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CARIBBEAN FOOD AND NUTRITION INSTITUTE

A Review of Its Program and Operations, 1967-1975,
and Some Suggestions as to Its Future Role

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and Some Suggestions as to Its Future RoleI. INTRODUCTION

In 1961, just before the West Indies Federation expired, its Standing Advisory Committee on Food and Nutrition met in Puerto Rico and recommended the establishment of a Caribbean nutrition institute. It believed that the countries of the English-speaking Caribbean had nutrition problems with so much in common that a regional nutrition institute serving national programs would be a more effective use of resources than the creation of two or three national institutes, which in any case was felt to be unlikely in view of the many other calls on development funds in small, newly independent countries.

This recommendation was pursued by both FAO and PAHO/WHO, who each sent consultants to the area in 1963 and 1964. These agreed that a Caribbean food and nutrition institute could play an important role in the improvement of nutritional status of the area. Negotiations finally resulted in an Agreement of five years duration between PAHO/WHO, FAO, the University of the West Indies and the Governments of Jamaica and Trinidad and Tobago, to establish the Caribbean Food and Nutrition Institute with its main office on the University campus in Jamaica, connected to the Faculty of Medicine centered at that campus, and also with an office in Trinidad connected to the Faculty of Agriculture which is centered there.

The Institute commenced operations on 1 January 1967, and about the middle of that year began to implement a program. It has thus been in existence for eight years. In the beginning it owed much, as do many other nutrition programs, to the support of the Williams Waterman Program of the Research Corporation. To this day some significant support for its training and research program is provided by that source.

When the five-year Agreement expired in 1972, it was replaced with another on similar lines between the same parties. There were, however, two significant changes. Firstly, the new Agreement is of indefinite duration, to be terminated by mutual consent. Secondly, in addition to Jamaica and Trinidad and Tobago, all the other Governments of the English-speaking Caribbean, who had hitherto received services but not been parties to the Agreement or contributors to its support, were now included.

Just as with other multinational centers of PAHO, all the Institute's staff members, whether locally or internationally recruited, are PASB staff members. The budget of the Institute, deriving from whatever source, is administered by PAHO, and the general administration of the Institute conforms to that of any other PAHO Office.

There is, however, also an Annual Policy Committee on which are represented all the signatories to the Agreement, and which meets at the end of each year. A report is made to this Committee by the Director of the Institute on the progress made in fulfilling the Institute's program for the year, and a program for the following year is submitted. The Committee also examines and gives approval to the previous year's expenditure and the next year's budget.

This Annual Policy Committee is the occasion when all the parties meet together and is thus similar to a governing body. The representatives of the University are the Deans of Agriculture and Medicine; the Government delegates include four from the Health field and four from Agriculture. Trinidad and Tobago and Jamaica are represented by both Health and Agriculture every year, Barbados and Guyana by Health and Agriculture alternating, and the remaining two seats go to eight smaller states in a four-year rotation. The Policy Committee is most useful in ensuring that the Institute's program is kept responsive to the needs of the governments. As well as the delegates from PAHO and FAO and the Caribbean Community Secretariat, observers attend from UNDP, UNICEF, Research Corporation and other foundations supporting the Institute. They also find this opportunity useful to ascertain the opinions of the governments.

Annex I I sets out the 1975 budget of CFNI by sources. It will be noted that the Regular Budget of PAHO/WHO supplies some 35.2 per cent of the cost of operation, the Governments of the Caribbean some 8.4 per cent, UNICEF 17.3 per cent, and other sources 39.1 per cent. A list of staff is given in Annex II, with some indication of their main responsibility where their title is not self-explanatory.

Before leaving this introductory section dealing with the organization of CFNI over the last eight years, attention is drawn to the fact that, whereas for the first six years FAO participated in the staffing of the Institute with three posts, those of Deputy Director, Nutrition Officer and Food Planning and Policy Expert, it has not done so since 1973. The immediate cause of this withdrawal was a reduction in UNDP intercountry funds, which had financed FAO's contribution to CFNI from 1967 to 1972.

