

BEST AVAILABLE COPY

11p.

PD-AAA-997-B1

OPERATIONAL GRANT PROPOSAL

Total CFC Request : \$48,249

Project Title : Training Primary School Teachers in Nutrition

Project Location : Haiti

WHO Office and Location : Fondation CARE; 21 Avenue Verde Jeune (P.O. Box 77)
Port-au-Prince, HaitiCentral Headquarters : CARE/MEHICO, Inc., 660 First Avenue, New York
New York, 10016

Contact Person : Mr. Leo Pastore, Program Department; CARE/MEHICO

Date of Submission to AID : February 14, 1975
(Original submission July 10, 1974)Project Purpose and DescriptionA. Project Purpose and Target Group of Beneficiaries

The primary goal of the project is to improve the nutritional status of school children, through the medium of their teachers, by increasing their knowledge of nutrition and changing harmful dietary attitudes and practices. Secondary goals are to establish nutrition education as part of the primary school curriculum; to instruct teachers in basic principles of hygiene and family planning; to improve school lunches; to give practical advice and material help in school gardening; and to induce the GOH to undertake a similar project (by involving it in this pilot project).

The direct beneficiaries of the project will be the rural school teachers receiving nutrition education training during summer seminars in Damien, Chateaud and Verdefranco. The ultimate beneficiaries will be the pupils in rural schools throughout Haiti who will receive basic nutrition education from teachers who attended the seminars.

BEST AVAILABLE COPY

B. General Description of Project

The project will begin with a survey of height-weight-age ratios, food habits and nutritional awareness among the pupils in 40 schools of the Port-au-Prince, Conaives, Port de Paix and Cap-Haitien regions. During the summer, approximately 240 primary school teachers will attend a nutrition course, designed to impart a general knowledge

.../...

of nutrition and its importance in the home and the school. During the school year following the summer course, the project nutritionist and an agriculture extension agent will visit the teachers in their schools to advise, supervise and give audio-visual and food preparation demonstrations. At the end of the year, another height-weight-age ratios, food habits and nutritional awareness survey will be taken to detect any improvement in the nutritional status of the school-children. The school visits will be repeated after the summer seminars in 1976. The project will end in June 1977 with a final survey to determine overall nutritional improvement in the school children.

3. Conditions Expected at End of Project

It is expected that the height-weight-age ratios surveys will show a slight improvement in the nutritional status of the school-children at the end of each year of nutrition education. (On the height-weight-age scale prepared by Harvard Medical School for Haiti, this might be an average shift from second-degree to first-degree nutrition, or from first degree malnutrition to normal status). In addition, a written quiz on nutritional awareness, given before and after the course to pupils in the upper grades, would be expected to show an increase in the children's knowledge of nutrition and hygiene. The food habits surveys may show only a slight change since the children are not responsible for food preparation at home. (However, the audio-visual presentations and demonstrations given by the nutritionist at the schools will include interested parents. Also, pupils may explain their nutrition lessons to their parents). Measurement will be based on increased alertness of the children in class, increased nutritional awareness shown by the quizzes, weight improvement, and changed food habits indicated by the surveys.

Project Background

A. Prior Experience

CARE/Haiti is initiating the project because of its knowledge of poor rural conditions and its experience with the feeding program in Haiti. Over eighty percent of the population is rural and CARE's food is distributed accordingly; hence, this program will be directed mainly to the rural child. The CARE program currently provides food for forty-four centers which feed approximately seven thousand children from two months to six or eight years old. At these centers, nutrition education is presented to the mothers by nutrition aides paid by the Bureau of Nutrition, the Haitian American Community Help Organization (HACHO), or by private or religious groups. In addition, CARE provides food for approximately 3,600 children in pre-school lunch programs, and for approximately 103,900 children in primary schools. CARE also provides food for about two thousand children under eighteen years old in hospitals and institutions.

.../...

Although the original request for the nutrition education project did not come from the host government, officials in education and nutrition are strongly in favor of it. The Bureau of Nutrition has assigned a staff member to help develop the curricula for the summer seminars and the primary schools. The Ministry of Agriculture has promised classroom space and about 20 hours for nutrition education during each of the summer seminars, office space at Darden, programming help from specialists in nutrition and agriculture, and an agriculture extension agent to travel as a team with the project nutritionist.

