THEORETICAL BASES FOR THE DEVELOPMENT OF FOOD AND NUTRITION EDUCATION PROGRAMS

Division of Food and Nutrition Planning
INCAP

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I. BACKGROUND

Since its beginning, INCAP has been interested in developing nutrition education activities.

During the period 1955-66, the Institute produced a considerable amount of informative and teaching material; it also participated in the training of approximately 10,000 exchange agents. Aware of the lack of personnel specialized in nutrition, INCAP developed courses in academic training. From 1961 to 1967, through CENADAL (Specialized Course in Applied Nutrition for Latin American Dietasts), it trained 70 dietists in Nutrition and Public Health, and in 1965 it organized the pre-graduate and graduate courses through which 132 Control American nutritionists have been trained up to the present dates. Most of these nutritionists work in the health sector and dedicate part of their time to nutrition education activities.

Although INCAP, as well as the Covernments of Central America and Panama, have placed much effort in developing nutrition education actions, these have not had the expected impact in the area.

It is evident that the following retions are necessary: a) to investigate the nutrition education situation in Central America, as well as the most effective methods to convey adequate messages that will influence the dietary behavior of the individual and his family in a favorable manner; b) to prepare and train field personnel in nutrition education activities, not only in the health sector, but also in the fields of education, agriculture and other related areas; c) to identify systems of non-formal education as well as of mass communication that may be utilized in nutrition education, according to each country's

characteristics; d) to design and evaluate teaching material in accordance with local conditions.

Based on these necessities, the Member Countries included within INCAP's Work Plan for 1982-83 the subprogram Food and Nutrition Education. To comply with this petition, the Food and Nutrition Education Unit was created in October, 1981.

The objectives of this Unit are the following:

- a) To cooperate with the Governments of the Member Countries in the development of programs in Food and Nutrition Education (FNE).
- b) To cooperate in the preparation of human resources and in the training of in-service personnel who have educational responsabilities in the food and nutrition programs.
- c) To carry out and promote research on dietary behavior and on education planning and teaching methodologies.

II. PHILOSOPHICAL BASES ON FOOD AND NUTRITION EDUCATION

INCAP's Food and Nutrition Education Unit laid down the following principles as the basis for their actions oriented towards the attainment of their goals:

- 1) TO ACKNOWLEDGE that every human being has a righ to an adequate diet.
- 2) TO ACKNOWLEDGE that in order to exert their right to an adequate diet, individuals must be able to produce the nutritional goods and use services that the community needs.
- 3) TO ACCEPT that the nutrition problem is the result of a multicausal action determined by political, structural, social and cultural factors.

- 4) TO CONFIRM that education, both formal and non-formal, is a component of the overall development of the countries.
- 5) TO CONSIDER education as an active and reflective process of learning-teaching.
- 6) TO ACKNOWLEDGE that all individuals can learn and modify their behavior notwithstanding their socioeconomic condition, race, age or sex.
- 7) TO ACCEPT that food and nutrition education is a process of reflection and confrontation between the actual nutritional needs of the individuals and their felt needs as conditioned by cultural, social and economic factors.
- 8) TO CONSIDER that food and nutrition education must project itself towards all individuals, whatever their position or role in society.
- 9) TO ACKNOWLEDGE that food and nutrition education must promote the conscious, active and organized participation of the individuals in their search for solutions to the nutrition problems and in the attainment of an optimum dietary behavior.
- 10) TO ASSERT that food and nutrition education must be a component of the national food and nutrition plans and policies.
- 11) TO ACKNOWLEDGE that food and nutrition education must be developed through the use of all channels and media available for communicating with the community.
- 12) TO CONSIDER that food and nutrition education is a permanent process based on the application of recommendations that stem from continuous research and evaluations of programs and activities.

III. DEFINITION AND OBJECTIVES OF FOOD AND NUTRITION EDUCATION

A. Definition

INCAP's Food and Nutrition Education Unit defines Food and Nutrition Education as a group of educational activities aimed to develop -at the individual, family and community levels- the capacity to identify food and nutrition problems and their possible causes and solutions, and to rationally act in the process of food production, selection, acquisition, conservation, preparation, distribution and consumption.

According to this definition, when we speak of <u>community</u> we refer to local, regional or national groups. By <u>capacity</u> we mean the ability to do something, to have the necessary knowledge to enable the individual to make a decision and carry it out. By <u>acting rationally</u> we understand the capacity of the individual to select the most convenient option in the solution of a problem at any level.

