  
Máximo Mateo, Deputy Director, Student Welfare  
Isabel Alcántara, Director, PreSchool Education Program  
Juris Rosano, Helen García, Pedro Velásquez, Nutrition Section,  
Student Welfare  
Personnel, Preschool Program in Cristóbal, Azua and a barrio of Barahona

SEA (State Sugar Council)

Lydania Guilliani, Promotion Department, Barahona  
Personnel of the Food Center in Barahona

CARE

Richard Steelman, Director CARE/Dominicana  
Peter Heffron, Assistant Director  
Angie Baez, Head of Commodities  
Apolonio Diaz, Head of Supervision  
Miguel Angel Gómez Escaño, Supervisor, San Francisco de Macoris Region  
Victoriano Rivas, Supervisor, Barahona Region  
Silvio Medina, Supervisor  
Ramón Taveras, Supervisor  
Osvaldo Tapia, Supervisor  
Michael Alms, Medical Doctor

CRS (Catholic Relief Service)

Carol Munroe, CRS/Dominicana  
Joy del Rosso, Consultant in the preparation of the OPG Proposal

CORITAS

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Personnel of the Nutrition Recuperation Center, Bani  
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Promotores ANEP, Aguacate, y Castillo, Nagua

CWS (Church World Service)

Kathryn Wolford, Field Representative

CCID (Social Service Programs of the Dominican Churches)

Felipe Martínez, Program Director  
Lidia Santana de Cabrera, Nutritionist, Central Office  
Angelista D'Oleo, Nutrition Promotor, Región Barahona  
Personnel in the Nutrition Centers in Mena, Jaraqua and Los Rios, Barahona

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Philip Schwab, Mission Director  
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Rose Veith, Director, Program Office  
Don Soules, Assistant Program Officer  
Oscar Rivera, Director, Health and Nutrition Office  
Marcom Moore, PL-480, Title II Program  
Tom Nicastro, Director, Education Office  
Tom Ross, Education Office  
Arturo Valdez, Director, PVO Office  
W. Ellis, Director, Agriculture Office  
Dorothy de Witt, Loan Office

IDOTEC (Dominican Institute of Industrial Technology)

Wilston Alvarez, Director, Department of Research and Development  
Personnel, Department of Research and Development and Public Relations

RADECO (Community Radio Education)

Sukrè Muñoz, Director, RADECO  
Aime Olson, Chief of Party Inter-America Research Association  
Allan Hundley, Consultant

CONANI

Luz Calcañé de Meléndez, Nutritionist

UNESPRES

Marisela Bodden, Nutritionist

PEACE CORPS

Durán, Director  
Craig Fredrickson, Assistant Director  
Miguel León, Head, Nutrition and Health Programs

PLAN SIERRA

Blas Santos, Director, Plan Sierra  
Germania Morel, Director, Health Program  
Andrea Gómez, Director, Women's and Social Promotion Programs

Richard Pelczar, Education Specialist, Inter-American Development Bank  
Dr. Muñoz, Director, Children's Hospital, Santo Domingo  
Society of Pediatricians (those pediatricians involved in research)  
Society of Food and Nutrition (Breastfeeding Seminar)  
Marisela Nuñez, La Leche League

USAID/Washington

Audrey Wright, Nutrition Office, Bureau Science and Technology  
José Rodríguez, Deputy Director, Food for Peace  
Judy Gilmore, Office for Programs, Policy and Education, Food-for-Peace and Voluntary  
Assistance Bureau  
Iope Sukin, Office for Programs, Policy and Education, Food-for-Peace and Voluntary  
Assistance Bureau  
Pirie Gall, Team Leader, PL480/Title II/Evaluation, Dominican Republic

Other People

Marcelo Selowsky, World Bank  
Rose Schneider, Development Associates  
Rudi Horner, Nutritionist CARE/New York

APPENDIX B

AGENDA AND PARTICIPANTS IN  
NUTRITION PROGRAM PLANNING WORKSHOP

DRAFT

PROJECT FOR:

A SEMINAR-WORKSHOP ON THE APPROACH TO NUTRITION AND CHILD AND  
MATERNAL HEALTH PROGRAMS IN THE DOMINICAN REPUBLIC

1. JUSTIFICATION

A general evaluation of P. L. 480 Title II Program in the Dominican Republic was conducted in June of 1982. This evaluation focused mainly on the actions being developed with these resources by CARE/SESPAS/CRS/CARITAS and SSID. in the specific components of nutrition and maternal and child health and food for work.