The Bureau of Nutrition is currently operating 17 nutrition centers and supporting other centers under MASHO and Catholic Relief Services. In addition, it has a mobile team of a doctor, nutritionist, and aides visiting the centers at intervals for preventive medical care. The Bureau of Nutrition trains about twenty five aides twice a year in a five-week course of nutrition education. Approximately forty women were trained in two six-month nutrition education courses sponsored by the World Health Organization and the Ministry of Public Health.

The Department of Rural Education under the Ministry of Agriculture includes very limited nutrition education in its primary school curriculum under "Home Economy". In addition, the curriculum includes "Agriculture Education" and "Health, Recreation and Physical Education". The Ministry has a nutrition education course in the home economics schools at the Secondary school level, sponsored by UNICEF.

Project Objectives

BEST AVAILABLE COPY

A. Economic Effects

The people most directly affected by the project will be the school teachers attending the summer seminars, who will learn better management of the food dollar as well as basic nutritional facts. This information will be passed to the pupils in the schools, and augmented by the demonstrations of the visiting nutritionist. The children themselves and their teachers will apply agricultural techniques learned in class to the school gardens, adding the food they grow to the school lunches. The nutrition classes and demonstrations will include basic elements of food storage without refrigeration. Secondary beneficiaries will be those parents attending audio-visual presentations and food demonstrations.

Determining the precise economic effects of this project are difficult because the relationship between this type of social development project and direct economic outputs is long term and heavily dependent on other more dynamic economic movements. This project's primary goal is to improve the nutritional status of rural Haitian children

by increasing their knowledge of nutrition and changing harmful dietary attitudes and practices. Using the premise that healthier children will contribute more efficiently in the future than sick children, it is possible to state that this project will eventually contribute to economic improvement. At the same time, in measuring its economic value, good nutrition cannot be isolated from the dynamics of agricultural production and climatic conditions.

Approximately 480 teachers will attend the summer seminars in three locations during the thirty-three months of the project. The 360 teachers attending in Chatard and Damien in the CARE zone of operations will reach an average of 250 students per school, with an approximate total of 90,000 school children receiving nutrition education during the thirty-three months. Since the project value is approximately \$48,000 dollars, project investment will be \$0.50 per child for the entire 33 months.

B. Technology

1. Height-weight-age ratios survey: ten schools in each district of the CARE zone of operations will be selected for the survey. (These are the regions of Port-au-Prince, Cap-Haitien, Gonives and Port de Paix). Twenty percent of the students in each school will be selected for the survey. Thus, 20% or a minimum of four pupils in each of the classes (Infantine, Preparatoire, Elementaire, Moyen and Certificat d'Etude) will be selected. Their height, weight and age will be recorded and compared with the norms for Haiti.

A short written quiz will be given to the pupils in the upper grades to test their knowledge of basic nutrition. In addition, all of the children measured will be questioned on what (or is) they eat for breakfast, lunch and supper; what crops the family raises for itself and for the market; and what food is bought in the market place.

This three-part survey will be carried out by the project nutritionist at the beginning of the project and after each school year of visits and demonstrations. The personnel of the Bureau of Nutrition will assist in planning the project and analyzing the results. If possible, if the teachers participating in the summer seminars are drawn from the same schools each time, the surveys will be made in the same schools. Children who have attended a nutrition center, or whose siblings have attended, will be excluded from the survey because of their prior exposure to nutrition education.

2. Summer seminars: The seminars will be given for one month consecutively in Damien (near Port-au-Prince), Marfranc (near Jaco) and Chatard (near Cap-Haitien). There will be approximately 240 primary school teachers taking part, drawn from the thirty-seven school districts of Haiti. These teachers are either recent graduates from the Ministry of Agriculture's Normal School or are uncertified teachers chosen by local leaders. The teachers will board at the centers for the month of the seminar at the expense of the Government of Haiti. The seminars are taught by ten special-

lists in the Rural Education Division of the Ministry of Agriculture. UNICEF pays for the seminars, about \$3,000 for each.

Under this project, a curriculum for nutrition education will be devised by the project nutritionist in cooperation with the Bureau of Nutrition and the Ministry of Agriculture. The instructor or instructors will be the project nutritionist, personnel from the Bureau of Nutrition and from the Nutrition Department of the Ministry of Agriculture. The course will be designed to impart a general knowledge of nutrition and its importance in the home and in the school. It will also include practical training and demonstrations in preparing local staple foods. The Ministry of Agriculture has agreed to incorporate about 20 hours of nutrition education into the month-long seminar. This will include basic hygiene and family planning. School gardens will be dealt with under the "Agriculture Education" section. The teachers will also be introduced to the basic curriculum of nutrition education for their students. These seminars will be repeated in 1976.

