

TRANSCENTURY

FINAL EVALUATION OF
THE CARIBBEAN REGIONAL NUTRITION PROJECT (538-0022)
AND RECOMMENDATIONS FOR FUTURE USAID ASSISTANCE



TABLE OF CONTENTS

	<u>Page</u>
Acknowledgements	i
Executive Summary	ii
List of Abbreviations	3
I. Introduction	4
II. Project Background	5
III. Project Evolution	7
IV. Methodology	11
V. External Factors	13
A 1. Socio-economic conditions	13
2. Political Events	14
3. National Disasters	14
B Project Assumptions and their Validity	15
VI. Project Inputs	20
1. USAID Inputs	20
2. Other Inputs	24
3. Discussion	26
VII. Outputs	27
1. Food and Nutrition Planning	27
2. Training Programs	31
3. Production and Dissemination of Educational Materials	41
4. Manpower Needs Study	49
VIII. Project Purpose for Evaluation	52
1. Food and Nutrition Planning	52
2. Training	54
3. Educational Materials Production and Dissemination	55
4. Manpower Needs Study	57
IX. Goal of the Project for Evaluation	58
X. Beneficiaries	60
IX. Unplanned Effects	62

	<u>Page</u>
XII. Lessons Learned	64
XIII. CFNI and the Future	69
XIV. Regional Food and Nutrition Needs	73
1. Nutrition Planning and Food and Nutrition Surveillance	73
2. Nutrition Related Diseases	74
3. Training	75
4. Education	76
XV. Recommendations for Future USAID Assistance	77
Bibliography	84
Appendix	87

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SUBMITTED IN
COMPLETION OF IQC WORK ORDER #19

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8

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Dr. Ramsey and Eddie Lambert's acceptance of recommendations presented in this paper is contingent upon their reading and approval of the entire document. We hope they, and everyone else concerned, are satisfied with our work.

David Eckerson, USA
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EXECUTIVE SUMMARY

The Caribbean Regional Nutrition Project provided the Caribbean Food and Nutrition Institute (CFNI) with financial and technical assistance totaling \$1,352,000 Dollars over four and a half (4½) years to increase the capability of English speaking Caribbean countries to design, implement and evaluate regional and national food and nutrition policies and programs.

Project activities were concentrated in the areas of food and nutrition planning, infrastructure development, training, the development and dissemination of educational materials, and assessment of manpower needs in the regions' food and nutrition sector.

During the course of this project, all countries within the region initiated activities to develop food and nutrition planning infrastructures. LDC's in the region showed the greater nutrition infrastructure growth than MDC's. A regional food and nutrition strategy was developed during the life of this project.

Over 900 people were trained in food and nutrition under project activities. This was 200 more people than were originally projected to be trained.

CFNI increased it's capacity to produce printed materials to support food and nutrition programs in member countries. Audio visual productions and materials to support public education programs were not major outputs of this project.

Two manpower needs assessments were done during the course of project activities. These studies demonstrated a need for institutionalized training for middle-level personnel in the region.

Constraints to project activities were due to a lack of financial and manpower resources within member countries were not able to reproduce these materials on a large scale.

There is a continuing need within the region to promote food and nutrition planning. Future assistance to develop regional and national food and nutrition surveillance systems is recommended to serve as a basis for food and nutrition advocacy within member country governments.

Additional assistance is also recommended to support country-specific public educational materials development to complement on-going food and nutrition programs.

Finally, assistance is recommended to support institutionalized and country specific training for middle-level personnel in food and nutrition. Technical cooperation among developing countries in the region should also be supported to provide needed manpower resources and training in LDC member countries.

LIST OF ABBREVIATIONS

CARDI	Caribbean Agriculture and Research Development Institute
CARICOM	Caribbean Common Market
CBI	Caribbean Basin Institute
CFNI	Caribbean Food and Nutrition Institute
DCN	Diploma in Community Nutrition
FAO	Food and Agriculture Organization
IFAD	Institute for Food and Agriculture Development
LDC	Lesser Developed Country
MDC	Middle Developed Country
PAHO	Pan American Health Organization
PVO	Private Voluntary Organization
RDOC	Regional Development Office for the Caribbean
SPACGEM	Strategy for the Prevention and Control of Gastroenteritis and Malnutrition
UNICEF	United Nations Infant and Child Education Fund
WHO	World Health Organization

INTRODUCTION

This document serves as the final evaluation for the Caribbean Regional Nutrition Project/CFNI (538-0022). This project was funded by the United States Agency for International Development (USAID) to increase the capability of English-speaking Caribbean countries to design, implement, and evaluate regional and national food and nutrition policies and programs.

This report will also assess the current food and nutrition needs and priorities of the region. Areas for continued assistance by the United States Agency for International Development will be suggested.

This document was prepared in October and November, 1982 by a consultant from the United States and a consultant from Jamaica. The authors hope that this document will serve as a basis for discussion by all organizations working within the food and nutrition sector of the English-speaking Caribbean region.

PROJECT BACKGROUND

The Caribbean Regional Nutrition project began as a follow-up to a Ford Foundation grant to the Caribbean Food and Nutrition Institute (CFNI) to promote food and nutrition planning in its member countries. Realizing the impetus gained by CFNI in promoting food and nutrition planning throughout the Caribbean region, the United States Agency for International Development (USAID) provided project assistance to CFNI for the purpose of increasing the capability of the English-speaking Caribbean countries to design, implement and evaluate regional and national food and nutrition policies, and programs.

The original Caribbean Regional Nutrition project paper was written jointly by USAID and CFNI in April, 1978. A project agreement was signed in June, 1978 between the Pan American Health Organization (PAHO, the sponsoring body of CFNI) and USAID. This agreement provided \$1,102,200 over a three year period to support project activities.

The Caribbean Regional Nutrition project was designed to provide CFNI with two long term technical assistants and various short term technicians to expand the capability of CFNI to assist member countries in all aspects of food and nutrition planning.

The project also contained a training component to convene technical group meetings, refresher seminars, intensive training courses and workshops in the areas of food and nutrition planning and nutrition related diseases for government officials, middle level

technicians and graduates of previous community nutrition courses sponsored by CFNI.

Further, CFNI received assistance to produce educational materials and distribute them to support training activities and food and nutrition programs in member countries.

CFNI was also provided assistance to undertake a study of the manpower needs within member countries in the food and nutrition sector. From this study, a strategy for addressing the manpower and training needs in food and nutrition was to be developed for the region.

PROJECT EVOLUTION

The Caribbean Regional Nutrition project was originally designed to last three years, from June, 1978 to May of 1981. The project eventually went on for four and a half years until December of 1982.

The first change to occur in the project took place in early 1979 when project management shifted from the USAID/Barbados regional office to the USAID/Jamaica office. While this was a regionally funded project, it was felt that project management could be more effectively done from Jamaica where CFNI was headquartered. Also, at the time management shifted, USAID/Jamaica staff was considered to have more nutritional expertise than its Barbados counterpart.

After one year of project activities an evaluation was carried out. This evaluation, in June of 1979, recommended that \$255,000 dollars be added to the original project grant so that the project could extend seven months to December, 1981. This extension and additional assistance were recommended for the following reasons:

1. Delays had occurred in the recruitment of one long term project technician;
2. Increased consultant requirements were needed for effective nutrition policy and program development;
3. There was a need to extend the length of training workshops;
4. Increased project costs in per diem, tuition rates and travel expenditures;

5. More money was necessary to support the development and production of educational materials.

This first evaluation also recommended that CFNI place increased emphasis on project activities in lesser developed countries in the region. From project files it is difficult to figure out what really became of the recommendations made by this first evaluation.

However, a second evaluation of the project occurred in November, 1980. This evaluation must have assumed that the project extension and additional funding recommended by the first evaluation would not be forthcoming. Thus, the second evaluation team recommended that the project be extended for one year and that \$276,000 dollars of additional funding be added to the original grant of \$1,102,200 dollars. The recommendations of the second evaluation team were based on the following reasons:

1. An extension of CFNI staff time and project duration would permit member countries to reach a stage of self sufficiency in the food and nutrition planning process;
2. An extension of the project would permit rescheduling of certain training activities that had been included in the original project design but might be more effective if scheduled later than anticipated;
3. Additional workshops beyond those foreseen in the original project paper were required to address certain regional food and nutrition needs which had evolved during project

implementation. Thus workshops were added to the project to address the need for food and nutrition surveillance in the region, to develop a Caribbean regional anemia strategy, and to update the regional strategy for the prevention and control of gastroenteritis and malnutrition (SPACGEM). Additional regional meetings for heads of nutrition units in member countries were also provided for by additional grant assistance;

4. Finally, the second evaluation team felt that increased funding was necessary for the production of educational materials so that when project support terminated, CFNI would be able to sustain a continued supply of proto-type materials to the countries it served.

Again, project documentation is difficult to comprehend. The recommendations of the second evaluation team went into the system. The recommendations from the first evaluation were already there. Somehow, they both seemed to surface.

In April of 1981, a project amendment was signed and a sum of \$255,000 dollars was allocated for FY1981. But, since there was still money left unspent in the project, this brought total project funding to \$1,085,000 dollars.

In October of 1981, USAID and PAHO negotiated program support costs for additional money that would be made available for extended project funding in FY1982. PAHO program support costs, which had been 31% of total grant assistance throughout the course of the project, became 13% of additional funding in FY1982.

A final grant of \$267,000 dollars was accorded to the project in November, 1981. The project was also extended to December, 1982. In the end, the total amount of grant assistance to the Caribbean Regional Nutrition project became \$1,352,000 dollars or \$250,000 more than originally designed.

METHODOLOGY

This document serves as an end of project evaluation for the Caribbean Regional Nutrition project. It also provides an assessment of current needs within the food and nutrition sector of the English-speaking Caribbean. A modified USAID evaluation format will be followed. This will be coupled with a discussion of sector needs and recommendations for future USAID assistance.

This document is based on briefings with USAID/Washington personnel, USAID/Jamaica project management staff and USAID regional officials in Barbados. CFNI central staff in Jamaica were interviewed as well as CFNI regional field staff.

Two days of discussions in Jamaica were followed by two weeks of visits to assess project activities in St. Kitts-Nevis, Montserrat, Dominica and St. Vincent. The regional USAID office in Barbados was also visited. Following this field work, suggestions for future assistance to CFNI and the region were discussed and reviewed in Jamaica during two days of meetings with CFNI, USAID/Jamaica and representatives from the CFNI Policy Advisory Committee and the CFNI Science and Technology Advisory Committee.

Discussions were held with governmental officials and relevant individuals working within the food and nutrition sectors of all countries which were visited. Discussions centered on project activities and specific country needs in the areas of food and nutrition.

Interviews were also held with various representatives from PAHO, CARICOM and other regional organizations who were encountered in different countries during site visits. Regional needs and priorities in the food and nutrition sector were discussed, as well as CFNI project activities.

USAID project documentation, CFNI publications and reports prepared by other regional organizations also served as the basis for this document.

While the authors talked with more than 70 individuals in the course of their work, the constraint of time given to visit five countries in 14 days and prepare a document for discussion was a severely limiting factor. Time did not permit enough discussion with community level individuals who should have been the focus for this document.

EXTERNAL FACTORS

This section will present certain external factors which influenced the attainment of the project purpose and goal. The validity of assumptions made during the design of the project in 1978 will also be discussed in relation to the reality of events during the life of the project.

The major external factors which affected the Caribbean Regional Nutrition project were the following:

1. Socio-economic conditions

Throughout the life of the project, socio-economic conditions in many countries of the region deteriorated. This was due in part to a rise in world-wide oil prices and a corresponding decline in sugar prices. Tourism, a mainstay for the balance of payments in many countries, declined as economic recession occurred throughout the world. The region was also affected by a decline in bauxite prices, given increased competition in bauxite production within the world market. These events led to worsening terms of trade for most countries in the English-speaking Caribbean during the life of the project. This situation generated an inflationary spiral which led to higher food prices and restrictions on imports throughout much of the region.

These factors led to a general decline in food availability throughout the English-speaking Caribbean, since most countries are highly dependent on imported food. Restrictions on imports also led

to a scarcity of agricultural inputs such as fertilizers, which in turn influenced a decline in local agricultural production. This decline was exacerbated as more and more younger people turned away from the agricultural sector.