Many recommendations resulted from this evaluation, aimed at improving the nutrition and maternal and child health programs of the different agencies. These recommendations will be revised and analyzed during the proposed Seminar-Workshop in order to program their implementation.

2. GENERAL OBJECTIVE

Development of programs for the next three years.

3. SPECIFIC OBJECTIVES ASSOCIATED WITH THE PLAN FOR THE NEXT THREE YEARS:

- 1) To improve program efficiency and coverage of target groups.
- 2) To introduce institutional education components in all programs.
- 3) To introduce concepts of control and continued evaluation.
- 4) To establish coordination and integration among institutions and programs.

Drafted by:

AID/W-TDY:MGriffiths:ft

May 18, 1983

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PROGRAM FOR THE WORKSHOP ON NUTRITION TO BE HELD

FROM MAY 30 TO JUNE 1, 1983

Place: Casa San Pablo,  
Santo Domingo, D. R.

Monday, May 30

- 9:00 - 9:15 a.m. Opening.
- 9:15 - 9:45 a.m. Usefulness of nutrition programs in the less developed countries.  
Speaker: Dr. Fernando Monckeberg.
- 9:45 - 10:15 a.m. Present health and nutrition policy in the Dominican Republic.  
Speaker: Dr. Haydee Rondón de Nova.
- 10:15 - 11:45 a.m. Limiting factors in the achievement of objectives.  
- All participants -
- 11:45 - 12:00 noon Summary.
- 12:00 - 1:00 p.m. Lunch.
- 1:00 - 4:00 p.m. Discussion of projects related to nutritional status improvement through growth follow-up and nutrition education.  
- Work groups-
- 4:00 - 5:00 p.m. Summary of a program improvement plan.

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Tuesday, May 31

- 9:00 - 10:30 a.m. Discussion on the Nutrition Rehabilitation Centers.  
- Work groups -\*
- 10:30 - 11:00 a.m. Summary of a program improvement plan.
- 11:00 - 12:30 p.m. Discussion of the Pre-School and RADECO Programs  
- Work groups - \*
- 12:30 - 1:00 p.m. Summary of a program improvement plan.
- 1:00 - 2:00 p.m. Lunch.
- 2:00 - 4:00 p.m. Discussion of the institutionalized children's feeding program.  
- Work groups - \*
- 4:00 - 5:00 p.m. Summary of a nutrition education plan.

Wednesday, June 1

- 9:00 - 10:30 a.m. Agency work to define nutrition program plans.  
- Work groups - \*
- 10:30 - 11:45 a.m. Plan presentation by Agencies.
- 11:45 - 12:00 p.m. Closing.

\* The following are the topics to be discussed by the work groups:

- Project objectives.
- Indicators to measure achievement of objectives.
- Project definition - characteristics and methodology.
- Criteria for the selection of project sites.
- Criteria for the selection of project beneficiaries.