FAO has failed to find any other funds since then with which to restore its participation. The withdrawal of UNDP funds took place in spite of the recommendation of their Resident Representative and the findings of an inter-agency mission in 1972 (UNDP/FAO/PAHO/UNICEF). Nevertheless, the food and agriculture side of the Institute's program has not suffered. The experts withdrawn have been replaced with PAHO experts in agricultural economics and in nutrition science, funded by foundations or by the PAHO Regular Budget. Since this reorganization, the Institute has been involved somewhat more effectively in food economics and in food and nutrition policy formulation.

One other feature of the staffing pattern that should be noted is that whereas at first the technical staff members were all recruited from outside the West Indies, it has been possible in the intervening years to move gradually to a pattern where six out of the eleven technical staff members are from the English-speaking Caribbean itself. Two of these six were assisted in their postgraduate training through the Institute, and are in charge of important aspects of the Institute's program.

II. OBJECTIVES OF CFNI

In the annual program of the Institute the program targets are adjusted from year to year. The overall objectives are to assist the governments in:

1. Establishment of an adequate diagnosis of the food and nutrition status of each country.
2. Formulation of food and nutrition policies in all the countries.
3. Strengthening of nutrition units in the ministries of health, and improvement of food planning capability in ministries of agriculture and national planning agencies.
4. Training of personnel at all levels for nutrition and nutrition-related services.
5. Improvement of programs for the diagnosis, prevention and treatment of nutritional diseases.
6. Improvement of institutional food services.
7. Increase of knowledge in food and nutrition through practical operational research.

III. FOOD AND NUTRITIONAL PROGRAMS IN THE CARIBBEAN, 1967-1975

In the first part of this section we will deal with achievements, and in the second part, failures or rather unresolved problems and continuing deficiencies. Because all of CFNI's work is for, through, or at the request of governments, one is to a certain extent considering both the regional (Institute) program and the national programs together, and they cannot be separated completely, particularly as there are very few national nutrition programs since 1967 in which CFNI has played no role. We will review progress, or lack of it, under the seven headings given above. However, it seems advisable to say something not only about progress in programs during the eight-year period but about progress in actual food consumption of the people and nutritional status.

(a) Infant Mortality Rates

For the five Member Countries of PAHO served by CFNI and comprising over 85 per cent of the area's population, the average infant mortality rates in 1965-1966 ranged from 37 in Jamaica to 44 in Barbados. In 1973 they ranged from 24 in Trinidad and Tobago to 33 in Guyana and Barbados. Gains over the eight-year period range from 23 to 40 per cent.

(b) 1-4 Year Mortality Rates

These are a fairly specific indicator of the magnitude of the problem of the combination of malnutrition and infectious diseases, but are unfortunately not yet universally reported regularly. However, bearing in mind the small numbers now considered to give rise to fluctuations not statistically significant, the rates for Barbados, Jamaica and Trinidad and Tobago ranged from 2.2 to 4.5 in 1965-1966 and in 1973 from 1.2 to 1.5, reductions ranging from 25 to 65 per cent.

(c) Food Availability

Continuous series of food balance sheets are not yet available for every year throughout the period for any country other than Jamaica (almost none were available until CFNI commenced operations), but in Jamaica, average caloric availability rose from 2,420 calories per person per day in 1966 to 2,950 in 1972, a gain of 22 per cent; and average daily protein availability per person rose from 57 grams to 74 grams over the same period, a gain of 30 per cent. Likewise, in Barbados average caloric availability rose from 2,476 per person per day in 1966 to 2,926 in 1971, a gain of 18 per cent, and protein availability from 65 grams to 74 grams over the same period, a gain of 14 per cent.

To turn to the objectives of the Institute's program, taking each objective as set out, let us examine achievements and continuing problems or deficiencies under each heading. We will not attempt to give full details of eight years' work but rather to mention enough to convey a fairly thorough appreciation of the nature of the Institute's work.

1. ESTABLISHMENT OF AN ADEQUATE DIAGNOSIS OF THE FOOD AND NUTRITIONAL STATUS OF EACH COUNTRY

A. Achievements

Prior to 1967, national surveys of nutritional status and food consumption had been conducted in Trinidad and Tobago, St. Lucia and St. Kitts-Nevis-Anguilla in 1961, and among children under six years in Jamaica in 1964. Since that time, national surveys of the nutritional status of young children were carried out in Jamaica in 1970 and in St. Vincent in 1967; a National Food Consumption Survey was

carried out in Trinidad and Tobago in 1970; and full-scale national surveys involving nutritional status of all age groups, social and economic factors and food consumption levels were carried out in Barbados in 1969, Guyana in 1971 and St. Lucia in 1974. All these surveys were carried out by the governments with the assistance of the Institute.