Finally, a rise in unemployment occurred throughout the region during the life of the project. This, coupled with higher rates of inflation, affected the purchasing power of many families within the region.

2. Political Events

Many governments in the English-speaking Caribbean underwent political change during the life of the project. In some cases, this enhanced project activities. Newly elected officials sometimes became more sensitive to problems within the food and nutrition sector than their predecessors. In other cases, however, past efforts in the food and nutrition sector under the project were stymied by a change in leadership and a shift in political priorities.

Political pressures also influenced the implementation of some project activities. In one case, a government was reluctant to release an applied nutritionist who was chosen to serve as one of the project's long term technical assistants. This resulted in a delay of seven months before the individual could be employed by the project.

3. Natural Disasters

During the course of this project, hurricanes David, Frederick, and Allen caused considerable destruction in St. Vincent, St. Lucia, Dominica and Jamaica. St. Vincent also experienced a volcanic eruption in the northern part of the country.

These events severely affected project operations within Dominica and St. Vincent as food and nutrition planning activities gave way to relief operations which in turn generated massive amounts of international donor assistance. But, this also decreased the amount of time and money governments had available for food and nutrition planning activities.

The above external factors influenced to some extent the attainment of the goal and purpose of the Caribbean Regional Nutrition project. These factors also influenced the validity of assumptions contained in the project's logical framework. These assumptions, made in the design of the project in 1978, will be discussed below in the context of what really occurred during the life of the project.

Project Assumptions and their Validity

1. "Absence of abnormal or severe climatic conditions and events which would affect food production and food availability in the region".

Accounting for this eventually was well founded. The destruction stemming from hurricanes in Dominica and other countries and the volcanic eruption on St. Vincent led to severe short term crises in food production and food availability in these countries. This obviously affected the nutritional status of resident populations. It is interesting to note, however, that what is bad for one is good for another. The volcanic ash that fell in Barbados after the eruption on St. Vincent fertilized fruit crops in Barbados and helped to produce a bumper harvest.

2. "Continued and increased agricultural productivity and production".

As mentioned earlier, import restrictions stemming from worsening terms of trade led to a shortage and prohibitive cost of agricultural inputs in much of the region. This had a negative effect upon agricultural production and productivity. The validity of this assumption was further reduced as growing numbers of people refused to enter the agricultural sector. In many countries where increased agricultural production occurred, the increase was in the area of export crops, while this generated income for farmers, inflation and production costs cancelled much of the economic benefit. Further, less food was available for local consumption.

3. "Continued recognition by the governments that malnutrition is a serious problem".

Whether this assumption held is difficult to assess. All governments felt that malnutrition "per se" was a serious problem during the life of the project. They still do but many also feel that their countries do not suffer from malnutrition in a serious way.

4. "Financial and human resources and political commitment of the governments to carry out food and nutrition interventions.

As the project progressed, these factors deteriorated. Governments became severely strained, given decreased financial resources. Many governments lacked the capacity to carry out food and nutrition programs if they required financial support. In some countries, human resources did not exist or were not made available to manage food and nutrition interventions. In most countries, however, governments had enough political commitment to

create food and nutrition planning councils. These councils evolved, due to sustained efforts by CFNI project staff. The councils required little financial investment from governments and had generally salutary effects.

5. "Government recognition of the importance of food and nutrition policy for effective and efficient projects".

On a regional level, this assumption remained highly valid throughout the course of the project. The commitment by governments in the region to develop a regional food and nutrition strategy attests to this.

Within individual countries, however the validity of this assumption was fair. In some cases, food and nutrition policies developed during the project were never ratified by governments. This was due in some cases to changes in political leadership at the time of policy approval.

In other instances, such as Dominica, food and nutrition policies were recognized by governments as important tools to shape effective and efficient projects.

6. "Continued and increased government funding and support for nutrition and food related personnel".

The validity of this assumption was fair throughout the course of the project. This was due in part to the financial constraints faced by many countries in the region.

In cases where choices had to be made, some governments funded personnel outside the food and nutrition sector. In other instances,

food and nutrition personnel who retired were not replaced. The primary health care sector, however, did receive increased support by many governments.

On a regional level, all countries voted to increase their financial support for CFNI activities in the food and nutrition sector during the life of the project. While some countries are behind in their payments, actual government contributions to CFNI increased from \$98,096 dollars in 1978 to \$188,637 dollars in 1982.

7. "CFNI can continue to attract additional funding for CFNI training and technical assistance activities".

The validity of this assumption was fair throughout the course of the project. Outside funding to CFNI (apart from the USAID grant) totaled \$140,832 dollars in 1978. This funding declined steadily, however, throughout the life of the project. In 1982, additional funding for CFNI training and technical assistance activities (apart from the USAID grant) will total \$42,209 dollars.

8. "Countries in the region will continue to request the assistance, training and materials of CFNI".

The validity of this assumption was high throughout the course of the project. This was borne out by the fact that every country in the region requested assistance, training and materials from CFNI during the life of the project and still continue to do so.

9. "CFNI continues to attract professionally competent staff members".

The validity of this assumption remained high. CFNI has continued to attract highly competent and trained personnel throughout the course of project activities.

In summary, external factors such as deteriorating socio-economic conditions, political events and natural disasters influenced the validity of assumptions made during the design of the Caribbean Regional Nutrition project.

Confronted with political change, natural calamities and limited financial resources, many governments were hard-pressed during the life of this project to allocate scarce resources and personnel to design, implement and evaluate activities in the food and nutrition sector.

These factors presented measurable constraints to the implementation of this project.

INPUTS

1. USAID Inputs

Basic USAID inputs to the Caribbean Regional Nutrition project consisted of long and short term technical assistance in food and nutrition planning, commodity purchases for the production of educational materials, staff support for CFNI and financial assistance to convene workshops, training courses and seminars to sustain activities in the field of food and nutrition planning and nutrition related diseases. Financial support was also given to produce and distribute educational materials. Approximately 20% of the project grant was paid to PAHO as program support costs.^{1/}

Table 1 shows a comparison of monies budgeted for this project, recommended additional assistance and actual expenditures.

Table 2 presents an estimate of project expenditures for each project component.

In sum, approximately 40% of USAID project inputs were spent on long and short term technical assistance and travel.

A bit less than half (45%) of total project expenditures were spent for food and nutrition training and sensitization. Roughly 15% of project inputs were spent on equipment purchases and the production and dissemination of educational materials. Inputs for direct nutrition planning activities were approximately 20% of total project costs.

^{1/} This figure reflects the purchase of a computer for CFNI from PAHO program support costs which was attributed to project monies. This purchase will be discussed in a later section on unplanned effects.

TABLE 1

USAID INPUTS (000\$)

	ORIGINAL P.P	RECOMMENDED ADDITIONAL SUPPORT	TOTAL P.P AND RECOMMENDED	ACTUAL EXPENDITURES
PERSONNEL AND TRAVEL	318	84.7	402.7	389.4
SHORT TERM CONSULTANTS	102.6	7.3	109.9	154.4
MEETINGS, SEMINARS AND WORKSHOPS	301.4	73.2	374.6	401.6
EDUCATIONAL MATERIALS	80	28	108	134.8
PROGRAM SUPPORT COSTS	248.7	82.7	331.4	276.7
INFLATION CONTINGENCY	51.5	-	51.5	
TOTAL	1,102.2	275.9	1,378.1	1,357.6

1

Due to changes in Program Support Costs and discrepancies in proposed budgets for additional assistance, these figures are calculated estimates.

TABLE 2

USAID ESTIMATED EXPENDITURE FOR INPUTS BY PROJECT COMPONENTS

1.	<u>NUTRITION PLANNING*</u>	(000\$)
	Data Collection + interpretation of data	41.2
	Examination of existing policies and programmes	40.5
	Identification and design of nutrition programs	69.7
	Establishment of administrative/coordinating mechanisms	32.0
	Project monitoring evaluation	<u>47.3</u>
	TOTAL	230.7
	*Includes 60% personnel costs for Agricultural Economist	
2.	<u>NUTRITION TRAINING AND SENSITIZATION**</u>	
	DCN Refresher Courses	128.5
	Technical Group Meetings	147.8
	Intensive Courses	259.5
	Dietary Workshops	<u>72.1</u>
	TOTAL	607.9
	**Includes 100% personnel costs for Applied Nutritionist and 40% personnel costs for Agricultural Economist	
3.	<u>EDUCATIONAL MATERIALS***</u>	
	Equipment Purchases	78.4
	Publications production	99.3
	Distribution	<u>18.6</u>
	TOTAL	196.3
	***Most indirect costs, e.g. postage, freight, which are charged to CFNI grant funds are not necessarily absorbed by those funds as there are no general operating expenses provision.	
4.	<u>MANPOWER NEEDS</u>	
	1979 Study	24.0
	1981 Study	9.4

TABLE 2 (continued)

5. PROGRAMME SUPPORT COSTS

1978 -1982		276.7
	Total Estimated Expenditures	1344.0
	Actual Expenditures	1357.6

2. Other Inputs

Under the terms of the original project, CFNI, Ford Foundation and UNICEF were to provide additional inputs to the project besides those given by USAID. These were largely in the form of percentages of time CFNI staff would devote to project activities.

Ford Foundation and UNICEF were funding certain CFNI staff members at the time. Some monies which had been granted to CFNI for training activities from these organizations were also to be used in support of related project activities.

Table 3 presents these other inputs as they were proposed in the original project paper and then presents an estimate of what CFNI and other sponsoring organizations actually provided in support of project activities.

Other actual inputs are estimates based on CFNI expenditures from 1978-1982. They take into account programs undertaken by CFNI which were closely related to project activities. These included all CFNI programs in the areas of nutrition education, breast feeding, food and nutrition surveillance, community nutrition training and the preparation of the CARICOM Regional Food and Nutrition strategy.

While these are subjective estimates, it seems apparent that CFNI and sponsoring organizations more than doubled the inputs expected from them during the course of project activities.

OTHER INPUTS (000\$)

	ORIGINAL PP			ESTIMATED ACTUAL IMPUT			
	CFNI PAHO	FORD UNICEF	TOTAL	CFNI PAHO	FORD UNICEF	(OTHER) WHO CARICOM	TOTAL
PERSONNEL/TRAVEL	114	19.8	133.8	180	195.4	1.5	277.2
SHORT TERM CONSULTANTS					91.3	2.1	93.4
MEETINGS/SEMINAR WORKSHOPS		23	23		93.8	26.7	120.5
EDUCATIONAL MATERIALS					9.9	15.4	25.3
INFLATION CONTINGENCY	32.1		32.1				
TOTAL	146.1	42.8	188.9	180	290.7	45.7	516.4

1. Estimated at 40,000/year for 4½ years for CFNI staff and travel
2. From CFNI actual expenditures June 1978 - 1982
3. From CFNI actual expenditures 1978-1982

3. Discussion

The inputs delivered to the project seemed to arrive on time and as expected. There was a delay in securing one long term technician, but this was due to external factors beyond the scope of the project.

The quality of technicians working with the project were considered to be very good by all persons contacted by the evaluation team. Except for one short term consultant who lost his baggage and his report, most contractual work was performed on time.

The use of short term consultants from the region contributed greatly to this project. While this factor will be discussed later in this report, project designers and USAID management personnel should be recognized for their foresight in providing for this in the project paper and their flexibility in helping this to occur.

OUTPUTS

This section will describe the major outputs of the Caribbean Regional Nutrition project in relation to the output objectives set forth in the project paper. Attention will also be given to recommendation made in project evaluations that altered the original project design.

Outputs will be discussed by project components. While projects such as this are difficult to evaluate as to their impact, an attempt will be made to measure success according to the processes employed to attain the stated purpose of the project.

1. Food and Nutrition Planning

- a. "Expanded CFNI technical assistance to member countries in all stages of formulating national food and nutrition plans".
- b. "All countries will have initiated the planning process; ten countries will have formal plans; four countries will have completed the process".

Efforts by CFNI extend back to the middle 1970s in the area of food and nutrition planning. The addition of one long term project technician and project assistant and with the support of staff provided by CFNI/PAHO and the Ford Foundation, CFNI surely did expand technical assistance to member countries in the area of food and nutrition planning.