## PARTICIPANTS IN THE NUTRITION SEMINAR/WORKSHOP

Casa San Pablo - May 30-June 1, 1983

<u>NAME</u>	<u>ORGANIZATION</u>	<u>POSITION</u>	<u>N° DAYS ATTENDED</u>
Donald Soules	AID	Asst. Program Officer	3
Evangelista D'Oleo	SSID	Nutrition Promoter	3
Libia S. de Cabrera	SSID	Nutrition Promoter	3
María C. Garcia	SSID	Nutrition Dept. Admin.	3
Joy M. Del Rosso	CRS		3
Ezequiel Ramírez	CARITAS	Nutrition Program Admin.	3
Angela Ma. Rodríguez	SSID	Nutrition Dept.	3
Vitalina Morfe	SSID	Nutrition Dept.	3
Kathryn Wolford	CWS/SSID	Representative	2
José Vinicio Torres	CARITAS	Promoter	3
Damián Pérez (Gerardo)	CARITAS	Executive Director	2
Belkis Mejía Peña	CARITAS	Secretary	3
Ramón A. Castillo	CARITAS	Administrator/Supervisor	1
Marcon A. Moore	AID	Program Assistant	3
Eduardo Jiménez	CARITAS	Promoter	3
Leonida de León	CARITAS	Volunteer	3
Hno. Cristobal Walsh	CARITAS	Director, Las Matas de F.	3
Hector M. Ortíz	CARITAS	Sec., Las Matas de F.	3
Ramón Ant. Arias	CARITAS	Promoter	3
Persio O. Romero	SESPAS	Director, Reg. I	3
Dra. Daniela Cotes	SESPAS	Region III, San Fco. Mac.	3
Dra. Grisel Martínez	SESPAS	Director, Region VI	3
Dra. Martínez de Cabrera	SESPAS	Director, Region II	3
Carmen Granley	SESPAS	Central Office	3

<u>NAME</u>	<u>ORGANIZATION</u>	<u>POSITION</u>	<u>N° OF DAYS ATTENDED</u>
Rubia Hernández	CARITAS	Area Administrator	3
Ramón Taveras	CARE	Supervisor	3
Maritza Raposo	SEEBAC	Technician	3
Lic. Pedro María Vásquez	SEEBAC	Technician	3
Lic. Ana Ma. Weeks	PEACE CORPS	Nutrition-Health Program Coordinator	3
Quisqueya Lora	CARITAS	Area Administrator	3
Indiana Jones de Rincón	CARITAS	Asst. Director, Food Program Administrator	3
Héctor Ogando	CARITAS	Promoter	3
Agustín Javier	CARITAS	Area Admin.- Higuey	3
Miguel A. Gómez	CARE	Supervisor	3
Peter Heffron	CARE	Field Representative	3
Marcia Griffiths	MANOFF INT'l	Vice-President	3
Victoriano Rivas	CARE	Supervisor	3
Silvio Medina	CARE	Supervisor	3
Oswaldo Tapia	CARE	Supervisor	3
Apolonio Díaz	CARE	Technician	3
Nurys Rosario	SEEBAC	Technician	3
Felipe Martínez	SSID	Program Director	2
Máximo Valdéz	CARITAS	Promotor	3
Práxedes Roa	CARITAS	Nutritional Assistant	3
Dra. Haydee Rondón	SESPAS	Director, Nutrition Div.	3
Ana John	SESPAS	Nutritionist	3
Angelo Minier	ODC	Promoter	3
Julio Aracena	CARITAS	Promoter	2

<u>NAME</u>	<u>ORGANIZATION</u>	<u>POSITION</u>	<u>N° OF DAYS ATTENDE</u>
Rafael Reyes	CARITAS		3
Melba Tió Brea	CARITAS		3
Olga Ramírez	CARITAS	Mothers' Club	3
María Alt. Enc.	CARITAS	Mothers' Club/Prom. Nutr.	2
Ana H. Cabrera	CARITAS	Promoter	3
Marisela Bodden	INESPRE	Nutrition Admin.	2
Barbara Liedke	PEACE CORPS	Nutritionist	3
Kalee Powell	PEACE CORPS	Nutritionist	1
Ana Kepple	PEACE CORPS	Dietician	2
Mathus	CARE	-	1
Pegg V. Heulen	CRWRC	Public Health Advisor	1
María Coleman	-	Nutritionist	1
Ilsa Nivar	Pre-school Dept.	Psychologist/Teaching Spec.	2
Carol Munroe	CRS	Director	2