Prior to 1967, the only food balance sheets available in the area were those of Jamaica for 1958 and 1962, apart from a few early efforts in the colonial era. Since that time, food balance sheets have been produced for Guyana in 1967 and 1970; for Trinidad and Tobago in 1968; for Barbados in 1966, 1969, 1970 and 1971; for St. Lucia in 1970; and for Jamaica in 1960 through 1973. Estimates of future food demand were made for Jamaica to 1977 and 1980.

Nutrient cost tables, a concept developed by the Institute, have been produced on several occasions for different countries for specific purposes. From January 1975, however, they are being produced on a regular quarterly basis for all countries, and 328 complete sets are distributed to government officials, mainly in response to specific requests.

Data on food expenditure within the family budget was prepared for Guyana, Barbados and St. Lucia as part of the survey, and extensively for Jamaica during preparations for formulation of that country's national food and nutrition policy.

B. Continuing Problems

National surveys are an expensive way of obtaining the data necessary for the planning of policies and programs. Moreover, they quickly become out of date. The countries really need to monitor the food and nutritional status on a continuous basis by:

- (a) regular production of annual food balance sheets;
- (b) exploitation of the data in national household budget surveys, and in subsample surveys perhaps conducted at annual intervals. These can give not merely food budget data, but as we have shown in Jamaica, enough information about food consumption patterns in the various income groups to suffice for policy formulation; and
- (c) if child health clinics had a sufficient coverage to be a reasonable approximation of the population at risk, and if the children's weights were charted, much of the nutritional status data we most need could be regularly obtained from these.

Under all three headings, we have quite a long way to go before we attain this. Yet in our opinion, we cannot rest content with the diagnosis until it is established for each country on a continuous basis. Until then, surveys will always be needed from time to time.

2. ESTABLISHMENT OF NATIONAL FOOD AND NUTRITION POLICIES IN ALL THE COUNTRIES

A. Achievements

We are using the term "national food and nutrition policy" as has been defined by PAHO/WHO and FAO in numerous papers and publications, and in several meetings over the last eight years. Jamaica and St. Lucia, with the assistance of CFNI, last year formulated national food and nutrition policies in this sense which are now in the process of implementation.

B. Continuing Problems

(a) There is a gap between having strong general interest within government in this type of policy, and the point where it is crystallized by the Cabinet of Ministers requiring an appropriate group to carry out all the data collection and interministerial consultations and to formulate a policy and programs for submission to the Cabinet by a certain date. Many countries in the Hemisphere are in precisely that position. Recurring food shortages will shorten that gap and, conversely, recovery from the present economic crisis will probably lengthen it. As nutrition continues as a problem, and more particularly as food is a basic human necessity which on the average accounts for over 60 per cent of family expenditure in our countries, development will never progress as well as it should, if it is the improvement of the quality of life which is aimed at, until the countries tackle this problem directly with such policies. Without a political mandate from the highest level of government, there will be no will to implement a policy and programs, and they will not be worth the paper they are written on. Therefore, in those countries where the specific political mandate has not yet been given, CFNI must continue to promote such policies with all the means at its command.

(b) A national food and nutrition policy is not a once and for all effort. It is a continuing process. The cycle runs diagnosis-formulation-implementation-evaluation-reformulation, and so on. We have reached the implementation stage in two countries. It is very important that in the horizon years 1977-1978, evaluation and reformulation take place. Only by pursuit of this cycle will the countries reach the mid-1980's with their food system in good shape and the nutritional state of their population much improved.