Table 4 presents country standings in the food and nutrition planning process at the onset of project activities. It also presents member country standings in this process at the time of this evaluation. One can note from Table 4 that 4 countries were at the stage of formal plans in 1977 and at the end of project activities, 10 countries (including the previous 4) were at the formal plan stage.

The question is posed as to what constitutes a "formal" plan. One can assume this is a plan which has been accepted formally, through a political process, within member governments.

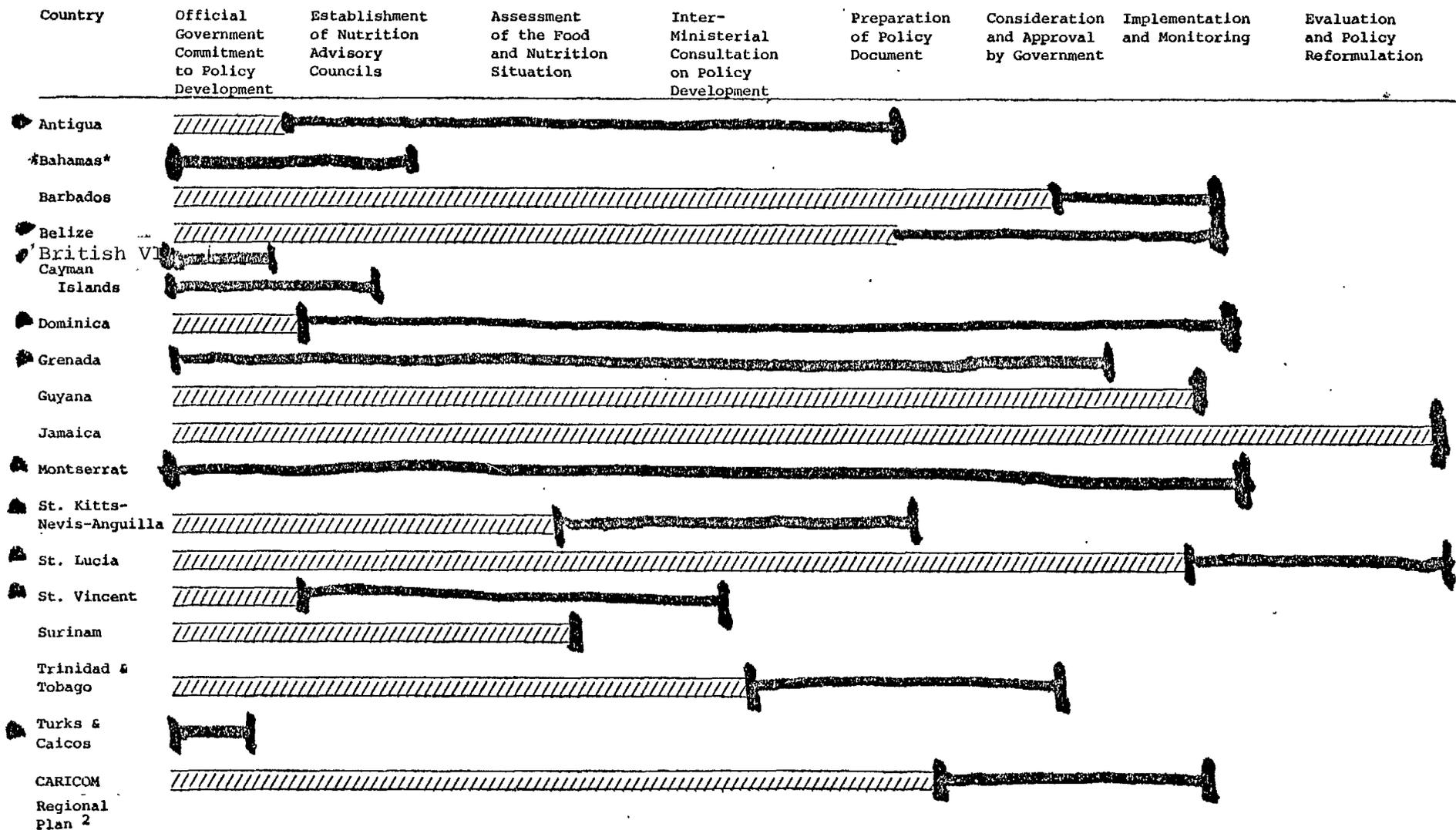
However, in certain countries such as Montserrat, food and nutrition councils are implementing programs without "formal" acceptance of their food and nutrition plans.

At the onset of the project, only Jamaica had completed the food and nutrition planning process. St. Lucia had completed this process at the time of this evaluation. Thus, a total of two countries instead of four were at the final stage of the nutrition planning process, that of evaluating and reforming food and nutrition policies of project activities. It is important to note, however, that 8 countries were at the stage of implementing and monitoring programs at the time of this evaluation, as compared to 3 countries when the project began. This stage can also be considered a final stage in the nutrition planning process.

Finally, as Table 4 indicates, all CFNI member countries have initiated the food and nutrition planning process. The table also shows that the greatest gains in the food and nutrition planning process occurred in lesser developed countries.

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Table 4. Country Standings At the Beginning and End of Project Activities in the Continuous Process of Formulation and Implementation of Food and Nutrition Plans ¹



1 The vertical columns represent the major stages in the continuous process of food and nutrition planning and policy formulation. Each stage in turn consists of a series of steps. (See text.)

2 CARICOM and CF&I are involved in development of the Regional Plan.

* Not currently a member country in 1978

1978 = 1978
 1982 = NOVEMBER, 1982 ● = LDC

Discussion

On the whole CFNI performed admirably in assisting member countries to advance within the food and nutrition planning process. But this process is plagued with problems, not only in the English-speaking Caribbean, but in the rest of the world as well. The problems encountered by CFNI were not new. They do bear discussion, however, and are presented as follows:

1. Many governments felt this was just another program to be imposed on them. While CFNI had sensitized many senior government officials in the past to food and nutrition planning concerns, many of these had been removed from office after political change. Where sensitized officials were in place, CFNI made inroads.
2. Food and nutrition councils set up by CFNI faced many problems. Since they were multi-sectoral, political interests could take them over or at worst, render them powerless. Many times food and nutrition councils were placed under the direction of health ministries. This sometimes made food and nutrition solely a health concern and inhibited inter-sectoral coordination. In other cases food and nutrition councils were placed under the responsibility of non-dynamic government officials. Faced with poor direction, their efforts faltered. Finally, food and nutrition councils depend on their members. Personality clashes sometimes occurred, fragmenting policy decisions. In some instances, members refused to take responsibility to carry out actions of the council.

3. Formulating regional and national food and nutrition policies was a difficult task. CFNI tried to insure that the policies they helped to develop were felt to be the product of concerned individuals in the food and nutrition sector. When this did not occur, and people felt left out, sustained efforts to implement policies did not arise. In other cases, policies remained frozen at higher levels of government due to political decisions and changes. In spite of all the problems CFNI encountered, measurable success was gained in promoting food and nutrition planning within member countries under this project. Where inroads didn't exist, CFNI staff made them. Where delays occurred, CFNI staff had the patience to await the right moment to try again.

Finally, another significant output of food and nutrition planning activities was the development of the Caribbean Regional Food and Nutrition strategy. This strategy touches all member country concerns and is near endorsement by the CARICOM community. With this regional strategy as a basic document and tool, future nutrition planning efforts in CFNI member countries will be enhanced.

Training Programs

1. "700 persons involved in food and nutrition in ministries of health, agriculture, planning, other institutions or private organizations have received training".

2. "Five one week technical group meetings of fifty professionals will be held".
3. "Four two week seminars for 90 DCN graduates and 16 three day seminars (one in each country) for 20 health personnel on diabetes and obesity will be held".
4. "Five three month courses for 26-30 middle level government personnel will be held".

Three two week seminars for DCN graduates were held to upgrade the training of 60 people. This was in contrast to four seminars for 90 people as originally designed. 17 three day seminars sensitized a total of 661 people in diabetes and obesity. Some countries had more than one seminar. Four countries were not reached. Originally, 320 people from all member countries were to be trained in these seminars. A total of 942 persons in CFNI member countries were trained in food and nutrition under this project. This was 200 in excess of the 700 persons that were to have been trained under the project.

Three one week technical group meetings were held instead of five as originally planned. A technical workshop on Prevention and Control of Anemia was also held. A total of 104 persons participated in these meetings. This is less than the number (150) projected.

Three intensive 3 month courses were held on food and nutrition planning rather than the five originally planned. A shorter course in food and nutrition surveillance was also held. A total of 52 people were trained in these activities, compared to 150 as initially planned.

In addition to these planned activities, the project financed two meetings for heads of nutrition units of member countries. These meetings were held once a year and involved 35 persons.

Rather than holding a workshop to update the regional SPACGEM strategy, a consultant was employed to do country specific updates in 9 territories.

Table 5 presents the different training programs held during the course of the project. The table also shows countries represented and numbers of participants for each activity.

Table 6 indicates approximate costs for each country.

Discussion

This project trained 200 more people than originally intended. Over 50% of those trained were from lesser developed countries.

The training costs of this project seem comparable and in some cases less expensive than similar USAID/funded activities. It is interesting to note that the diabetes workshops had a participant cost of \$37 dollars per person.

1. Technical group meetings were designed to promote consensus within the professional community on different food and nutrition concerns. The three technical group meetings which were held on the regional food and nutrition strategy, dietary management of nutrition related diseases and feeding the weaning age group were very beneficial outputs from this project.

Guidelines were produced from these meetings (except feeding the weaning age group) to address major concerns. Recent research and qualified experts in various fields were

COUNTRIES	INTENSIVE COURSES		WORKSHOPS			TECHNICAL GROUP MEETINGS				HEADS OF NUTRITION UNITS MEETING	TOTAL
	3-Month Course in Food & Nutr. Prog. & Planning	7-Week Course in Food & Nutr. Surveillance	National Diabetes Workshops	Food Nutr. Planning	DCN Re-fresher Courses	Food & Nutr. Strategy Meeting	Tech work-shop on Anemia	Dietary Management of Related Diseases	Manage-Nutr. Weaning Age Group		
• ANTIGUA	4	-	36		3	1	-	-	2	3	49
BAHAMAS	1	-	31	2	1	1	-	1	-	2	39
BARBADOS	2	1	76	2	2	2	1	2	-	1	89
• BELIZE	1	1	32	1	1	1	-	1	1	2	41
• B.V.I.	1	-	30	-	-	1	-	-	-	1	33
CAYMAN IS.	-	-	18	-	-	1	1	-	-	2	22
• DOMINICA	3	1	60	-	3	1	1	1	1	2	73
• GRENADA	8	1	35	1	2	3	-	-	1	3	54
GUYANA	1	2	31	2	5	2	-	1	21	3	68
JAMAICA	7	1	94	9	18	8	6	10	4	4	161
• MONTSERRAT	1	1	32	1	1	2	1	1	1	3	44
• ST. KITTS_NEVIS	3	-	24	-	2	1	-	-	-	3	33
• ST. LUCIA	3	1*	70	-	12**	1	1	-	1	2	91
• ST. VINCENT	3	1	30	-	1	1	-	-	1	1	38
SURINAME	-	1	***	3	-	-	-	3	1	1	9
TRINIDAD & TOBAGO	3	-	29	9	9	3	-	6	1	-	60
• TURKS & CAICOS IS.	-	-	33	-	-	1	1	-	1	2	38
TOTAL	41	11	661	30	60	30	12	26	36	35	942

* Participant was unable to participate in the final week of the workshop due to ill-health

** Includes 10 observers

*** This was incorporated in another workshop that was held in Suriname

TABLE 6

TRAINING PROGRAM COSTS

PROGRAM	DURATION	NUMBER OF PARTICIPANTS	(U.S.\$) APPROXIMATE COST	<u>1/</u> COST PARTICIPANT	(U.S.\$) APPROX. COST PARTICIPANT
INTENSIVE COURSE IN FOOD AND NUTRITION PLANNING	3 months	41	126,000		\$3,000
INTENSIVE COURSE IN FOOD AND NUTRITION SURVEILLANCE	7 weeks	11	26,700		2,400
DIABETES WORKSHOPS	3 days	661	24,300		37
FOOD AND NUTRITION PLANNING WORKSHOPS	3 days	30	14,500		483
DCN REFRESHER COURSES	2 weeks	60	28,500		475
TECHNICAL GROUP MEETINGS	5 days	92	50,600		550
TECHNICAL WORKSHOP ON ANEMIA	5 days	12	6,700		558
HEADS OF NUTRITION UNITS MEETINGS	3 days	35	21,000		600

1/
DOES NOT INCLUDE STAFF SALARIES AND TRAVEL

produced excellent baseline data to evaluate these target populations were refined as children under 5; pregnant and lactating mothers, school children aged 5-15 years, poorer segments of the population and persons affected by anemia, diabetes and obesity and to plan future programs in the food and nutrition sector. On-going data collection begun during the course of this project is presently underway in some countries, but time and the limited scope of country visits did not permit adequate analysis of this information.