APPENDIX C

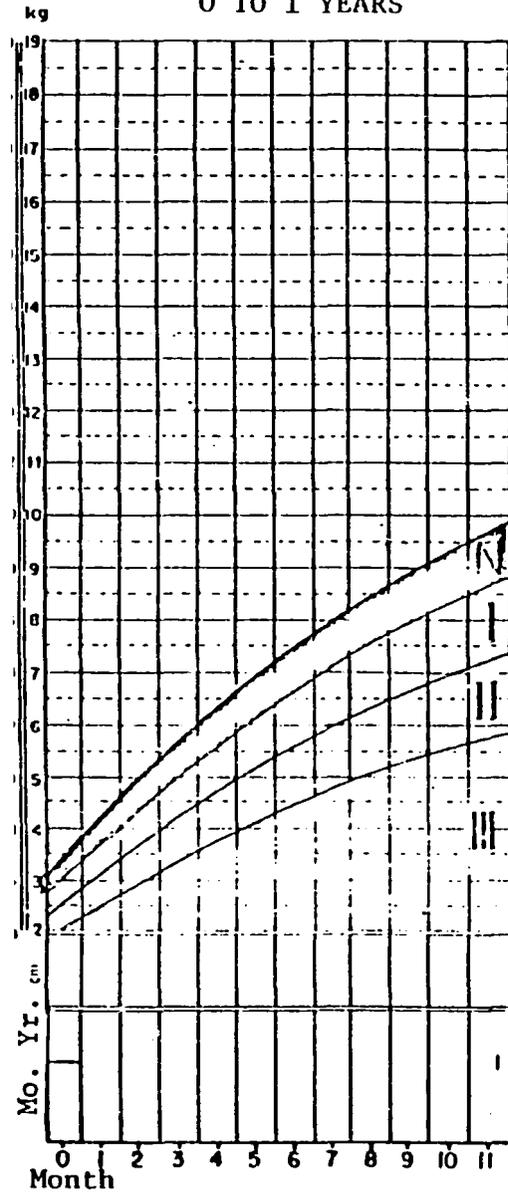
SESPAS GROWTH CHART

(Subject to corrections in curve for  
children three to five years old)