3. STRENGTHENING OF NUTRITION UNITS IN THE MINISTRIES OF HEALTH, AND IMPROVEMENT OF FOOD PLANNING CAPABILITIES IN THE MINISTRIES OF AGRICULTURE AND NATIONAL PLANNING AGENCIES

A. Achievements

In respect of nutrition units in the ministries of health, headed by trained nutritionists, whereas there was in 1967 such a nutrition unit only in Trinidad and Tobago, there are now units also in Guyana, Barbados and Jamaica. The development in Jamaica has been particularly rapid in the last few years and there are now ten nutritionists, all trained at the Masters' level, attached to that unit and stationed throughout the country.

To improve food planning capabilities, CFNI and governments have organized seminars on food and nutrition with agricultural and planning staff involved, and in 1972 conducted a training workshop for 23 people in the compilation of food balance sheets. The best training, however, has been for nationals to work with CFNI staff on the actual production of data used in formulation of policy. The existence of the balance sheets, other data on food economics and policies, is evidence that the training to that extent was effective.

A series of annual four-week workshops on food economics and food and nutrition planning for senior personnel begins this month. Negotiations are also in the preliminary stages with a foundation to support the commencement of postgraduate training in these subjects.

B. Continuing Problems

Much progress has been made with nutrition units in the ministries of health in the larger countries, and the governments have done as much as, or more than, could be expected over the last eight years. One of the main constraining factors is lack of qualified public health nutritionists, which will be referred to in the next section.

With regard to food planning capabilities, we must admit that we are only beginning to tackle this problem effectively. It will not be solved until:

- (a) the senior officers have undergone inservice training which orients their existing skills and experience towards solving food supply and demand problems; and

- (b) there is a small but steady production of postgraduates in economics and agricultural economics, with additional training in food and nutrition planning, who are taken into the governments' agricultural marketing corporations and Caribbean development agencies.

4. TRAINING OF PERSONNEL AT ALL LEVELS FOR NUTRITION AND NUTRITION-RELATED SERVICES

A. Achievements

In 1969, the Institute commenced a bi-annual course for a Diploma in Community Nutrition. Over 70 persons have graduated from the course, which is mainly for personnel already working in government service, who are either graduates or, more usually, have the appropriate qualification of their profession and at least five years' experience. The principal cadres contributing students have been public health nurses, home economics teachers, as well as a number of public health inspectors, agricultural extension workers, and community development workers.

CFNI has also contributed considerably to the introduction of nutrition teaching to medical and agricultural students, as well as being responsible for the nutrition sections of the Diploma in Public Health and the Diploma in Community Health and the applied nutrition section of the M.Sc. in Nutrition.

Mention should also be made of innumerable seminars, lasting from half a day to five days, on nutrition, particularly on the feeding of young children, which have been held in every country of the area, even the smallest islands. It is noteworthy that this year the Institute was selected by UNICEF to receive the Maurice Pate Award, which will be expended on intensification of this teaching.

B. Continuing Problems

The area will never have an adequate supply of public health nutritionists, dietitians and home economists with adequate and locally relevant training until the University establishes such a course at the Bachelor's level. Even though there seems to be some financing available for such a degree program, the University will not institute it without a firm directive from the governments.

Secondly, systematic courses of inservice training for public health nurses and other health staff and home economics teachers are needed. Occasional seminars no doubt help, as does the large-scale circulation of CFNI's newsletter, Cajanus. However, there are no substitutes for systematic inservice training, which would not only bring up to date knowledge of the practical aspects of nutrition but also rekindle enthusiasm.

5. IMPROVEMENT OF PROGRAMS FOR DIAGNOSIS, PREVENTION AND TREATMENT OF NUTRITION DISEASES

A. Achievements

One of the means adopted to carry out this objective is the Technical Group Meeting, where the national personnel in a particular field meet together with University and PASB staff to reach a consensus on a controversial question or to prepare a regional strategy for tackling a major problem. CFNI has held eight such meetings, some of which have had good results, some not, and with some it is too early to judge. The subjects are listed in Annex III, with some appraisal of results. The most successful was that in 1970 which produced PAHO Scientific Publication No. 217, Guidelines to Young Child Feeding in the Contemporary Caribbean, now in its fifth printing. It deals with a subject on which there was previously much disagreement and many variations in the material taught to the public and professionals, and represents a consensus of national pediatric, obstetric, nutrition and public health authorities. Over 7,000 copies have been distributed. It has done a great deal to unify teaching on these matters, and has promoted breastfeeding and a rational transition to a mixed diet. Several countries have adopted all or part of these guidelines into the material they use for training personnel or for public education.