Anecdotal data suggests that in Montserrat, however, deaths of children less than one year of age fell from 11 deaths in 1979 to 5 in 1981. In St. Kitts, where an on-going food and nutrition surveillance system began during project activities, second and third degree malnutrition in children less than 5 years of age has remained constant at around 10% during the course of project activities.

The St. Kitts situation, however, has been influenced by activities of the World Food program. Targeted food distribution in health clinics has increased the numbers of children coming to clinics and thus affected comparison of data.

National food and nutrition profiles are not currently prepared by CFNI for member countries on a regular basis. Staff time does not permit this activity. Regional data is collected on an "ad hoc" basis. The most recent analysis was done in 1981, but data dated back to a 1979 analysis. Therefore, regional data did not exist to permit an impact evaluation of this project. Other economic political and natural factors external to project activities have

used to update knowledge of participants and stimulate discussion.

A Regional Anemia Strategy was also developed from a technical workshop financed by this project. This workshop was held in response to the mid-term project evaluation. The Anemia strategy is presently under review by other professionals in the region.

Finally, a consultant was employed under this project to update the regional SPACGEM strategy. This was also in response to the mid-term project evaluation. Nine member countries were visited and a report was prepared recommending country specific ways the implementation of the strategy could be enhanced.

Strategies may be criticized as exercises in mental deliberation if they are not acted upon. However, if they are effectively used as tools, much like how the SPACGEM strategy seemed to be employed, they can result in rational and efficient efforts to address specific problems.

2. DCN graduates were given refresher courses under this project to upgrade their skills in food and nutrition. While not all the graduates received training, those who did seemed to benefit from increased knowledge and upgraded skills. This training program also enabled CFNI to assess past food and nutrition training activities and determine future needs.

3. Workshops on diabetes involved mainly middle-level personnel and responded to an expressed need within the region to provide current knowledge to physicians and health personnel on dietary management of diabetes. The basis for the 3 day workshops on diabetes was a handbook~~s~~ entitled "Meal Planning for Diabetes", a document produced with project assistance. The workshops were inexpensive and involved twice the number of participants originally projected.

Further, in many member countries, initial project financed workshops were followed by similar regional workshsops within the individual countries, thus multiplying their effect.
4. The intensive three month courses in food and nutrition absorbed CFNI staff time fqr more than originally planned. For this reason three were held, rather than five. A shorter course on food and nutrition surveillane, recommended by the mid-term evaluation, was also conducted. This course was designed to address a need that arose from other food and nutrition planning activities sponsored by this project. The training in surveillane has stimulated some countries to initiate national food and nutrition surveillane activities. This workshop has also generated requests from 3 member countries for assistance in setting up food and nutrition surveillane systems.

Due to country selection processes which were, many times, beyond the control of CFNI, some participants lacked essential food and nutrition background, knowledge and experience which would have prepared them to benefit more from the courses. On the whole, however, most participants gained valuable sensitization and training from the courses.

With any activity of this nature, participants must be able to use the new skills they obtain in their everyday work. For some, this was not the case. For others, usually from the more developed countries, participants went home to situations where their new skills could be employed.

The fact that each course employed field work and practical exercises greatly enhanced their effect. Reports written by participants during field phases to analyse food and nutrition problems sometimes served as the basis for work within their own countries.

In one case, participants from an intensive course conducted a food and nutrition survey in Antigua as part of their field activities. This experience not only benefited the participants, but Antigua as well gained important data on its food and nutrition sector.

It is difficult to measure the extent participants were able to employ skills learned from these courses.

However, taken as a whole, these activities were valuable outputs from this project. They served to fill a vacuum in food and nutrition training for middle-level personnel that existed in the region.

5. This project also financed two yearly meetings for heads of nutrition units in the region. These meetings were designed to bring together persons responsible for nutrition activities in member countries to permit them to share experiences and update their awareness on food and nutrition activities underway in the region. CFNI also used these meetings to collectively plan and program CFNI assistance on a yearly basis to member countries.

These meetings have served as a valuable first step towards enabling CFNI to respond to country specific needs. More emphasis, however, should be given to the relevance of country programs and where CFNI assistance could be most effective.

Taken as a whole, the training activities financed by this project effectively responded to a need for food and nutrition sensitization and training in the region. As such, they were significant and valuable project outputs. Activities such as these will need to continue until resources are made available within the region to institutionalize food and nutrition training.

Production and Dissemination of Educational Materials

1. "Increased and diversified production and dissemination of printed and audio-visual materials to support CFNI's training activities and countries' service delivery systems."
2. "Expanded CFNI production and dissemination of printed materials by (80) pieces annually and of audio-visual materials by (9) units annually."
3. "Three man-weeks of short-term technical assistance to assess CFNI facilities, staff expertise and organization needed to expand educational materials production."

CFNI showed a modest increase in their production and dissemination of printed educational materials under this project. There was little development done to produce audio-visual materials.

Under the project, CFNI produced 43 units of printed materials in 4½ years. There was one audio visual set of materials produced for breast-feeding. Project money was used to develop and produce 1,000 flip charts. Other sponsoring organizations supported a slide package and a package of recorded cassette tapes to complete the breast-feeding unit.

Early in the project, two consultants provided technical assistance which oriented the use of project funds to purchase commodities necessary for expanded production of educational materials.

Tables 7, 8, and 9 present the different units of educational materials and their costs produced under this project. Each is categorized as to what target group it was intended to reach. Approximately 25% of the units were for senior government officials.

TABLE 7

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REFERENCE PUBLICATIONS FOR GOVERNMENTS

1978 1982

<u>Publication Title</u>	<u>No. of Copies</u>	<u>Cost</u>
Policy and Procedure Manual for Hospital Dietetic Services...	1,000	\$2,500.00
Nutrition in the Basic Nursing Curriculum	500	\$1,500.00
Institutional Food Services	2,500	\$5,000.00
Proceedings of the Technical Group Meeting on Food and Nutrition Councils	200	\$100.00
Guidelines		
Guidelines for Obesity, Prevention ... Obesity	500	\$2,000.00
Guidelines to Food and Dietary Services...	1,000	\$2,500.00
Guidelines for the Prevention of Nutrition Related Diseases	500	\$1,500.00
Guidelines, Mass Media	200	\$100.00
Guidelines for Feeding the Weaning Age Group in the Caribbean	500	\$500.00
Guidelines to Young Child Feeding (Reprint)	2,500	\$1,000.00
	TOTAL:	\$16,700.00

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TABLE 8

EDUCATIONAL MATERIALS FOR FIELD WORKERS
1978 - 1982

<u>Publication Title</u>	<u>No. of Copies</u>	<u>Cost</u>
Breastfeeding Your Baby (Flipchart)	1,000	\$8,146.00
Malnutrition and Gastroenteritis (reprint)	2,500	\$1,900.00
Nutrition Education Handbook for Supervisors of Day Care ...	1,500	\$3,000.00
Dietary Management of Diabetes Mellitus...	1,000	\$2,500.00
Meal Planning for Diabetics (reprint)	50,000	\$14,230.00
Workshops on the Dietary Management of Diabetes Mellitus. (Selected Papers)	1,000	\$2,500.00
Diet Manual for the Caribbean	1,000	\$5,000.00
Mass Media Resource Directory (out of print)	200	\$100.00
Feeding the Weaning Age Group in the Caribbean. Proceedings of a TCM	500	\$1,000.00
Nutrition Education Primary School (in press)		
Nutrition Handbook for Community Workers (in press)		
Recommended Dietary Allowances (reprint)	2,500	\$2,000.00
Optimeness of Human Milk (reprint)	1,000	\$500.00
Safe Management of Breastfeeding (reprint)	1,000	\$1,000.00
... (reprint)	1,000	\$1,000.00
... (reprint)	1,000	\$1,000.00
TOTAL		<u>\$42,976.00</u>

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TABLE 9

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EDUCATIONAL MATERIALS FOR Public Education

1978 - 1982

<u>Publication Title</u>	<u>No. of Copies</u>	<u>Cost</u>
Facts about Anaemia	500	\$100.00
How to Prevent Anaemia	500	\$100.00
How to Protect ...	500	\$100.00
Many People Have Diabetes	2,000	\$500.00
Food and You	1,000	\$250.00
Key Nutrients in Foods	5,000	\$800.00
Nutrition Made Simple	5,000	\$4,500.00
Did You Know	5,000	\$800.00
Snakes and Ladders Game	1,000	\$250.00
News Releases/Features	200	\$50.00
Steps on Use of Mass Media	500	} \$2,500.00
Planning Nutrition Exhibit	200	
Guide to Nutrition Education Programme Plans	500	
Food Ways - What Affects Habits	200	
How Well Do You Eat?	100	
How do I Feel About Food?	200	
Eight Guidelines to Good Nutrition	5,000	\$800.00
TOTAL:		<u>\$10,750.00</u>

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37% were intended for middle-level workers. 38% were designed for public education.

60% of the cost of educational materials production under this project went to the production of materials for middle-level workers.

Table 10 presents the cost of commodities purchased with project funds to expand the production of educational materials at CFNI. A mini-computer which was purchased from program support costs paid to PAHO is listed here as a project output. While the computer is used for many purposes, the word processing unit serves for the production of educational materials.

Discussion

The failure of this project to meet estimated outputs in the production and dissemination of educational materials was due to many factors and constraints. These could be explained as follows:

1. The initial needs assessment for this component stressed the development of printed material. This was CFNI's expertise at the time. Project monies were invested to purchase a new printing press and other related commodities.

Subsequent evaluations never mentioned the need to produce more audio-visual materials. In general, this project has been oriented towards printed, rather than audio-visual production.

It must also be mentioned that the new printing press purchased with project funds is rarely used.

TABLE 10

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LIST OF EQUIPMENT PURCHASED BY GRANT FUNDS

1978-198

<u>DESCRIPTION</u>	<u>COST</u>
Davidson Printing Press	US\$13,213
Stock Carts for Printing Unit, 4 @ US\$250.00 ea.	1,000
Electrical Timer for Printing Unit	53
Developer, Washer, Viewer, Sink	1,363
Library Shelving	1,984
Plate Storage Cabinet	480
Duplicating Stencil Machine Gestetner 460	2,019
Electronic Stencil Maker Gestetner 473	2,647
BM Photocopier, Secretary II	9,735
Card-Catalogue Cabinet	285
Electric Interlake Stapler	2,651
Micro-Computer	27,716
Combo Punch	<u>611</u>
	<u>US\$63,757</u>
<u>On Order:</u>	
Blank Folding Machine	US\$2,495
Strip Printer Machine	<u>700</u>
	US\$3,195

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While the technician in charge of printing attended a training course which should have enabled her to use the more sophisticated and efficient Davidson press, she prefers the CFNI older press. This is a question of taste perhaps only printers would understand.

2. Distribution and dissemination of educational materials is a major problem for CFNI. Mailing costs of materials to member countries can run higher than the cost of printed materials. This has been a constraint to increased production.

The word "proto-type" was used in some project documents. It was felt that in many countries CFNI could develop and test materials and then send stencils to member countries for final production to be done locally. This policy has not worked. Member countries lack the facilities and the resources to support local printing.