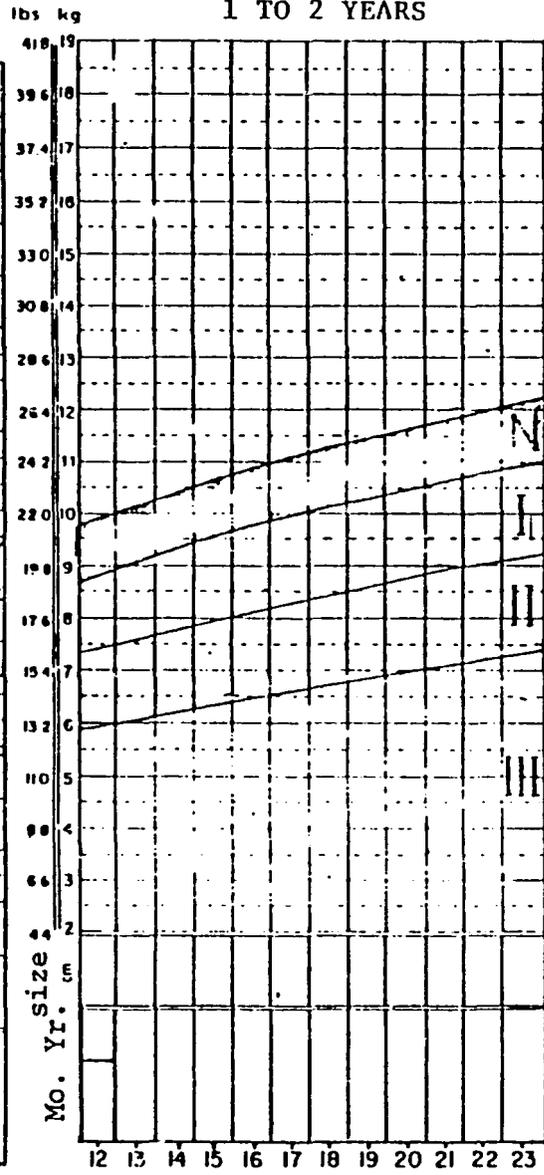
GROWTH CURVE AND NUTRITIONAL CLASSIFICATION OF 0-TO-5-YEAR-OLD CHILDREN

0110

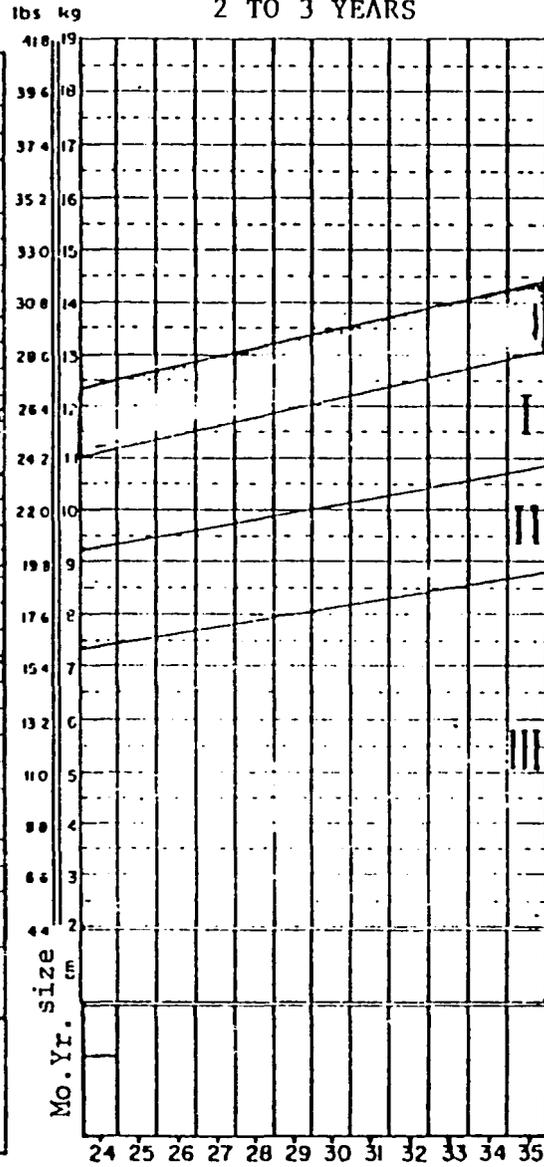
0 TO 1 YEARS



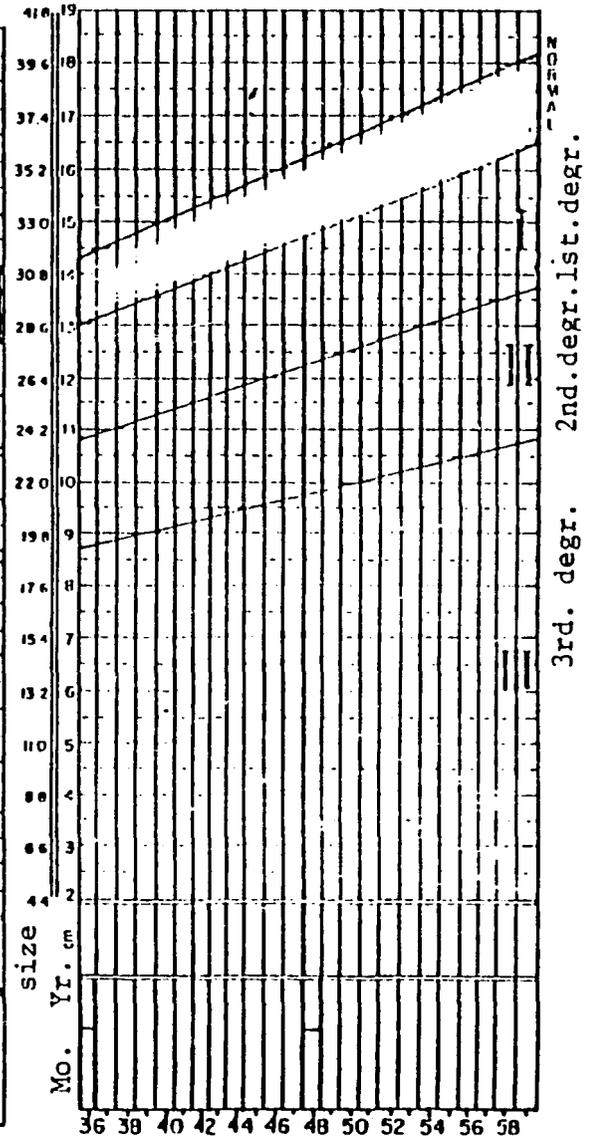
1 TO 2 YEARS



2 TO 3 YEARS



3 TO 4 YEARS 4 TO 5 YEARS



Signature \_\_\_\_\_

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1. General information

Subcenter or clinic \_\_\_\_\_ Registry n° \_\_\_\_\_ Code \_\_\_\_\_ Date \_\_\_\_\_ Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