It is true that the principal subject of the nutrition education activities is the community; however, it is the institutional personnel who have the responsibility to develop these activities, and that is the reason why these actions must be oriented towards both the institutional and the community levels.

- B. Objectives of Food and Nutrition Education at the Institutional Level, as Regards Institutional Personnel
- 1) To become aware of the nutrition problem in the country and the factors that condition this problem.
- 2) To identify the multisectoral components of a food and nutrition plan.
 - 3) To recognize the importance of food and nutrition education

as a component of a food and nutrition plan.

- 4) To identify the functions of each institutional level in connection with the development of food and nutrition plans.
 - C. <u>Objectives of Food and Nutrition Education at the Community</u>
 Level
- 1) Develop within the population knowledge related to the nutritional needs of the human being, in accordance with age, work and physiological status.
- 2) Prepare citizens that will act in a rational manner in the process of food production, selection, acquisition, conservation, preparation, distribution and consumption.
- IV. FOOD AND NUTRITION EDUCATION AS A COMPONENT OF A FOOD AND NUTRITION PLAN

In the theory of food and nutrition planning, it has been established that since the nature of the nutrition problem is multicausal, the solution to this problem is a multisectoral responsibility. The actions to take, arranged according to their characteristics, constitute the components of a Food and Nutrition Plan. Figure 1 outlines these concepts and gives examples of programs or activities for each component as well as the purpose of each one, all of which contribute to the attainment of one goal: to raise the nutritional status of the population.

FIGURE 1

COMPONENTS OF A FOOD AND NUTRITION PLAN

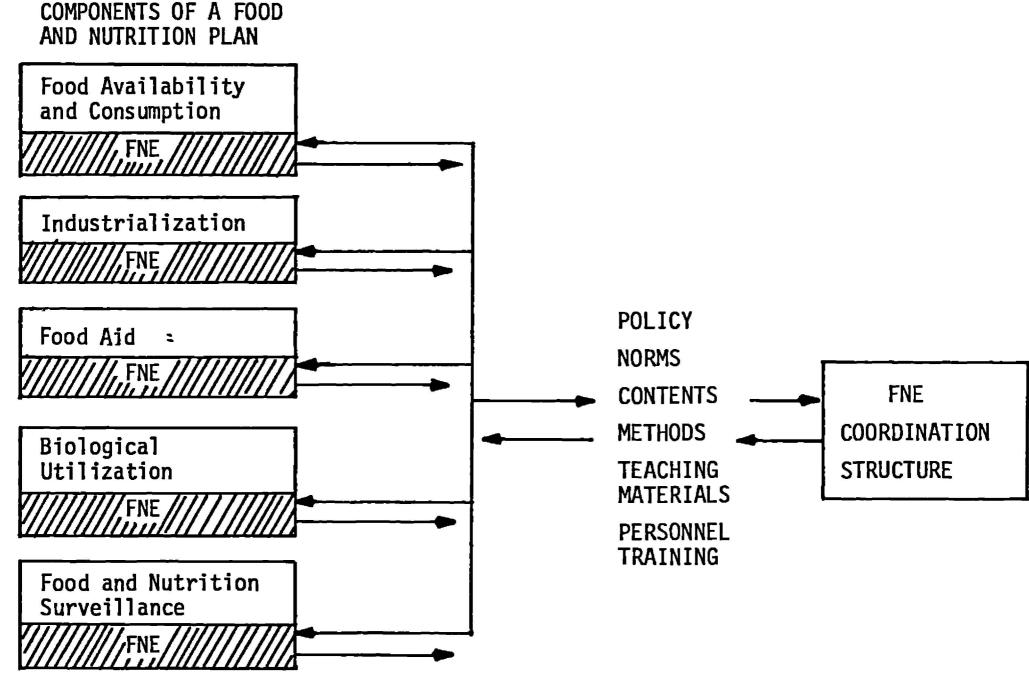
COM	PONENTS	TYPES OF PROGRAMS AND/OR ACTIVITIES	PURPOSES	GOAL
	d availabil- and consum <u>p</u> n	-Basic foods pro- duction -Basic foods com- mercialization	To have an adequate diet, accesible to all the population	
Ind tio	ustrializa- n	-Nixtamal -Agroindustries	To increment and improve availabil- ity of industrial- ized foods	
Food Aid	d	-Nutritional recovery -Overall rural development	To aim at the re- covery of the population affected by malnutrition	
	logical lization	-Medical programs -Environmental sanitation -Parasitism reduction	To promote, through health interven-tions, the optimum biological utilization of ingested foods	To raise the nutritional status of the population
nut	d and rition veillance	-Basal diagnosis -Nutrition inform- ation system	To establish a food and nutrition sur-veillance system	
nut	d and rition cation	-Formal education -Non-formal educa- tion -Communication media	To improve the dietary behavior of the population	