Distribution and dissemination within member countries is also a problem for those materials CFNI produces and sends out to the field. There seems to be an unequal distribution to member countries. In territories where the food and nutrition community is dynamic, more materials are sent. In countries where the food and nutrition infrastructure is weak, fewer materials are received.

In some cases, community level personnel who could make good use of CFNI materials never receive them. This is due to distribution and dissemination mechanisms within member countries which favor certain organizations more than others.

It is obvious that a better distribution and dissemination mechanism for educational materials is needed at CFNI. This will be discussed later in this report.

3. The suitability of CFNI educational materials is a constant problem. Each member country has its own needs and desires. It seems apparent that in the LDC's more emphasis should be placed on the development of public education materials such as audio-visuals to reach segments of the population who are not literate. The fact that the development of educational materials under this project did not address this need is a serious drawback to the project's impact. It is fair to say however, that the educational materials CFNI produced under this project were valuable outputs. Major productions such as breast feeding materials, which were audio-visual in nature, and the popular handbook on meal planning for diabetes are widely used and much appreciated throughout all member countries. While the handbook on Meal Planning for Diabetics is used most by professionals, more work will be needed to develop simpler materials for middle and community level personnel.

These materials took a considerable amount of time to develop, given the pre-testing, refinement and consultation required to ensure their quality. Their proliferation and wide-spread use is a measure of project success.

A nutrition handbook for community workers was also developed under this project. This promises to be a valuable tool in the training process of community level personnel. This handbook has yet to be field tested and revised.

The series of pamphlets designed for distribution in health clinics on anemia, diabetes, and other nutrition related subjects were efforts designed to address public educational concerns. These materials had wide distribution but it is difficult to measure their impact.

CFNI has been of invaluable help, supplying educational materials to member countries that would not have been able to produce the materials themselves. The materials have served many of the needs expressed by many countries for assistance in promoting food and nutrition concerns.

Finally, a visit to the CFNI printing room demonstrates the extent that project assistance enabled CFNI to expand its production potential for printed material. While the new press is not currently used as effectively as possible, other equipment purchased from project funds had definitely given CFNI an expanded printing capability.

Manpower Needs Study

1. "A strategy for addressing manpower and training needs in food and nutrition in the region will be developed."
2. "Recommendations for action on regional needs over the next 3 to 5 years will be made."

An initial manpower and training study was undertaken during the first year of project activities. This study was entitled "Manpower Needs of Middle-level Personnel in the Caribbean."

This first study was carried out by two consultants and focused on middle-level personnel. Unfortunately, one of the consultants lost her suitcase and her raw data at the end of her consultancy. Thus, the first report had certain data gaps.

The second evaluation of this project recommended that a more precise update of the first study should be carried out. This was also suggested because the possibility of fulfilling manpower needs had increased during the course of the project due to the growth of training facilities in Barbados and Trinidad.

The second manpower study, entitled "An Update of Human Resources Study in Nutrition, Dietetics and Home Economics in the Caribbean Region", was undertaken in December, 1981. It coupled a country-specific questionnaire with visits to individual member countries to collect information. The study detailed the numbers of senior (or professional) and middle-level personnel working within member countries. Precise data was collected on academic backgrounds, training and functions performed by nutritionists, dieticians and home economists economists working throughout the region. Information was also presented to describe nutrition programs and training facilities in member countries. The report also contained an analysis of country specific manpower and training needs and presented recommendations for future action.

This study can be considered a valuable output of this project. It documented a real need in the region for training of middle level personnel. This ran counter to a feeling amongst many countries that senior or professional personnel were most in need.

Further, certain member countries have recently asked CFNI to conduct a middle-level training course in community nutrition. CFNI has responded by asking PAHO to fund a 7 month community nutrition course to be held in the near future at the community college of Barbados. This proposal is currently under study.

PROJECT PURPOSE FOR EVALUATION

The purpose of the Caribbean Regional Nutrition project was to increase the capacity of the English-speaking Caribbean countries to design, implement and evaluate regional and national food and nutrition policies and programs.

The objectively verifiable indicators described within the project paper to measure success in achieving the project's purpose have already been discussed as output objectives in the previous section. These were as follows:

1. "All countries have initiated the planning process; ten countries have formal plans; four countries have completed the process."
2. "700 persons involved in nutrition and food in ministries of health, agriculture planning, other institutions or private organizations have received training."
3. "Expanded CFNI production and dissemination of printed materials by (80) pieces annually and of audio-visual materials by (9) units annually."
4. "A short-term and long-term strategy exists for the region for meeting manpower and training needs."

Food and Nutrition Planning

This project had measurable success in promoting the food and nutrition planning process in CFNI member countries. All countries initiated food and nutrition planning activities. Lesser developed

countries within the region showed the greatest advancement in levels of planning activities. While not all targets were achieved, the project was able to come very close to attaining them.

On a deeper level, however, many of the food and nutrition councils set up under this project will demand continued technical and financial assistance. At this stage, many are fledgling structures dependant on certain key individuals or outside assistance.

CFNI will continue to provide technical assistance to these councils after project activities terminate, but the level CFNI can provide will be less than what the project supported.

Future financial and technical assistance will be required to assist member countries and their respective food and nutrition councils to sustain and extend country-specific food and nutrition planning efforts. Future assistance must be tailored to individual country needs, given the vast differences which exist between member countries in respect to financial and human resources and food and nutrition planning infrastructures.

On a regional level, project activities were instrumental in developing a regional food and nutrition strategy. This is another indicator of project success.

For this strategy to become an effective tool in future planning efforts, however, financial assistance will be required to print and distribute the document. Further financial and technical assistance will also be required to monitor the regional strategy and adapt national food and nutrition programs accordingly.

Training

Over 900 persons, 200 more than originally planned, were trained in food and nutrition concerns during the course of this project. Most of those trained were middle-level personnel from a cross section of government ministries, public and private organizations. This was a significant measure of success in achieving the purpose of this project.

The fact that some participants who received training were not able to use their newly acquired knowledge effectively was a drawback to some training activities. The effectiveness of training programs was also diminished when participants lacked sufficient background knowledge to follow material presented in training courses.

Nonetheless, training activities carried out under this project greatly benefited the capability of CFNI and member countries to undertake future training and food and nutrition planning activities. Those participants trained and sensitized in food and nutrition concerns under this project now form a cadre of personnel within the region capable to assist in efforts to plan, implement and evaluate programs in the food and nutrition sector. Participants who were trained under this project represent a critical mass of people within the region sensitive to food and nutrition concerns.

Their strength, however, is certain to be diminished over the long term by attrition and employment mobility. Future efforts must address the need to institutionalize food and nutrition training within the region.

Another positive outcome of the training component of this project was technical group meetings and meetings of heads of nutrition units from member countries.

Technical group meetings contributed to overall project success. The guidelines and strategies they produced were valuable additions to the food and nutrition planning process in the region. Their effectiveness, however, will be measured over time by the extent to which their guidelines and strategies will be implemented or used.

Meetings of heads of nutrition units were also valuable contributions to food and nutrition planning in the region. These meetings served to promote cross-pollination of ideas amongst key individuals in nutrition units of member countries. These activities also facilitated scheduling of CFNI assistance to food and nutrition programs in member countries.

More efforts will be required by CFNI to refine this process so that member country programs are given more scrutiny. Future activities of this nature must address the need to refine country programs, especially within the LDC's, and tailor food and nutrition assistance by CFNI to address priority concerns within member countries.

Educational Materials Production and Dissemination

Project assistance increased the capability of CFNI to produce printed educational materials. The project fell far short of its original production targets, however. This was due to a lack of human resources in CFNI and the amount of time required to produce quality educational materials.

Project activities were concentrated more towards the production of materials for middle-level personnel. Public educational materials, especially audio-visual production, were not major outputs from this project. The fact that so few public educational materials were produced was a drawback to the project's success.

The educational materials produced under this project had unequal distribution among and within member countries. Further, "prototype" productions of CFNI were not always reproduced in member countries. Financial constraints or lack of suitable equipment restricted effective use of these materials. These factors also diminished the overall effect of project activities.

CFNI will need continued financial and technical assistance to produce public education materials in support of on-going food and nutrition programs in member countries. A new distribution system must be designed to insure that countries with lesser developed food and nutrition infrastructures have more access to CFNI productions. Better distribution systems are also needed within countries to insure that all organizations working within the food and nutrition sector benefit from CFNI materials. Activities to produce prototype materials must be re-examined.

Materials which were produced and distributed by project assistance did strengthen food nutrition planning activities throughout the region. While problems were encountered in obtaining production targets and insuring equal distribution, materials which were produced were of high quality and benefited many segments of the population.

In many cases, materials produced by this project were valuable assets to member countries who could not and still cannot produce educational materials themselves. In this respect, the project obtained measurable success.

Manpower Needs Study

Two manpower needs studies were produced from project activities. The end result was a precise detailing of manpower needs for individual countries and the region.

These studies underlined the need for institutionalized training of middle-level personnel in food and nutrition in the English-speaking Caribbean. This was in contrast to a perceived need for training of higher level personnel.

As a result of these studies and demands from member countries, CFNI has proposed to undertake a 7 month community nutrition training course for middle-level personnel at the Barbados Community College. This effort will require financial assistance.

The manpower needs studies carried out under this project were valuable contributions to strengthen food and nutrition planning efforts within the region. The resulting proposal for middle-level training in community nutrition is a measure of their success.

GOAL OF THE PROJECT FOR EVALUATION

The goal of the Caribbean regional nutrition project was to improve and sustain the nutritional status of target populations^{1/} in the English-speaking Caribbean and improve food availability and nutrient intake at the household level.

Objectively verifiable indicators set forth in the design of this project to assess goal achievement were:

1. Increased caloric and protein intake of mothers and children of 0-5 years.
2. Increased birth weights
3. Reduced prevalence of anemia
4. Reduced infant and 1-5 year old mortality
5. Increased availability of basic foods
6. Reduced prevalence of obesity and diabetes.

This project has been oriented to create food and nutrition planning mechanisms within member countries of CFNI. Efforts have been largely concentrated upon the institutional development of the food and nutrition planning process, with a major emphasis upon training. Educational materials have been developed and distributed which could have had an effect on the above indicators.

This effect, however, has not been possible to quantify during the course of this evaluation in any significant way. In many cases, the project, through consultant reports and project activities

probably affected indicators of project success. Declining financial resources and a general trend towards increased reliance upon imports and decreased production of local foods amongst member countries make it imperative that further efforts must be made to collect, analyse and use food and nutrition information on a continuous and regular basis within the region.

This project has made great strides to facilitate this process. Individuals have been trained and sensitized and institutional frameworks now exist to permit efforts to monitor, assess and evaluate programs within the food and nutrition sector of the region.

It is essential that this process continue. When ongoing food and information systems exist and regular analysis is undertaken and presented, decision-makers will be able to make critical choices to directly benefit the nutritional status of the population.

BENEFICIARIES

This project was oriented to senior and middle-level personnel within CFNI member countries. The project envisioned that governments, given food and nutrition planning infrastructures and trained personnel, would be able to make decisions which would better the nutritional status of selected target groups within their populations. Another aspect of this project was to produce educational materials to support food and nutrition programs.

Food and nutrition training benefited over 900 senior and middle-level personnel throughout the region. Those who most benefited from training activities were middle-level personnel. These included physicians, agricultural extension and information agents, public health and hospital nurses, nutrition officers, teachers and others.

A smaller group of senior officials benefited from reports, documents and strategy preparations generated by project activities. This group of beneficiaries gained information and were sensitized to food and nutrition planning concerns.

Educational materials benefited senior and middle-level officials more than the population at large. The increased awareness and training of this group of beneficiaries most probably had a salutary effect on target groups within the population. Some educational materials, especially those related to breast feeding, directly benefited many women and young children within the region.

In essence, this project, like many others, expected to better the nutritional status of many people by assisting governments to effectively plan, implement and monitor activities in the food and nutrition sector.

By design, the project was overly optimistic. The duration of this project prohibited direct benefit to large numbers of people.

In the longer term, however, and especially in the Caribbean where governments are small and populations are not especially large or diverse, these efforts hold much promise to directly benefit populations at large.