3. Follow-up visits: After school begins in October, the nutritionist and an agriculture extension agent will visit the teachers from the seminars in the GARD zone in their schools, to ensure that they are incorporating nutrition education into the curriculum. The nutritionist and extension agent will advise and supervise the teachers and give food preparation and school gardening demonstrations, as well as audio-visual presentations for parents and pupils. These school visits will be repeated after the second series of summer seminars.
4. School gardening instruction: There are approximately eighty "Rural Schools" with school gardens under the Ministry of Agriculture. Proceeds from the sale of vegetables are supposed to be given to the Ministry for further development of the school gardens. The agriculture extension agent travelling with the nutritionist will give demonstrations and advice to directors of the schools and interested parents. Crops will be corn, Congo beans, lima beans, green beans, tomatoes, cabbage, lettuce and carrots. The vegetables will be used in the school lunch program.

C. Socio-Cultural Factors

Haiti is the single country in the Western Hemisphere which is listed in the UNDP's scale among the least developed countries of the world. The estimated average income is \$76, one of the lowest in the world and the lowest in the Western Hemisphere. The essentially agricultural economy suffers from lack of fertilizers, irrigation, storage facilities and roads. Three-fourths of the land is mountainous. There is widespread ignorance of correct agricultural methods. Deforestation is widespread, with concomitant erosion. There are perpetual food shortages. Ninety-five percent of the population is illiterate. Medical facilities are lacking. The population growth

rate is 2.02%, a high index. Population density is 180 people per square kilometer, the fourth highest in the Western Hemisphere.

Malnutrition is widespread, owing partly to ignorance of proper nutrition and agricultural methods. Malnutrition among the general populace is estimated at sixty percent. Seven percent of school-age children are suffering from Kwashiorkor, and about sixty percent from milder forms of PCM. The average daily intake is about 1,700 calories, compared to a desirable 2,500 for a school-age child. The rural diet is limited to primarily starches. Ignorance and resistance to certain high-protein foods explain their exclusion from the diets of the school-age child. According to Dr. William Fougere, Haiti's leading nutritionist, surveys of Haiti point out a deficiency of several key nutrients: protein, Vitamin A, riboflavin, iron and calcium. However, sources of these nutrients are available in Haitian markets, particularly congo beans, fish, eggs and fruit. With proper knowledge, the rural families would be able to have a better diet within their purchasing power.

Rural living conditions are marginal because of poor land, primitive agricultural techniques, ignorance of nutrition, and over-population. Public health institutions are few, and there is a shortage of personnel, equipment and medicine. For example, 200 of the 350 doctors in this country of 4.3 million people live in the capital of 500,000. Gastro-intestinal maladies, tuberculosis and tetanus are widespread owing to poor hygiene, malnutrition and lack of medical facilities. Less than seventeen percent of the rural population have access to potable water facilities.

1821 The project will attempt to improve nutritional awareness and thus change attitudes and habits in food selection and preparation which lead to poor nutritional status. There are several superstitions about food which may be changed by nutrition education. The project is aimed at the children in order to inculcate proper attitudes at an early age. Parents of the students will be invited to attend demonstrations, although their ingrained habits and attitudes will be more difficult to change. In addition, children will be encouraged to tell their parents about their lessons in nutrition.

D. Relationship to USAID Guidelines Governing Funding for PVOs

The project is directed at teachers and pupils in the rural elementary schools under the Ministry of Agriculture. Many of these children have great difficulty finding the money to buy books and uniforms. Of the 1,688,000 children of primary school age, only about thirty percent attend school. About 34% of these children, or 172,000 children, receive food in school lunch programs under CARE, Church World Service and Catholic Relief Services. (These are in national, religious and tuition free private schools). If nutrition education is incorporated into the primary school curriculum, the 330,000 children in schools without lunch programs, will benefit from the nutrition education project, if their teachers do not participate in the summer seminars.

In order to avoid duplication of efforts, CARE has agreed to integrate its activities with the Nutrition and Rural Development Program of the National Planning Council (CONADEP). UNICEF, which supports the Ministry of Agriculture's pilot centers of secondary-school level education in home economics, nutrition and agriculture, has indicated there would be no conflict of interest with the CARE project. The nutrition education Program of the Bureau of Nutrition is aimed at mothers of malnourished children from six months to six years old who attend the nutritional recuperation centers. (CARE itself provides food for many of these centers. Since CARE's nutrition education project is directed at children of primary-school age, there would be no duplication of efforts.