Another such meeting, which has at least good promise of success, was a meeting in St. Vincent in 1974 which produced a "Strategy and Plan of Action to Combat Malnutrition and Gastroenteritis in Children Under Two Years of Age." This strategy was produced at the request of the Caribbean Health Ministers, and met with approval and even enthusiasm on the part of some.

Breastfeeding is particularly important in the Caribbean area. The same high prevalence of bottle-feeding obtains as in low-income areas in developed countries. Poverty leads to overdilution, and lack of hygiene to contamination. The result is apparent in the fact that gastroenteritis is by far the commonest infectious disease, synergistic with energy-protein malnutrition in the infant, and in the changing pattern of malnutrition from second year kwashiorkor, now uncommon, to marasmus in the first six months. In promotion of breastfeeding, CFNI has made much propaganda in the medical and nursing professions. We have reached the stage now when the professions agree that breastfeeding is best.

Lastly, CFNI has tried to improve programs by means of the provision of information. Ever since the first year of the Institute's operation, the newsletter, Cajanus, has been published. Something between a newsletter and a journal, it has contained numerous articles on health and agricultural aspects of nutrition aiming at the level of the intelligent layman. We have always tried to make our health articles comprehensible

to a teacher or agriculturalist, for example, and vice versa. Cajanus is in its eighth year of publication. Its fortieth issue has just been published, and its total circulation varies between 1,400 and 2,200, according to how recently the mailing list has been revised. Some 70 per cent of copies go to the countries the Institute serves, the rest having a worldwide distribution. It is published in CFNI with its own machinery and the cost is relatively small.

Other publications, in addition to those on young child feeding and to Cajanus, include proceedings of conferences such as the 1968 "Protein Foods for the Caribbean," "Strategy and Plan of Action to Combat Malnutrition and Gastroenteritis in Children Under Two Years of Age," the results of the national surveys in Barbados, Trinidad and Tobago and Guyana mentioned earlier, and "Food Composition Tables for the English-speaking Caribbean." There are about eight others in preparation, including two on hospital dietary services, a collection of food balance sheets, a review of the food and nutrition situation of Jamaica, the national survey of St. Lucia, and the policies of Jamaica and St. Lucia.

The Institute this year, with the support of UNICEF and the Research Corporation, has greatly extended its facilities in the area of dissemination of information, with the formation of its Information Services Section, including its own printing unit, a library, which is widely used by university students and staff, and a visual aids center, all of which are supervised by a professional media officer with a staff of six. It can fairly be said that the Institute has contributed significantly to a considerable increase of knowledge of food and nutrition among Member Governments and university staff in the area it serves, and we intend to continue and strengthen this program to the best of our ability, and to at least add to it the material for more direct approach to the public.

B. Failures and Continuing Problems

This section is really about applied nutrition at the service point, the local level. We acknowledge that our impact has been less than could be desired and our approach (necessarily indirect in a UN project, that is, through national programs) has been too much at the central level and too much at the informative and promotional level.

In the areas of MCH, usually considered to belong to the nutritionists, some progress has been made in the introduction of individual weight charts in clinics, but by no means are they in universal use, and one has doubts as to the usefulness with which they are interpreted and to whether significant action follows interpretation. Indeed, of the two actions, one, nutrition education, is not very successful in a crowded clinic with very little teaching material. The other important action which can be taken to help the malnourished weanling child is by the

provision of supplementary food, particularly so where poverty is a main cause of the child's condition. However, these programs are of very low effectiveness. They are mainly the remnants of UNICEF, US/AID, CRS and ICWS dried skim milk or corn-soy-milk free distribution programs. Their coverage is low, the wastage is high, the cost to governments in distribution is considerable, the donors are cutting down drastically in quantities, and delivery is irregular. In any case the dry skim milk is far from an ideal supplementary food for the young child, is easily directed to the whole family, and corn-soybean mixture (CSM) is very prone to infestation. Taking the Caribbean as a whole, very little progress has been made in this particular area of applied nutrition, and the supplementary feeding programs are less effective today than they were 10 years ago.