Large segments of the population will directly benefit from food and nutrition planning only when systems and infrastructures exist to permit decisions based on nutritional concerns. In the Caribbean today, this implies hard economic data and political advocacy. This project did much to advance CFNI and member countries along the path of the food and nutrition planning process. More effort is required, however, before large numbers of people will feel the benefit.

UNPLANNED EFFECTS

The following could be considered unplanned activities or effects which resulted from the Caribbean Regional Nutrition project.

1. Two evaluations altered the original design of the project. The activities of the project were adapted to address changing needs and priorities within the region. Thus, an anemia technical workshop was convened, the SPACGEM regional strategy was updated, meetings were held for heads of nutrition units, and a seven week intensive training course was held in food and nutrition surveillance. These activities, while not planned for in the original project design, contributed to overall project success.
2. The food and nutrition surveillance training course used participants to undertake a food and nutrition survey in Antigua. This activity, while unplanned during the design of the course, was fortuitous for participants in the training course and for the government of Antigua. Valuable information was collected and analysed on the food and nutrition situation in Antigua and participants gained practical experience in the implementation of food and nutrition surveys.
3. One long term technician on the project staff has been involved with the teaching of a university undergraduate course on food and human nutrition to agriculture students

at the University of the West Indies in Trinidad. This activity while being an unplanned output of this project, has served to fill a valuable need to incorporate food and nutrition concerns into agriculture curricula at all levels.

4. Almost \$30,000 of project money committed to PAHO program support costs was used to purchase a mini-computer for CFNI. This computer has been invaluable to CFNI since its acquirement. It has speeded up data storage and analysis functions. Further, the computer's five remote terminals and printer are employed by CFNI staff in all facets of daily activities, from updating mailing lists to word processing of all reports, publications and documents. This computer and its acquirement from project funds destined to PAHO support costs was not a planned component of this project. The computer, however, has been enormously beneficial to expanding the institutional capability of CFNI to assist member countries in all aspects of food and nutrition planning.
5. While somewhat planned, CFNI's extensive use of West Indian personnel as short term consultants was extremely beneficial to project activities. The project's use of regional technicians has been instrumental in promoting the development of skilled food and nutrition planners within the region. The use of regional personnel in project activities has also done much to promote technical cooperation amongst developing countries within the region.

LESSONS LEARNED

The following lessons were learned from this project:

1. "Food and nutrition projects which stress infrastructure, training and education will not, by themselves, have measureable impact on nutritional status indicators."

Projects of this nature should be realistic in design.

Infrastructure development, training and education are necessary to improve the nutritional status of populations. But alone, they will not have a direct impact on nutritional status. This requires either a major commitment of financial and human resources on the part of governments or decision-making based on food and nutrition concerns.

Project goals should be based on the real assumptions which have to be made before direct nutritional impact will be felt from food and nutrition planning activities. Many times direct nutritional effect is overly optimistic to expect.

2. "Food and nutrition councils, to be effective, need technical staff and financial resources or statutory power."

In many countries it is easy to set up intersectoral committees. These kinds of committees exist around the world and address a variety of concerns.

For committees or food and nutrition councils to be effective, however, they need a cause, technically capable and dedicated members

and some sort of financial support or a means to acquire financial assistance. Without financial means and concerned personnel, food and nutrition councils become social groups which discuss but rarely act.

Food and nutrition councils which were granted statutory powers by their governments under this project became more effective than other food and nutrition councils. This was due to financial resources made available by member governments to support food and nutrition council staff and their activities and the fact that as statutory bodies, food and nutrition councils could receive external financial assistance.

Future food and nutrition planning activities should take this into consideration. While statutory powers depend on governments, financial assistance can be built into project designs to provide food and nutrition councils with support or the means to implement food and nutrition programs.

3. "Short-term training in food and nutrition should be problem-oriented to produce the most beneficial results."

When short-term training programs utilize practical exercises and problem solving activities, participants feel more involved... especially if the skills they develop help them in their normal work. If training programs are tailored this way and oriented to provide knowledge which participants need, their effect is enhanced.

This was the case in some project training activities. Intensive courses on food and nutrition planning and surveillance

were based on field work and practical exercises. While some aspects of these programs were overly technical and theoretical, the experiential components to these activities were much appreciated by program participants. Reports from field work and practical experience gained in undertaking food and nutrition surveys served participants and governments as well after training was completed.

4. "Participants in training programs must be able to use the new skills they acquire."

Training in food and nutrition is often looked at as a panacea to remedy problems throughout the food and nutrition sector. With more trained and sensitized personnel it is assumed that governments will be better able to address food and nutrition concerns.

Any training in food and nutrition must be oriented to provide skills and knowledge participants can use. If not, training programs are a waste of money and human resources.

It is difficult to train a cross-section of people in food and nutrition. Programs oriented to home economics teachers, agriculture extension agents, health personnel and others at the same time must address a variety of needs.

Some project activities were rendered ineffective when the spectrum of participants exceeded the skills and knowledge provided by training programs. Further, participants were often times taught skills they could use but were faced with limited means within their respective governments to utilize their newly acquired knowledge.

More attention must be given to this fact when undertaking future food and nutrition training programs. Linkages must be made between training and implementing acquired skills.

5. "Expanded production of anything must take into account the personnel required to do it."

This project purchased equipment for CFNI to use to expand their production of educational materials. To produce quality products, however, especially those destined to the general public, requires more than machines. There is also a need for adequately trained and sufficient manpower resources.

CFNI had adequately trained personnel. They just didn't have enough of them to produce all the educational materials this project required.

Projects need to assess the institutional capacity of organizations before assigning expected outputs. In the case of CFNI, especially in the future, this must be taken into consideration.

6. "Community purchases should reflect current needs and future activities".

This project purchased equipment to augment production of printed material at CFNI. While more efficient printing might have been beneficial to the organization, a clear need existed at the time to expand audio-visual production.

There was little attention given to equipment purchases which would have aided audio-visual materials development, even though this was a component in the project design. Further, production of printed material was not greatly expanded by the purchase of a new press, since it is rarely used.

Future activities must take into consideration how commodities will be used. Equipment must complement existing and future activities.

7. "Changes in the system, while many times beneficial, can pose problems."

This project was aided immensely by management from the USAID/Jamaica office. There were, however, some bureaucratic nightmares stemming from the fact that the project was funded through USAID RDOC/Barbados and managed by USAID/Jamaica.

USAID/RDOC/Barbados never really managed or became involved in CFNI everyday activities. From this, the regional USAID/Barbados office suffered from a communications gap with CFNI, especially in regards to some activities which could have been linked to other USAID/Regional projects within the food and nutrition sector.

Collaboration should be sought between the USAID/RDOC office in Barbados and CFNI concerning mutual concerns within the food and nutrition sector. In areas such as nutrition planning and food and nutrition surveillance, both CFNI and USAID/RDOC/Barbados have much to offer each other.

ROLE OF CFNI IN THE FUTURE

CFNI was established to advise and offer technical assistance to member countries to address their food and nutrition problems. The centre has been instrumental in organizing and implementing surveys in several countries to define the nature and intent of their nutrition problems. Research has also been done on specific problems and considerable work has been done in assisting countries to formulate policies and plan effective programs to alleviate specific problems in the food and nutrition sector. The work of the centre has now evolved to assist countries to strengthen programs and increase the cadre of trained persons who work with the food and nutrition community.

During this evaluation concerns were expressed by some member countries regarding the evolving role of CFNI. These concerns include the following:

1. The need for CFNI to establish workable linkages with other regional organizations which work within the food and nutrition sector. Clear roles have to be defined with respect to CFNI's responsibility for data collection, education and training in the food and nutrition community.
2. As a service organization CFNI must work more closely with each member country to design programs that address the real needs of the population. In this regard CFNI must advise on the planning and implementing of programs at the highest levels.

3. Some countries, especially LDCs, do not have trained personnel nor the financial support to acquire them. This impedes their capability to plan and implement effective food and nutrition programs. These member countries are looking to CFNI to bridge this gap by providing more assistance to aid them in their planning efforts within the food and nutrition sector. In this regard CFNI could examine the possibility of either CFNI staff spending longer periods in these countries or a staff member could be assigned to service three or four territories.

Alternately CFNI could be the advocate for technical cooperation among developing countries. This would enable trained persons from other countries to serve in countries that lack trained personnel. CFNI could consider initiating discussion with relevant ministers of government to promote this type of technical cooperation.

4. LDC's are concerned that CFNI's distance from them militates against their receiving assistance comparable to that received by MDCs. If CFNI's new headquarters was more centrally located, it might facilitate greater benefits to the LDCs.
5. Given the interest of member countries, to extend their primary health care services, CFNI should continue to assist member countries in the training of middle and front line workers in food and nutrition. Many member countries cannot support necessary training functions in

the food and nutrition sector and will continue to rely on CFNI for some time.

6. Member countries continue to feel that CFNI should serve as a clearing house for information on food and nutrition. Concerns were expressed that CFNI should work more with member countries to produce educational materials that address their specific national needs. Further, many feel CFNI should streamline its distribution system for educational materials to ensure a more even distribution to and within all member countries.
7. Concerns were raised whether the present staff structure of CFNI will enable the institution to address all the needs expressed by member countries. In this regard, CFNI should re-examine its staffing priorities in relation to member country needs.
8. All countries visited endorsed the need for CFNI as a regional institution which must address the food and nutrition issues of the region. However, the real work of CFNI is not well known by many in the region, or not evident. This evoked the constant comment that "CFNI should be doing more." Many suggested that CFNI could improve this image by informing more senior government officials in member countries about CFNI's role in their respective food and nutrition sectors. Further, CFNI could assume a role as an advocate for regional food and nutrition concerns by commenting on food and nutrition issues

more in the media and exhibiting a more vocal stance at regional meetings.

REGIONAL FOOD AND NUTRITION NEEDS

The following areas were determined to be important priorities for action in the food and nutrition sector of the region.

1. Nutrition Planning and Food and Nutrition surveillance

- a. There is a definite need for data collection in the food and nutrition sector within member countries and the region as a whole. This will entail cooperation amongst regional agencies to pool information now being collected for analysis on a regular basis. This will also demand national and community level action to promote new technologies and the use of materials for assessing nutritional status and to upgrade existing information systems.
- b. The past efforts by CFNI to promote nutrition planning within the region have placed many member countries on the forefront of food and nutrition planning in the world. Governments have been sensitized, food and nutrition councils have been created, but a major constraint shared by member countries is a lack of personnel and resources, innovative ways must be sought to remedy this situation.

Training will be required for personnel to implement and evaluate these programs. More effort is required to work with member countries to define priority problems and seek cost-effective solutions to them. In this sense, the recently prepared regional food and nutrition strategy can be used as a tool to help member countries assess their respective food and nutrition sectors and define and monitor effective interventions.

c. The regional food and nutrition strategy must be energized and implemented.

2. Nutrition Related Diseases

a. The regional strategy for anemia is being reviewed and should be implemented. Country specific programs needed in areas of screening, iron supplementation, food fortification, education, and the control of parasitic diseases. Research could be considered on the testing of a slow release iron tablet.

b. Given the recent update of the SPACGEM strategy, country specific programs should be enacted to address implementation concerns, efforts need to be strengthened in data collection and monitoring. Member country programs must also be given assistance to tailor their SPACGEM strategies to primary health care concerns.

c. Diabetes efforts must go further to address problems at the community level, better screening procedures are needed. The urine tests now performed regularly as screening tools may be unreliable due to the masking effects of bush teas consumed by large segments of populations. Adequate surveillance of diabetics is essential for planning future programs and assessing past efforts.

d. Hypertension needs to be studied in the Caribbean context. Also, more research is required to determine the causal factors of hypertension in the region. Further, current approaches to treatment should be assessed. In

some cases, 25% of hospital budgets are spent on medicines to treat hypertension and diabetes alone.

e. New approaches to public education are required to address the above nutrition-related problems, innovative ways must be sought to use formal and non-formal education to support intervention programs, mass communication and educational campaigns should be linked by face-to-face re-enforcement at the community level. The bottom line should be effective behavioral change.