As can be observed in this figure, one of the community components is Food and Nutrition Education, which does not necessarily have to be organized and developed separately; it is more functional if one considers that each of the plan's components has its own educational area, as can be seen in Figure 2. In this case, a structure will be required that

will coordinate FNE in such a manner as to standardize the education methodologies that stem from the various sectors.

FIGURE 2

THE FOOD AND NUTRITION EDUCATION COMPONENT IN A FOOD AND NUTRITION PLAN



All those responsible of food and nutrition education in each one of the components should participate in this coordination. Their aim shall be to unify criteria at national level on policies, norms, contents, methods, teaching materials and personnel training. Based on these criteria, each institution will rationally plan their food and nutrition education activities.

V. FOOD AND NUTRITION EDUCATION PLANNING

Food and nutrition education programs to be implemented at local, regional or national level must be based on an overall planning. In this planning, which is an institutional responsibility, the following elements should be taken into account: national policies as well as those established within the sector; priority needs of the population as far as health and nutrition are concerned; available institutional resources and their interrelation with programs with incidence on the health and nutrition of the population.

We have identified four stages in the process of food and nutrition education planning: diagnosis, program formulation, program development, and evaluation.

A. Diagnosis of Food and Nutrition Education

The main objectives of an FNE diagnosis are:

- 1. To determine in what measure and form is the dietary behavior of the population conditioning its nutritional situation. To compare its behavior (preferences) with the availability of, or access to, foods.
- 2. To know the dietary behavior of the population, by ethnic, geographical, sociocultural and economic groups, and according to their physiological characteristics.
- 3. To identify the factors, of any nature, that influence the know-ledge, attitudes, habits and dietary/nutritional practices of the different groups of population.
- 4. To identify those behaviors that mostly affect the nutritional problem, for the purpose of determining education priorities.

- 5. Identify policies, strategies and resources existing in institutions, concerning food and nutrition education.
- 6. Identify, at institutional level, the food and nutrition programs developed and the type, magnitude and quality of these educational activities.
- 7. To know the degree of use made of existing resources for food and nutrition education, and to determine the need of these resources.
 - 8. To furnish information for the establishment of FNE indicators.

This diagnosis must be carried out at two levels: a) at institutional -or program-level, in order to know the type of coverage and quality of FNE as it is being carried out; and b) at population level, to ascertain the dietary behavior and the causes that influence it. This will determine the base line necessary to evaluate the change.

For the accomplishment of this diagnosis, the following stages are recommended:

- 1. To determine in detail the areas on which it is necessary to gather information.
- 2. On the basis of these areas, to select the indicators to be used for studying the situation.
 - 3. To determine the sources for obtaining the required information.
- 4. To collect, process, analyze and interpret the information, and to elaborate a document describing the situation as it stands.