The Ministry of Agriculture has agreed to incorporate nutrition education into the summer seminars, to improve the quality of nutrition education in the primary school curriculum, to lend technical aid in planning and evaluating this project, to furnish office space to the project nutritionist, and to second an agriculture extension agent to CARE to travel with the nutritionist. In order to continue the project on its own in the future, the Ministry would have to find a continuing source of funds for the seminars now funded by UNICEF, to pay the salaries of the nutritionist and extension agent, and to provide books and supplies. Since the Haitian government will be an active partner in this project, we hope that it will assume a larger part or take over the project at the end of the two years. However, CARE would extend its support beyond the two years if the project warrants it.

Project Design and Implementation

A. Implementation Plan

1. Technical assistance will be given by the Bureau of Nutrition and the Ministry of Agriculture in planning the curriculum, executing the project and analyzing the results of the surveys. The Ministry of Agriculture will pay part or all of the salary of the extension agent. CARE has hired a nurse/nutritionist (through an interim USAID Self-Help grant) to make the surveys, teach at the summer seminars, and make follow-up visits to the schools. A certain amount of time of the CARE Director and Field Representative will be allotted to the project.
2. CARE will purchase audio-visual equipment, poster material and teaching manuals for the summer seminars. It will provide mimeographed materials for the seminars and the basic curriculum in the primary schools. A jeep will be purchased for use by the project nutritionist and the extension agent. Disbursements and procurement will be regulated by CARE's normal accounting procedures.

3. Schedule of Action

a. Early Spring of 1975 (or upon approval of the project)

1. Height-weight-age ratios survey will be taken in 40 schools of the CARE zone by the project nutritionist. The Bureau

of Nutrition will aid in tabulation of the results.

2. CARE will purchase an audio-visual equipment, gather supplies, and prepare the seminar and primary school curricula with the aid of the Bureau of Nutrition and specialists at the Ministry of Agriculture.
3. If time permits, food preparation demonstrations and film shows will be given by project nutritionist for teachers, pupils and parents in the Port-au-Prince area before the summer seminars begin.

b. July, August and September 1975:

Presentation of nutrition education module of approximately 20 hours by project nutritionist to primary school teachers attending month-long seminars in Damien, Chatard and Marfranc. Personnel of the Bureau of Nutrition may also teach during this period.

c. October 1975 through April 1976 :

Follow-up visits to the teachers in their schools by the project nutritionist and extension agent. (As there are only 180 class-days in the year, and 180 teachers who will have attended the seminars, the goal will be to visit 75% of the teachers, or about 15 schools per month).

d. May and June 1976:

Second survey of height-weight-age ratios, food habits and nutritional awareness in the schools of participating teachers to determine the impact of the nutrition education. Preparation of progress report for USAID/Haiti and CARE/New York.

e. July through September 1976:

Presentation of nutrition education module in summer seminars. (See "b").

f. October 1976 through April 1977:

Follow-up visits by the nutritionist and extension agent (See "c")

g. May-June 1977:

Final survey of height-weight-age ratios, food habits and nutritional awareness in participating schools to determine impact of project. Preparation of final report for USAID/Haiti and CARE/New York.

B. Measurement and Evaluation of Project Accomplishment

1. First Survey in Spring of 1975

- a. The height-weight-age ratios survey will find what percentage of the pupils tested are suffering from first-degree and second

degree malnutrition .

- b. The food habits survey will establish the percentage of children eating one, two or three meals a day, and the contents of the meals. If possible, this will be correlated with the degree of malnutrition.
- c. The scores of the written quiz on nutritional awareness will be used as the basis of comparison with subsequent surveys. (The low scores may stimulate the teachers in their nutrition lessons).

2. Second survey in May-June, 1976

- a. The physical survey may show a slight increase in percentage of children at normal weight, or an improvement in nutritional status although still underweight.
- b. The food habits survey may show only a slight change in family food habits due to economic restraints and the children's lack of influence on the parents.
- c. The nutritional awareness quiz should show a definite improvement in the pupils' scores.