3. Training

a. For ten years the need to institute an undergraduate course in food and nutrition in the region has been discussed at many levels. Everybody knows about it. No one wants to pay.

b. Shorter term institutionalized regional training is necessary to upgrade middle level personnel in food and nutrition.

c. Interdisciplinary short term intensive training with emphasis on community participation is needed for country specific food and nutrition concerns. Preference should be given to national rather than regional training courses of this nature.

d. All training courses should be oriented to practical theory and problem solving. They should also be oriented to on-going or planned programs in member countries.

Efforts are needed to secure university credit for these courses in order that participants can upgrade their professional standing.

e. Technical cooperation among developing countries should be encouraged to bridge gaps in human resources until member countries attain their own individual food and nutrition personnel infrastructure.

4. Education

a. There is a continuing need to promote food and nutrition training in primary schools and secondary schools throughout the region.

b. Manuals have been developed and need to be tested and produced to incorporate elements of food and nutrition into the training of community level workers in primary health care systems.

c. New approaches to food and nutrition are required in agricultural schools to promote agricultural production. Efforts are also needed to stress the nutritional aspects and consumption effects of agricultural production.

d. There is increased need for public education throughout the region. Public education programs must be designed to address country specific problems and priorities. All public education activities must be coordinated amongst all organizations active in the food and nutrition sector.

RECOMMENDATIONS FOR USAID ASSISTANCE

Nutrition Planning/Food and Nutrition Surveillance

1. Assistance can be given to CFNI to convene a technical group meeting in the region on food and nutrition surveillance. This meeting would bring together all regional organizations and agencies who collect information on the food and nutrition sector. From this meeting, a process for collecting and pooling food and nutrition information could be decided upon by various regional organizations and mechanisms set up to regularly analyse and report upon data collected.
2. Short term technical assistance can be used by CFNI to convene workshops on food and nutrition surveillance within member countries where food and nutrition data collection is desired or possible to undertake. These workshops would be oriented toward food and nutrition councils, representatives from statistical units in various ministries and decision-makers to assess data collection needs which would be simple, practicable and useful for specific member countries.
3. Given the enormity of food and nutrition information which is collected in the region and the limited institutional capacity of CFNI to regularly collect, analyse and report upon it, assistance can be given to CFNI to create a food

and nutrition surveillance statistical unit within CFNI for the region. This unit would be headed by a surveillance officer preferably based in the eastern Caribbean and would be responsible for collecting, coordinating, analyzing and reporting upon the food and nutrition situation within member countries and the region as a whole. This regional surveillance activity would be oriented to member country needs and reports would be regularly presented to senior government officials within the region. Regional food and nutrition surveillance would enable the regional food and nutrition strategy to be monitored. USAID could work in collaboration with other agencies such as FAO (WHO perhaps could assist in posting a surveillance officer at CFNI), CARDI, IFAD, CARION and others to create a regional food and nutrition surveillance system. This would enable USAID assistance projects such as CBI to be evaluated as to their impact on the food and nutrition sector.

By regularly producing country profiles for member countries on their food and nutrition sectors, CFNI would much improve its regional image. Further, detailed economic analysis of food and nutrition sectors, coupled with advocacy of food and nutrition policies beneficial to target groups within member countries would do much to improve the nutritional status of the region.

4. In member countries where primary health care activities are beginning, short term technical assistance can be used to train community health workers in growth surveillance and implement nutritional status monitoring systems.

In this regard, appropriate technology to measure nutritional status such as inexpensive scales and growth charts based on WHO standards rather than GOMEZ classifications will be needed on country specific basis.

5. Short term technical assistance can be provided to food and nutrition councils and senior officials in member countries to orient and dovetail national food and nutrition policies to the regional food and nutrition strategy.
6. Efforts can be made to provide local food and nutrition councils, especially within LDCs, with financial assistance on a bilateral basis. One way to do this would be to fund country specific activities through national food and nutritional councils.

Further, USAID assisted PVO's could be encouraged to collaborate with food and nutrition councils and coordinate their actions with member country food and nutrition planning structures.

Finally, USAID can attempt to coordinate actions in agriculture and other sectors with national food and nutrition councils. Efforts should be made whenever possible, to link USAID activities within member countries with appropriate food and nutrition planning mechanisms.

Nutrition Related Diseases

1. Technical and Financial Assistance can be provided to CFNI to implement the present strategy for the prevention and control of anemia on a country specific basis. This would entail assistance in the areas of:
 - a. screening for anemia
 - b. iron supplementation
 - c. food fortification
 - d. education
 - e. control of parasitic diseases
 - f. research and testing of a slow release iron tablet
2. Technical assistance and financial support can be given to implement and monitor country specific SPACGEM programs. Efforts to strengthen data collection are also needed, as well as assistance to link member country SPACGEM programs with primary health care concerns.
3. Short term technical assistance and financial support can be given to CFNI to develop simple and efficient screening methodologies for diabetes within member countries.

Food and Nutrition Educational Materials

1. Short term technical assistance can be given to CFNI to assess current practices of materials distribution to and within member countries. Recommendations for a more efficient system could be developed to insure better dissemination of CFNI materials.
2. Short term technical assistance can be provided to assess the current CFNI materials production policy in relation

to the felt need in many member countries for visual materials to support on-going public education programs which address breast-feeding, weaning, diabetes and other nutritional concerns. An assessment must be made of CFNI black and white productions and the demand by many countries for color publications.

3. Short term technical assistance and financial support can be given to CFNI to develop country specific public educational materials to support on-going programs in the food and nutrition sector. This assistance can be in the following areas:
 - a. Increased production of visual materials. This would entail some minor equipment purchases such as a photo-type setting machine. It would also require technical assistance in graphics and design for specific materials to be developed.
 - b. Technical assistance in the area of media directed materials development can be used to re-orient current CFNI news releases ("Nyam News") to the general public rather than homemakers and health related personnel. This too, would require graphic artists on a contractual basis.
4. Technical and financial assistance can be given to CFNI to further test and adapt a recent CFNI/Government of Jamaica nutrition handbook for community workers. This handbook can be used as a tool for training workshops in primary health care. Workshops must also address team

building skills among community workers.

5. Technical assistance in educational technology and curriculum design and financial support can be given to CFNI to field test, revise and print a recently developed food and nutrition manual for primary school teachers. Supporting materials can also be developed and teachers within the region can be trained in their use.

Food and Nutrition Training

1. Technical and financial assistance can be given to CFNI to support the institutional development of the proposed community nutrition training course for middle level workers at the Barbados Community College. Discussions should be held with PAHO concerning collaborative funding for:
 - a. 12 man-months financial support for CFNI additional staff member to direct the course
 - b. 18 man-months of short term technical assistance to teach and plan the course
 - c. 14 fellowships for participants
2. Financial support can be given to CFNI to allow trained personnel in MDC's to serve for short periods of time as advisors in food and nutrition within LDC member countries. These advisors would promote technical cooperation among developing countries; provide needed manpower resources and train local counterparts in food and nutrition concerns.

3. In another sense, financial assistance can be given to provide fellowship training for LDC food and nutrition personnel within MDC's in the region. Participants would serve apprenticeships with MDC ministries and organizations within the food and nutrition sector to upgrade skills needed within their respective countries.
4. Technical Assistance and financial support can be given to CFNI to run food and nutrition training programs on an ad hoc, country specific basis to address individual country needs.

USAID EVALUATION MEETING (28 October - 19 November 1982)

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APPENDIX I
PERSONS CONTACTED

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LIST OF PERSONS CONTACTED

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- Mr. G. Rutherford, Management Trainer

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APPENDIX II

CFNI ACTUAL EXPENDITURES 1978 - 1982

CFNI PROJECTED EXPENDITURES 1983

ACTUAL EXPENDITURE - 1978

29

Source of Funds Type of Expenditure	PAHO/WHO Regular Budget	Government Contributions	U N I C E F					FORD FOUNDATION	USAID	TOTAL	PERCENTAGE OF TOTAL
			General Support	Maurice Pate	Nutrition Education	Food & Nutr. Surveillance	Promotion of FNP*				
Personnel Services	283,222	67,243			33,131	9,904		31,911	20,036	445,447	63.98
Short-Term Consultants	12,954		2,240				2,626	8,768	3,118	29,706	4.27
Seminars, Courses & Training General	4,889	6,201	299	3,057				10,440	18,204	43,090	6.19
General Operating Expenses	32,083	22,015			5,640			14,352		74,090	10.64
Fellowships								8,658		8,658	1.24
Supplies & Material						4,105			16,065	20,170	2.90
Duty Travel	45,127	2,637			3,591			2,110	2,645	56,110	8.06
Programme Support									18,921	18,921	2.72
TOTAL	378,275	98,096	2,539	3,057	42,362	14,009	2,626	76,239	78,989	696,192	100.0
Percentages of Total	54.33	14.09	(64,593) 9.28					10.95	11.35	100.0	
Total Amt. Expected	412,700	98,000	6,000	7,818	45,519	27,900	3,200	149,626	350,000	1,086,872	

*Food and Nutrition Policies - Grant expired.

ACTUAL EXPENDITURE - 1979

97

Source of Funds Type of Expenditure	PAHO/WHO Regular Budget	Government Contributions	U N I C E F					FORD FOUNDATION	USAID	TOTAL	PERCENTAGE OF TOTAL
			General Support	Maurice Pate	Nutrition Education	Food & Nutr Surveillance	Breast- feeding Package				
Personnel Services	339,865	68,163			40,360			8,534	73,920	530,842	63.6
Short-Term Consultants							18,593	8,005	35,296	61,894	7.4
Temporary Assistance						18,197				18,197	2.2
Contractual Services											
Seminars, Courses and Training General		7,099	3,110	925				583	39,018	50,735	6.1
Fellowships								5,623		5,623	0.7
Supplies & Equipment		3,503				2,860			23,334	29,697	3.5
General Operating Expenses	55,867	16,062								71,929	8.6
Duty Travel	45,583	1,850			7,880			1,330	8,930	65,573	7.9
TOTAL	441,315	96,677	3,110	925	48,240	21,057	18,593	24,075	180,498*	834,490	100.0
Percentages of	52.9	11.6	(91,925) 11.0					2.9	21.6	100	
Total Amount Budgetted	475,100	138,356	3,460	4,760	47,638	29,783	22,000	46,477	320,838	1,086,412	

*This amount available to C.I.I. Total grant includes US\$56,857, P.S.C. which go to PAHO.

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ACTUAL EXPENDITURE - 1980

Type of Expenditure	Source of Funds	PAHO/WHO Regular Budget (a)	Program Support Costs	Government Contributions	WHO (b)	UNICEF			USAID Nutrition Policies	Ford Foundation	Total	Percentage of Total
						Maurice Pate	Nutrition Education	Food & Nutr. Surveillance				
Personnel Services		448,250	-	102,455	-	-	9,930	-	89,651	-	650,286	59.1
Short-Term Consultants		-	-	-	2,167	-	-	-	18,662	-	20,829	1.9
Temporary Assistance		-	-	-	4,479	-	-	1,967	-	-	6,446	0.6
Contractual Services		-	16,162	-	-	-	-	-	-	-	16,162	1.5
Seminars, Courses & Training General		-	-	6,288	-	5,560	-	-	161,485	19,011	192,344	17.5
Fellowships		-	-	-	-	-	-	-	-	803	803	0.1
Supplies		-	-	-	2,831	-	-	159	32,247	-	35,237	3.2
Equipment		-	-	6,152	-	-	-	-	-	-	6,152	0.5
General Operating Expenses		63,050	-	15,387	-	-	-	-	-	-	78,437	7.1
Duty Travel		62,525	-	4,834	-	-	3,123	-	23,019	-	93,501	8.5
TOTAL		573,825	16,162	135,116	9,477	5,560	13,053	2,126	325,064 (c)	19,814	1,100,197	100.0
Percentage of Total		52.2	1.5	12.3	0.8	0.5	1.2	0.2	29.5	1.8	100	
Total Amount Budgeted		555,450	22,830	168,589	10,000	5,128	9,398	1,535	479,140	49,312	1,301,382	

(a) 50% of amount for 1980-1981 biennium.

(b) Haemoglobin Screening Project.

(c) This is the amount available to CFNI. The total Grant includes \$100,495 Program Support Costs to PAHO.