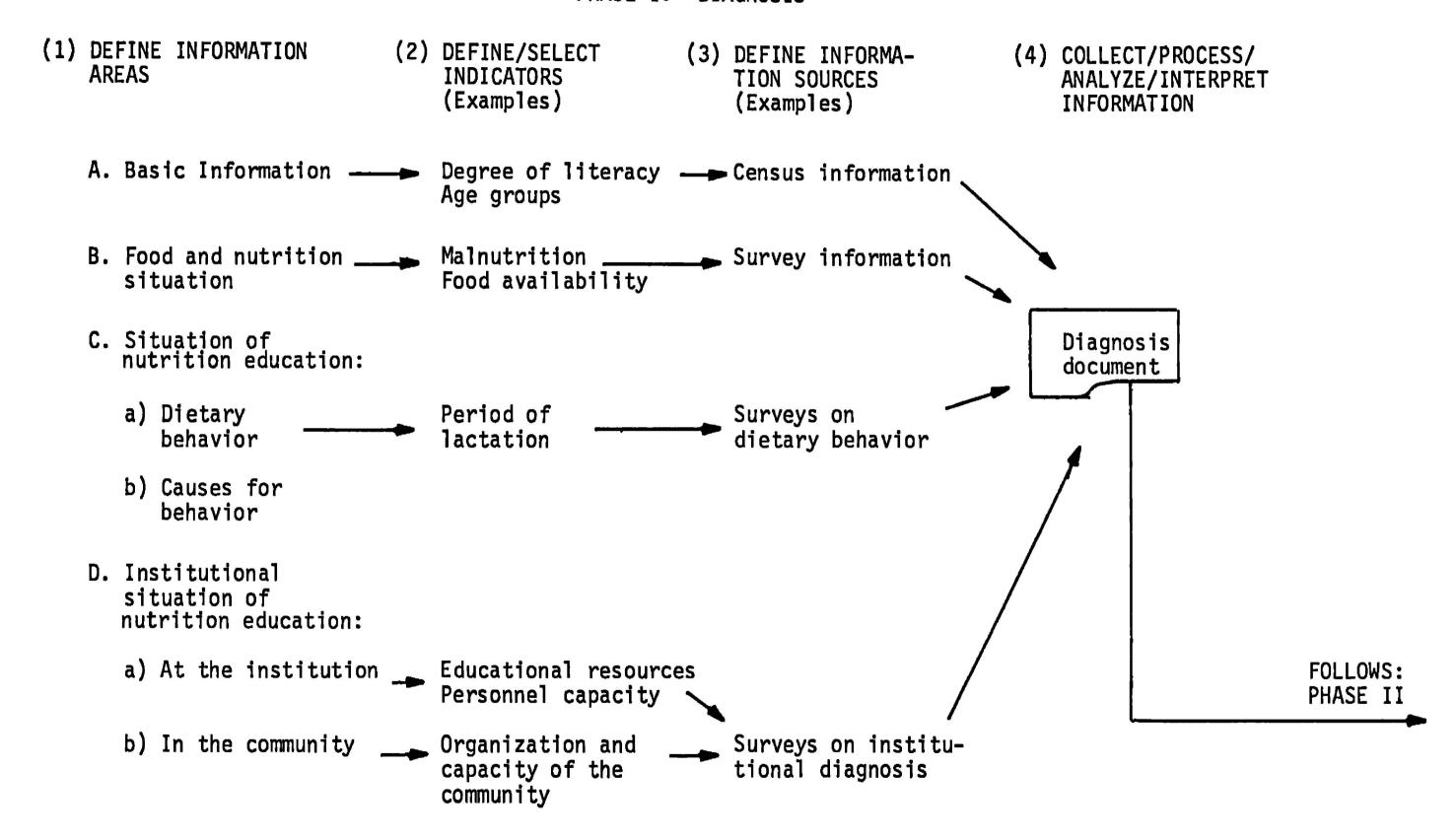
Figure 3 illustrates the process to follow in this phase.

B. Formulation of Nutrition Education Programs

The results of the diagnosis will allow, in an objective and realistic manner, to establish the objectives and impact that the program aims to

FIGURE 3

PHASE I: DIAGNOSIS



attain.

According to circumstances and the institutional resources as detected, food and nutrition education activities can be projected through the following strategies: formal education, extracurricular activities, mass communication and, as a support to each one of them, teaching material production. If a program is being planned at national or regional level, these strategies must be formulated in an integrated manner.

Once strategies are defined, activities to be developed for each case, as well as objectives and goals, are selected. In the formulation of food and nutrition education programs (Figure 4), two process variants are to be noted: educational planning and teaching planning. The first one refers to the logical, systematic and organized process to determine the goals and objectives of the program, define the strategies, activities and resources that are necessary for attaining its development, as well as the evaluating process. Teaching planning is the process through which each activity is planned, determining learning objectives, contents, methodology, time required, teaching material and evaluation.

Both educational and teaching planning conform a plan, project or program of food and nutrition education.

C. <u>Development of Food and Nutrition Education Programs</u>

This stage concerns the implementation of the plan formulated before. The process implies elements of organization, direction, execution, supervision and evaluation. These elements are outlined specifically in Figure 5. When carrying out the work plan it is imperative to have a permanent process of evaluation, to enable the revision of what is being executed and what has been planned, in order to make the necessary modifications.