Lastly, in schools and teacher training colleges, education in nutrition and health, and consumer education and sex education, need much improvement.

6. IMPROVEMENT OF INSTITUTIONAL FOOD SERVICES

A. Achievements

In this area, CFNI has maintained for over six years a successful program of assistance providing training and advisory services. Courses have been introduced and conducted which have trained over 60 food service supervisors, mainly for employment in hospitals, but also for other institutions. The course is now to be carried on as a normal routine activity of the Barbados Community College, and will continue to be available to all the other countries through PAHO fellowships. In respect of the professional dietitian, in very short or nil supply in all but two of the countries of the area, a professional association has been formed, annual conferences held, and an inservice education seminar conducted.

The syllabus has been drawn up for the dietary assistant level, intermediate between dietitian and food service supervisor, to consist of two years training, and also to be held in Barbados.

Finally, many short courses have been held for food service staff in the countries, and many visits made rendering advisory services. These have sometimes been extensive, involving short-term consultant assistance, as in the reorganization of the hospital food service in the Bahamas.

B. Continuing Deficiencies

We believe that PAHO and CFNI have done all that can be done at this stage, and the main obstacle now is the shortage of professional dietitians. This in turn depends upon (a) willingness of governments to employ them, and (b) willingness of the University to start a B.Sc. level course. The latter seems to be by far the most important step to be taken at this time, and without it we cannot go much further forward in this area.

7. INCREASE OF KNOWLEDGE IN FOOD AND NUTRITION THROUGH PRACTICAL OPERATIONAL RESEARCH

The research carried out has been largely in the form of surveys and in gathering data, such as nutrition-cost tables, food balance sheets, and food expenditure, necessary for the formulation of policies and programs.

Last year, a food economics research program was begun, one of the objectives of which is to study the components of the retail price of basic foods. We believe that this will reveal many preventable inefficiencies in the marketing system. However, a marketing expert to assist in follow-up will then be badly needed.

There remains one field, operational research, which we have not covered. In this area, CFNI has carried out a number of investigations. However, of those which are complete, only two were formal research projects in the sense of the whole operation being set up for the purpose, with controls, and carried out over a suitable length of time. One was a study of the effects of nutrition education in a rural area, and the other a study of the effects of supplementing the diet on the working efficiency of sugarcane cutters.

More useful and influential perhaps have been the evaluatory-type studies we have conducted. For example, before the "Guidelines to Young Child Feeding" could be agreed on, many studies were carried out in almost all the islands concerning present-day practices and beliefs in infant feeding. Other examples are evaluations of a mass media campaign in Trinidad to promote breastfeeding, an evaluation of the effectiveness of community health aides in Jamaica, a review of the state of the supplementary feeding program and of food legislation and control in six countries, and a review of the situation in regard to commercial promotion of breast milk substitutes in Jamaica.

But at this point, and even in the two more formally defined areas of operational research, we are in an area between research and normal programs of assistance. In fact, any nutrition program, if carefully and normally evaluated, using some independent criteria

such as nutritional status or change of practice, can be operational research. That should be our aim. To not do so, is our greatest continuing problem in this field.

Finally, a review of the Institute's program would not be complete without a brief mention of services to governments other than those of the English-speaking Caribbean who are parties to the Agreement governing CFNI. PAHO's other multinational nutrition institute, INCAP, over the last 26 years has a very considerable list of achievements in service to governments outside Central America and Panama. Naturally our much younger and much smaller program is not comparable. We can merely point to four graduates of the Diploma in Community Nutrition course who came from the Philippines and Malaysia, the circulation of our newsletter Cajanus to several hundred persons outside our area who apparently find it useful, and consultant missions to Cuba to advise on the improvement of nutrition programs and national food and nutrition diagnosis and to Costa Rica to advise on steps towards formulating a national food and nutrition policy.

IV. THE FUTURE PROGRAM OF CFNI AND THE COUNTRIES, 1976-1985

In this review we have tried not merely to present work already done, but also to consider at each turn the continuing problems and deficiencies. From a consideration of these, on the part of PAHO programs and the countries own programs, and in the CFNI program which is a part of PAHO and the countries' programs, we can come to some provisional conclusions as to where our future duty lies. The list that follows is by no means exhaustive, but represents some suggestions derived from a consideration of the position at this time.