3. Final survey in May-June, 1977

- a. The height-weight-age ratios survey will compare pupils in schools whose teachers newly participated in the summer seminars, those who have followed the program for two years, and those who only participated the first year.
- b. The scores on the nutritional awareness quiz and the responses in the food habits surveys will be compared the same way.
- c. The surveys could be expected to show a greater improvement in the children's nutritional awareness and attitudes than in eating habits due to the dominance of the parents in selecting the food for the family.
- d. Improvement in nutritional status can be expected to lag behind increase in nutrition awareness, because of the family's limited purchasing power and/or the dominance of the parents.

Financial Plan

Total estimated costs of project (33 months)

Item

	<u>1st twelve</u>	<u>2nd twelve</u>	<u>3rd</u>	<u>Total</u>
	<u>months of op.</u>	<u> </u>	<u>9 months</u>	<u> </u>
1. <u>Salaries</u>				
a. Location Allowances and Benefits				
U.S. Personnel				
CARZ Office Haiti:				
Mission Director(5%				

BEST AVAILABLE COPY

	<u>1st Twelve months of operation</u>	<u>2nd twelve months of operation</u>	<u>3rd 9 months</u>	<u>Total</u>
a. Cont'd of salary):	\$ 1,000	\$ 1,000	\$ 750	\$ 2,750
Project Supervisor (15% 1st year; 10% 2nd & 3rd year)	\$ 1,800	\$ 1,200	\$ 900	\$ 3,900
SUB TOTAL	\$ 2,800	\$ 2,200	\$ 1,650	\$ 6,650
b. Local Full-time personnel				
Project nutritionist (\$400 per month):	\$ 4,800	\$ 4,800	\$ 3,600	\$13,200
Benefits(2% of salary)	\$ 96	\$ 96	\$ 72	\$ 264
Extension Agent/ Driver (\$125 per month)	\$ 1,500	\$ 1,500	\$ 1,125	\$ 4,125
Benefits (2% of salary)	\$ 30	\$ 30	\$ 22	\$ 82
Clerk/Typist(\$125 per month)	\$ 1,500	\$ 1,500	\$ 1,125	\$ 4,125
Benefits(2% of salary)	\$ 30	\$ 30	\$ 22	\$ 82
SUB TOTAL	\$ 7,956	\$ 7,956	\$ 5,966	\$21,878
c. Local part-time personnel				
Accountant(5% of salary)	\$ 180	\$ 180	\$ 135	\$ 495
SUB TOTAL	\$ 180	\$ 180	\$ 135	\$ 495
2. <u>Travel and Lodging</u>				
U.S. Personnel (\$10 daily x 36 days)	360	\$ 360	\$ 270	\$ 990
Local Personnel Nutritionist (100 days x \$6)	\$ 600	\$ 600	\$ 450	\$ 1,650
Extension Agent/ Driver(100 days x \$6)	\$ 600	\$ 600	\$ 450	\$ 1,650
SUB TOTAL	\$ 1,560	\$ 1,560	\$ 1,170	\$ 4,290

.../...

	1st Twelve months of operation	2nd twelve months of operation	BEST AVAILABLE COPY 3rd 9 months	Total
3. <u>Other Costs</u>				
a. Purchase of vehicle	\$ 4,200			\$ 4,200
b. Vehicle operation	\$ 1,000	\$ 1,000	\$ 750	\$ 2,750
c. Maintenance and repairs	\$ 300	\$ 600	\$ 450	\$ 1,350
d. Rent, Utilities (Provided by SARE)				
e. Telephone, cables (\$10 per month)	\$ 120	\$ 120	\$ 90	\$ 330
	<u>\$ 5,620</u>	<u>\$ 1,720</u>	<u>\$ 1,290</u>	<u>\$ 8,630</u>
4. <u>Training Equipment</u>				
a. Movie Projector (sound)	\$ 400			\$ 400
b. Printing, paper (Circulars, Recipes, Posters, etc.,)	\$ 1,000	\$ 1,000	\$ 750	\$ 2,750
	<u>\$ 1,400</u>	<u>\$ 1,000</u>	<u>\$ 750</u>	<u>\$ 3,150</u>
SUB TOTAL OF # 1 - 4	\$ 19,516	\$ 14,616	\$ 10,961	\$ 45,093
5. <u>Overhead</u>				
Provisional Rate (7% of Items 1 through 4) :	\$ 1,366	\$ 1,023	\$ 767	\$ 3,156
GRAND TOTAL	<u>\$ 20,882</u>	<u>\$ 15,639</u>	<u>\$ 11,728</u>	<u>\$ 48,249</u>