Family name \_\_\_\_\_ Mother's maiden name \_\_\_\_\_ First Name \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Mother's complete name \_\_\_\_\_

2. Birth information: Place of birth \_\_\_\_\_ Institutional delivery (1) \_\_\_\_\_ Home delivery (2) \_\_\_\_\_

Birth weight \_\_\_\_\_ pounds Length \_\_\_\_\_ cm

3. Breastfeeding and formula: Breastfeeding from \_\_\_\_\_ to \_\_\_\_\_

Formula: solid food from \_\_\_\_\_ to \_\_\_\_\_

4. Growth and development: The child raised his/her head \_\_\_\_\_ months. Sat up \_\_\_\_\_ months. Walked \_\_\_\_\_ months. Spoke \_\_\_\_\_ mos

5. Immunizations: BCG single dose Measles single dose DPT 1st dose 2nd 3rd booster Polio 1st dose 2nd 3rd booster

DEVELOPMENT CONTROL

Write down the date and the differences found according to the "Guide."

\_\_\_\_\_

Morbidity control

\_\_\_\_\_

Date Weight Height Diagnosis Indications

Laboratory

\_\_\_\_\_

References

\_\_\_\_\_

APPENDIX D

MAP OF THE DOMINICAN REPUBLIC



APPENDIX E

NUTRITION COMMUNICATIONS IN THE PL 480 TITLE II PROGRAM

(1984-1986): IDEAS ABOUT HOW TO PROCEED

APPENDIX E: Nutrition Communications in the PL 480 Title II Program (1984-1986)  
Ideas About How to Proceed

Each of the projects for the Nutrition Improvement Program is outlined in Section IV of this report with nutrition education activities incorporated into each project description. These activities, however, provide only part of the Nutrition Communications Working Group's conception of how the Nutrition Communications Component might be developed.

The Group adopted a new, broader perspective when its conceptualization of the task was reoriented from nutrition education to nutrition communications. This reorientation was important to the planning process, because the Group's view of how to deliver information effectively was directed away from classroom teaching toward an educational process consisting of a complex of actions with the potential not only to impart information but to change behavior. The goal has therefore become one of altering behaviors to achieve nutritional status improvement. To accomplish it, the Working Group realized, would require undertaking two communications efforts: the first with the public, the beneficiaries of the program; the second with program personnel and decision makers (those on the inside) to keep them informed and focused on the same messages.

When the Group altered its vision of the work and began to see the greater potential for change afforded by a well run communications program, the member agencies decided to join forces and resources to carry out a work plan in which all would participate to generate a basic set of behavior-change oriented messages and interpersonal and mass media materials suitable for both food and non-food programs.

The Group debated the advantages of having the materials focus on feeding practices affecting young children or on food production and income generating activities. The consensus was that in the first two years of the project the Group would concentrate on activities a family can undertake with their own resources (i.e., infant and child feeding practices and diarrhea prevention and treatment) Members believed that providing this advice to families in the food program would be fundamental to achieving changes in nutritional status. They thought that the materials on home food production should be designed in the project's third year, when they could coordinate with food-for-work projects to provide some of the materials.

At the end of three years the Group hopes to have prepared five or six modules to aid interpersonal communications. The modules will provide specific advice to beneficiary families while they are receiving food, which will help them derive greater benefit from the food and improve their own situation. The

topics for the modules are listed below.