1. In respect of a national food and nutrition diagnosis, it is important that certain basic data on the weights of children and food availability and economics be routinely and continuously produced, and not to rely on national surveys. Longitudinal surveillance should be our aim rather than cross-sectional surveys. Nevertheless, for the next ten years there will be need, in addition, for more intensive and extensive enquiries for special programs, such as formulating and evaluating policies and programs. Throughout that time, we must refine and develop techniques of surveillance so as to have some hope at the end of replacing most of these special studies.

2. In respect of national food and nutrition policies, two things are necessary to further progress:

- (a) that the general interest in such policies in the countries other than Jamaica and St. Lucia should crystallize into the political will;

- (b) that CFNI and the Governments of Jamaica and St. Lucia not merely begin to implement the policies which are already in progress, but are persistent in implementation and in evaluation and reformulation of policy at the appropriate horizon year. We believe that this process of learning from one's mistakes and then applying that learning to do better would, within two or three such cycles, i.e., by the mid-1980's, prove to have contributed greatly to a fundamental improvement in food availability and nutritional status in the countries. Moreover, if we are indeed entering upon a quarter-century of worsening world food shortages, then the process is not merely desirable but a vital necessity.

The desire for a regional CARICOM food policy has been expressed in speeches, but the details have hardly begun to be discussed. Self-reliance and import substitution must not be made to take precedence over the food and nutritional needs of the people--there could be danger of that--and it is important that CARICOM's food policy, when it comes about, should be a food and nutrition policy, aiming at self-sufficiency with emphasis on availability for all people, as well as on self-reliance. The discussions which CFNI helped to open on this point at its last Technical Group Meeting must continue and become more detailed, although indeed it will not be easy to construct a CARICOM food and nutrition policy until most of the countries have national policies.

3. The objective of strengthening nutrition units in the ministries of health should be pursued by both governments and CFNI by means of strengthening their links within the general maternal and child health services, and not only by multiplying the numbers of nutrition workers and increasing their budgets.

The food planning capabilities of governments do depend upon training and upon the supply of consultant help to work with government personnel on problems on the spot.

4. In training, there are four major improvements to be brought about:
- (a) the training at the university level of nutritionists, dietitians and home economists, with emphasis on the Caribbean conditions in which they will work;
 - (b) continuing improvement of the basic training of health (and education) professionals in nutrition and the creation of systematic inservice training or retraining in which nutrition would be one of several components;
 - (c) if the use of community health aides, or other basic level health workers, spreads in the area, CFNI and the governments must pay close attention to making the little nutrition training they can receive to the point and effective; and

- (d) orientation of existing agricultural economists and development planners towards food economics and food and nutrition planning. This is already in hand and should be pursued, as should also postgraduate training in food economics and food and nutrition planning, so that the government services are infiltrated by this new orientation. CFNI has an opportunity to become a major center of such training, which many countries, not only in the Caribbean area, could use. The Caribbean provides many national examples of a manageable size to be studied; food and nutrition diagnosis is now relatively complete, and it is the Caribbean which alone has food and nutrition policies in course of implementation.

5. In the area of applied nutrition and of nutrition activities in the local health services, a better coordination of nutrition and maternal and child health programs would increase the effectiveness of health programs.

If we look at the area of program activities:

- (a) CFNI's information service has probably been a fruitful investment at relatively little cost, although it is hard to prove other than by pointing to the general increase in quality and quantity of nutrition services and understanding over the past eight years, and to the fact that in the area some governments do have national food and nutrition policies. This information service, so far exemplified by Cajanus and other publications, should now address itself not only to the professionals and students in the government and the university, but to the public at large, including the barely literate and the schoolchild, by more actively assisting government programs.
- (b) Another most important area is supplementary feeding. A whole new approach, with different food, is required, linked to an improved system of supervision of the nutritional health of the individual child in the clinics. Only governments can provide the money for this, for reliance on foreign aid has proved self-defeating in the last decade.