Type of Expenditure	Source of Funds	PAHO/WHO Regular Budget (a)	Programme Support Costs	Government Contributions	WHO (b)			
					Community Nutrition Training	Haemoglobin Screening Project	World Food Programme	Breastfeeding Project
Personnel Services		446,232	7,500	127,550				
Short-Term Consultants		-						
Temporary Assistance		-				530	1,500	4,000
Contractual Services		-	2,568					
Seminars, Courses and Training		-		7,000	970			4,000
Fellowships		-						
Supplies		-			2,290			
General Operating Expenses		64,682		23,961	210			
Duty Travel		60,676		6,000	1,530			
Equipment		-		5,000				
TOTAL		571,590	10,068	169,511	5,000	530	1,500	8,000
Percentage of Total		49.8	0.9	14.8	0.4	(c)	0.1	0.7
Amount Budgetted		573,825	7,000	147,895	3,948	530	1,500	8,000

(a) 50% of amounts budgetted for 1980-1981 biennium.

(c) Less than .05 percent

(b) WHO funds do not appear in PAHO budget

(d) This amount was available to CFNI. grant includes \$70,015 PSC to PAHO.

1981

96A

ng	UNICEF F & N Surveillance	USAID		Ford Foundation	CARICOM Secretariat (a)	Total	Percentage of Total
		Nutrition Policies	Intake Recall				
		88,433	7,932			677,647	59.1
		45,524	4,000			49,524	4.3
						6,030	0.5
	5,000	8,147				15,715	1.4
		118,632		22,330	8,202	161,134	14.1
				6,145		6,145	0.5
		38,171		1,200		41,661	3.6
			2,946			91,799	8.0
		24,666				92,872	8.1
						5,000	0.4
	5,000	323,573(d)	14,878	29,675	8,202	1,147,527	100
	0.4	28.2	1.3	2.7	0.7	100	
	5,050	332,217	14,378	29,675	9,384	1,133,902	

get.
The total

ACTUAL EXPENDITURES - 1982

11

SOURCE OF FUNDS TYPE OF EXPENDITURE	PAHO/WHO Regular Budget (a)	Programme Support Costs	Government Contributions	WHO Breast- feeding Methodology Project	UNICEF Breastfeeding Weaning Strategies	USAID(b) Nutrition Policies	Total	Percentage of Total
Personnel Services	519,250	7,335	126,900			72,539	725,124	66.0
Short-Term Consultants	8,400				10,000	13,227	31,627	2.9
Contractual Services		2,217	2,800		4,500		9,517	0.9
Seminars, Courses and Training General			16,168	9,660	10,000	48,783	84,611	7.7
Supplies			4,200	6,900	2,049	28,600	40,849	3.7
Equipment	7,500	27,717					35,217	3.2
General Operating Expenses	74,200		33,500				107,700	9.8
Duty Travel	35,800		6,000			21,971	63,771	5.8
TOTAL	645,150	37,269	188,668	15,660	26,549 ^(c)	185,120 ^(d)	1,098,416	100.0
Percentage of Total	58.7	3.4	17.2	1.4	2.4	16.9	100	
Total Amount Budgetted	637,050	5,000	188,657	10,900	30,000	191,643	1,022,350	

- (a) 50% of amounts projected for 1982/1983 biennium.
- (b) Grant expires December 1982.
- (c) Amount for CFNI. Total Grant includes \$3,451 PSC to PAHO
- (d) Amount to CFNI. Total Grant includes \$3,451 PSC to PAHO

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BUDGET PROJECTION FOR CFNI - 1983

88

TYPE OF EXPENDITURE \ SOURCE OF FUNDS	PAHO/WHO REGULAR BUDGET	GOVERNMENT CONTRIBUTIONS	TOTAL	PERCENTAGE OF TOTAL
Personnel Services	519,250	149,000	668,250	78.5
Short-Term Consultant	-			
Temporary Assistance	-			
Contractual Services				
Seminars, Courses and Training, General		12,000	12,000	1.4
Fellowships				
Supplies				
Equipment	15,000	10,000	25,000	2.9
General Operating Expenses	74,200	29,516	103,716	12.2
Duty Travel	35,800	7,000	42,800	5.0
Total	644,250	207,516	851,766	100.0
Percentage of Total	75.6	24.4	100	

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APPENDIX III. 1st DRAFT RECOMMENDATIONS FOR DISCUSSION
2nd DRAFT RECOMMENDATIONS FOR DISCUSSION

1st DRAFT RECOMMENDATIONS FOR DISCUSSION

CFNI/Primary Health Care

1. Given the recent interest in several member countries to extend primary health care services, CFNI should be involved in the food and nutrition training of all community workers who will implement primary health care activities. In this regard, the manual recently prepared by CFNI/Government of Jamaica should be field tested and adapted to individual country needs.
2. Further, CFNI should assist member countries to implement appropriate strategies for the control and prevention of anemia using guidelines now being revised by the Faculty of Medicine at U.W.I. This would entail assistance in the areas of:
 - a. screening for anemia
 - b. iron supplementation
 - c. fortification of foods
 - d. education
 - e. control of parasitic diseases
 - f. research and testing of a slow release iron tablet
3. Following the recent review of the SPACGEM regional strategy, CFNI should consult with member countries regarding the recommendations proposed with a view of implementing SPACGEM national strategies in the context of primary health care.

CFNI/Training

1. There is a definite need for an undergraduate program in food and nutrition in the Caribbean region. For effective planning and implementation of food and nutrition programs, individual countries need qualified personnel. To date, all persons with an interest in food and nutrition must go outside the region for undergraduate training. Many do not return. Those who do come back to the region must re-orient themselves to the Caribbean situation.
2. CFNI should try to convince the University of the West Indies to institute this program. CFNI should also explore other ways and means to facilitate the institution of an undergraduate program in food and nutrition for the region.
3. The proposed community nutrition course to be offered by CFNI in Barbados should be supported, given the interest and need by member countries for trained personnel in the food and nutrition sector.
4. If CFNI is to sponsor future short-term training courses, seminars or workshops in nutrition planning and nutrition-related diseases, CFNI should assess the cost effectiveness and benefits of country specific activities rather than a regional approach. Attention should be given to participant selection to ensure that participants who are selected will benefit from their training.

5. Training activities should be oriented toward on-going or planned programs. Emphasis should be given to use the training process in ways which will also benefit specific country needs. Thus, food and nutrition surveillance training could also be used to collect data or institute surveillance activities in respective countries. CFNI should ensure that participants receive continuing support to implement activities stemming from their training.
6. CFNI and other organizations should recognize that workshops, training courses and seminars are constantly being undertaken throughout the Caribbean region. Many times different workshops are oriented to the same people and conflict with one another. Efforts should be made to rationalize the use of these activities so that participants can have more time to work for the common good of their respective countries. The fact that the same people always seem to be trained by these activities suggests that a different approach may be needed.

CFNI/Food and Nutrition Education

1. Given the educational priorities of the regional food and nutrition strategy, CFNI should become actively involved in promoting food and nutrition education in primary, junior secondary, secondary and technical schools throughout the region.
2. CFNI should assess current member country needs for food and nutrition in their educational programs. In the area

of primary school education, CFNI is currently supplying technical advice on "nutrition" for a regional USAID assisted project to develop primary school curriculae in the areas of Math, Social Science, Science, Language Arts and Health Education. In this respect, nutrition is considered relevant to only health education. This program should be reviewed to address the need to incorporate food and nutrition in more subject areas.

3. CFNI has recently developed a Nutrition Handbook for Primary School Teachers. Assistance should be given to CFNI to field test, review and print this manual. Additional assistance will be required to develop supporting materials and train teachers in their use.
4. Recent evidence shows that the number of young people involved in agriculture is declining rapidly in the region. Efforts should be undertaken to revitalize interest in the agriculture sector. Innovative programs are needed to promote agriculture in educational institutions at all levels if goals of regional food self-sufficiency are to be realized.
5. CFNI should address the need for new approaches to agriculture in schools throughout the region. Assistance should be given to CFNI to study various approaches¹ currently undertaken in member countries to promote agriculture in schools.

¹Some countries in the region have begun agricultural training for all teachers at Teacher Training Colleges. Other countries have begun novel programs in schools which stress the economic benefits from agriculture. In some cases, students are allowed to gain money from sales of crops they grow. In other instances, schools have set up credit schemes, whereby students sell produce they grow in schools back to the institution and receive credit for supplies and other things.

6. Funding should be sought to implement appropriate agricultural teaching programs in selected member countries. These programs should also stress the nutritional aspects and consumption effects of agricultural production.
7. CFNI should consult with member countries' food and nutrition councils/nutrition units to assess specific country needs for public education materials. CFNI should seek financial assistance to produce public education materials in support of on-going or planned food and nutrition programs in member countries.
8. CFNI should develop a distribution mechanism for the dissemination of education materials to member countries to ensure that all agencies involved in food and nutrition programs have equal access to CFNI publications. While a certain bias can be expected to assist dynamic food and nutrition councils/nutrition units, efforts should be made to assist those countries where dynamism is less evident.
9. Given the fact that many member countries lack the facilities and the means to reproduce "proto-type" materials, CFNI should re-examine its policy in this regard. CFNI should consider seeking financial assistance to support training of member country personnel in the design and development of local food and nutrition educational materials.

2nd DRAFT RECOMMENDATIONS FOR DISCUSSION

CFNI/Primary Health Care

1. CFNI should be given assistance to work in member countries where primary health care systems have need to upgrade monitoring, surveillance and evaluation activities.
 - a. CFNI should be given financial support to train community health workers in growth surveillance and screening for under nutrition, anemia, diabetes and hypertension.
 - b. Support could be envisioned to provide simple weighing scales, growth charts (or health passports) based on WHO rather than GOMEX standards, and screening equipment for anemia, hypertension and diabetes.
 - c. Short term, Caribbean based consultants could be financed through CFNI to run country specific training programs.
 - d. These activities should always be linked to the establishment of information systems that will use data to be collected to monitor, program, plan, and evaluate the existing primary health care system and provide information for national food and nutritional surveillance.
2. CFNI should be given financial assistance to further field test and adapt the recent Nutrition Handbook for Community Workers prepared by CFNI/Government of Jamaica for primary health care workers. Further assistance could be considered

to use the revised manual as a basis for training workshops in member countries for primary health care workers.

CFNI/Training

1. The proposed community nutrition course to be offered by CFNI and administered by the Barbados Community College should be supported given the interest and need by member countries for trained personnel in the food and nutrition sector. Financial support should be considered for the first seven month course. This support would entail costs for:
 - one additional staff member (for seven months)
 - short term consultants
 - 14 students
2. In some LDC member countries, governments lack the financial support for trained personnel in the food and nutrition sector. In this regard financial assistance could be considered to allow:
 - a. Trained persons from other countries to serve in LDC member countries for short periods.
 - b. Lower level personnel to be given fellowships to upgrade their food and nutrition skills.

CFNI/Educational Materials

1. Short term technical assistance can be given to CFNI to assess current patterns of materials production and distribution within member countries. CFNI's production staff and member country counterparts should also be examined to design cost-effective measures for future publication and distribution of materials. Also to be examined should be CFNI's use of black and white vs. the possible effectiveness to be gained from using color in their materials.
2. CFNI should be given further financial assistance to produce public education materials to support on-going programs for breast-feeding, weaning, diabetes and under nutrition.

CFNI/Education

1. CFNI has recently developed a Nutrition Handbook for Primary School Teachers. Assistance should be given to CFNI to field test, revise and print this manual. Additional assistance will be required to develop supporting materials and train teachers in their use.

CFNI/Food and Nutrition Surveillance

1. CFNI should be assisted to promote food and nutritional surveillance within member countries and the region.
 - a. At national levels, short term consultants can be used to institute food and nutrition surveillance activities tailored for specific country needs.

b. A preferred approach could be funding a food and nutrition surveillance officer in the eastern Caribbean for CFNI. This person could work specifically within the LDC's in the region to institute food and nutrition systems designed to collect simple and practicable information to be used in program monitoring, planning and evaluation.

c. On a regional level, CFNI could be assisted to establish informational linkages with other regional organizations such as CARDI, IFAD, CAREC, PAHO and others who regularly collect food and nutrition information within the region. CFNI should be given assistance to pool this data and provide a yearly food and nutrition profile for the region.