- Breastfeeding (produced by the Breastfeeding Group).\*
- Infant feeding--stressing weaning food.
- Young child feeding--stressing food quantity.
- Feeding during illness.
- Prevention and treatment of diarrhea.
- Maternal needs.
- Food production (produced in collaboration with ANEP).\*

When the Group initially spoke about communicating nutrition information, the discussion was of group sessions and interpersonal communications. After exploring the subject, members agreed that for many reasons group sessions were not always the most appropriate or effective means of delivering information. They subsequently committed themselves to developing a radio component for every module. Although the format for the radio shows was not decided, short spots and a longer continuing-story format modeled on soap opera were favored.

Additionally, the Group thought that perhaps the best way to deliver specific, timely advice to a mother was when her child was weighed. Therefore, messages and materials tailored for use at weighing sessions will be developed. The content of the messages will be curative and behavior change oriented; the messages will suggest one or two things a family can try to improve the nutritional status of their child. The weighing session will be a forum for presenting advice to families about what they can do to ensure the recovery of their child. It will also be the place where the child's recovery, and thus the family's success in following the advice, is measured. The family's entitlement to receiving more food will be conditional on the child's recovery.

Message distortion due to the forgetfulness of village promoters was something all programs identified as a major problem. To overcome it, the Group is committed to producing good visual aids and uncomplicated messages. It also wants to include a strong communications element to promoter training. Additionally, the Group would like to develop a radio program particularly for community workers to keep them informed about the program, to repeat messages and to discuss successful

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\* The inclusion of staff from non-food programs in the Education Group was to encourage sharing of the methodology, so that the materials produced by those programs would fit the general pattern.

community programs. The radio program would probably be developed in Year Two.

Although there was a great deal of discussion about the products the Group thought were important to generate, there was little of process, or how these materials would be generated. Would members design the radio show from offices in Santo Domingo? Would materials have to be developed for each region? The problems were not easy to resolve. Therefore, the following plan was proposed and agreed upon: They would

1. Identify the real nutrition problems for the beneficiaries: women of childbearing age and children under five.
2. Identify more precisely who to reach (for example, rural and urban families with malnourished children; families with limited resources, etc.).
3. Investigate the nutrition problems with the audience identified for the communications effort. This would entail household visits or focus group interviews to uncover resistance points to new or modified practices. The investigation would also involve actual trials of recommended practices.
4. Synthesize the results of the investigation into carefully formulated behavior change objectives to address practices that can be affected by education.
5. Design messages based on the behavior change objectives, including the action component and a motivational component.
6. Identify the best media for each message and audience.
7. Design the best materials for each medium.
8. Pretest the materials with personnel who will use them and with the intended audience.
9. Inform all levels of personnel in the program about its plans and implementation.
10. Implement the program.
11. Monitor the progress of the implementation.

The process is long, but it is the only way to ensure that the materials designed will be sound.

The work plan that was agreed to for Year One follows these steps:

1. Establish the Nutrition Communications Group and receive a commitment of time and money from each participating organization.
2. Work on Steps 1 through 5 of the procedure with the understanding that this community work will provide the background for two years of work.
3. Choose one theme (child feeding was recommended) and develop a communications strategy that includes:
  - a) interpersonal materials for individual counseling at growth monitoring sessions (worksheets) and for group discussions (flipcharts);
  - b) mass media materials (radio) for the intended audience and for program personnel (radio shows); and
  - c) training for all levels involved in program implementation.
4. Implement the strategy.
5. Monitor progress.

In Year Two a communications strategy for an as yet unspecified theme will be designed and implemented. At that time, some of the special needs of projects will be addressed--for example, special materials for rehabilitation centers and preschools. Attention will also focus on perfecting the radio program for community workers.

In Year Three the focus will change from feeding and health practices to home food production activities. This may involve more fieldwork, but it is hoped that the ANEP program will have many of the crucial concepts already investigated. Year Three will also be a time to refine the communications strategies of the first two years and to perfect the modules and the radio communications.

At the end of three years the accomplishments of the program should be:

- (1) a core group of people at the central level well versed in communications

strategy planning and program monitoring; (2) a pool of information from which new messages and materials can be drawn; (3) a basic set of materials tailored to the realities of different regions and populations that addresses in an appropriate and effective manner major nutrition problems and constraints; (4) a team of people at the regional and community levels knowledgeable about the basic content and utilization of the materials; and (5) a group of program administrators committed to the program.

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