6. In respect of institutional food services--and when we talk of vulnerable groups we sometimes forget that the sick person in hospital is also nutritionally vulnerable--it is felt that apart from continuation of the intermediate and food service supervisor training, the lack of a well-trained, locally trained and well-motivated cadre of professional dietitians is now becoming the chief obstacle. Again, the necessity to start a course to train them is emphasized.

7. In research, the Institute should continue to assist the countries to compile, analyze and interpret the basic data essential to formulation of sound policy and programs, and moreover assist them to do this for themselves. We must refine our concepts of what is essential, for example by discarding some methods such as the mass taking of biochemical samples, and adding other simpler but more pertinent matter about family food expenditure and nutrient-cost data. Ambitious an aim as it may sound, we should try by critical and objective evaluation to make all our work "operational research," and not just special pilot projects.

8. Finally, if we are looking to the next ten years, mention should be made of CFNI's geographical coverage. Several representatives of other agencies and foundations have privately raised the question as to whether CFNI could not cover the whole Caribbean and not only the English-speaking Caribbean. This is a matter for the governments and other parties concerned to decide. The following are points for and against:

Against

- (1) There is an obvious language problem, although of course this is not an insuperable barrier.
- (2) Resources would need to be added to the Institute to service this extension of its program.

For

- (1) The agencies and foundations would find it easier to increase their support if the Institute served countries with a population of 24 million instead of five million.
- (2) There are common problems, in the Caribbean as a whole, in varying stages of solution. It would seem that countries could benefit greatly from the experiences of each other.

Annexes

1975 BUDGET IN US DOLLARS

Type of Expenditure \ Source of Funds	PAHO/WHO Regular Budgets	Governments of the Caribbean	Research Corporation	UNICEF	Ford Foundation	TOTAL
Personnel Services Including Duty Travel	188,670	50,000	157,300	18,000	30,570	444,540
Short-Term Consultants	2,200			10,000	4,400	16,600
Common Services, Equipment, Teaching Material, etc., Contractual Services	32,290		36,000	4,000		72,290
Fellowships, Courses Seminars, Meetings		3,000	15,000	78,000*		96,000
Miscellaneous Travel			5,000			5,000
TOTAL	223,160	53,000	213,300	110,000	34,970	634,430
Percentages	35.2	8.4	33.6	17.3	5.5	100.00

*including Maurice Pate Award

CARIBBEAN FOOD AND NUTRITION INSTITUTE

List of Staff

(Jamaica and Trinidad Offices combined)

Director	
Food and nutrition scientist	(until 31 August 1975)
Medical nutritionist	Training programs
Medical nutritionist	Research, and editor of <u>Cajanus</u>
Medical nutritionist	Evaluation of nutrition intervention programs
Food economist	Food and nutrition policy
Food economist	Food economics research program
Public health nutrition/dietitian	Institutional food services, dietitics
Nurse	Training of community health aides and midwives
Computer analyst	
Nutrition education specialist (under recruitment)	Improvement of nutrition education in schools
Media officer	Information Services Unit
Administrator	
Administrative assistants (2)	
Secretaries, clerks, receptionist, key punchers (10)	
Librarian	
Printer and printer's assistant	
Drivers (2)	
Office attendant	

CARIBBEAN FOOD AND NUTRITION INSTITUTE

Technical Group Meetings

Year	Place	Subject	Follow-up, Results
1968	Guyana	Protein Foods for the Caribbean	Very little. FAO/US-AID Mission, but this had little result.
1968, 1970	Jamaica	Young Child Feeding	Guidelines, 7,000 copies. Local manuals. Many small national seminars. Probably instrumental in considerable improvement of teaching on subject at all levels.
1970	Barbados	Food and Dietary Services	Initiated substantial program of teaching and advisory services. Guidelines. Manuals.
1972	St. Lucia	Nutrition Education in Schools	No real progress yet, but has led to new project to commence soon for production of educational materials.
1973	Jamaica	Nutrition in Day Care	Informational for participants; otherwise no visible result.
1974	St. Vincent	Gastroenteritis and Malnutrition	Produced a regional strategy. To soon to say how well it will be implemented, but already some follow-up national committees formed.
1975	Guyana	Maximizing Self-sufficiency in Food in CARICOM	At least began important dialogue on the practical aspects of a Caribbean Community Food and Nutrition Policy.