FIGURE 4

PHASE II: FORMULATION

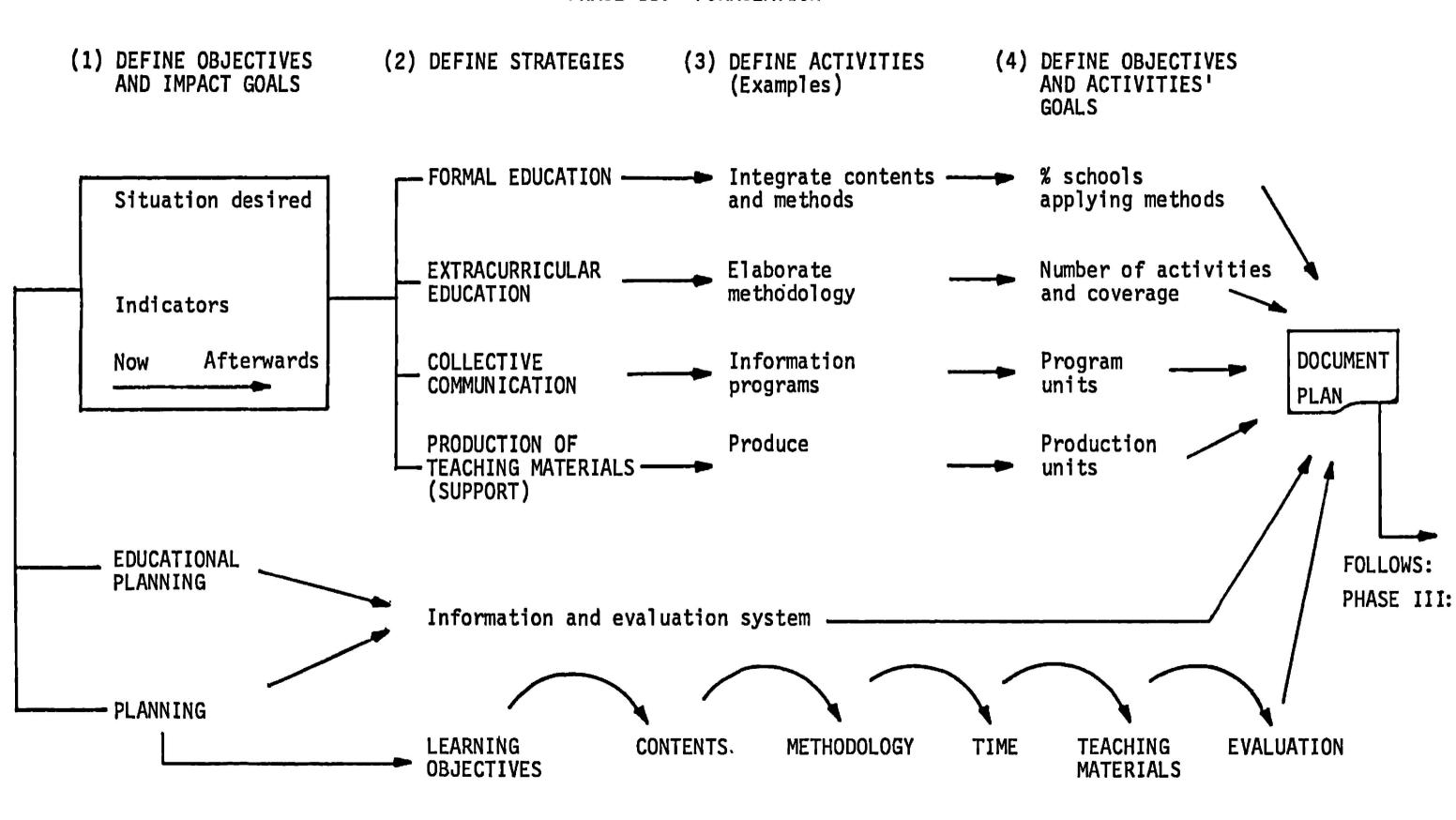


FIGURE 5

PHASE III: DEVELOPMENT OF EXECUTION

System

• Inform authority and levels • Recruit personnel • Define responsibilities • Clarify communication lines END OF PLAN, PROGRAM OF • Inform by levels **PROJECT** • Provide resources • Carry out activities as programmed -FOLLOWS: • Supervise PHASE IV Apply Information and Evaluation

INITIATION OF PLAN, PROGRAM OR PROJECT

D. Evaluation of Nutrition Education Programs

This is the process of measuring food and nutrition education specifically in terms of cognocities learning, changes in dietary behavior, efficacy of the didactic methodology, cost/benefit and impact attained. This process is explicit and implicit in the diagnosis stage and must be carried out during and at the end of the program. Figure 6 presents some questions that those responsible must be aware of, both during the development of the program and at the end of it.

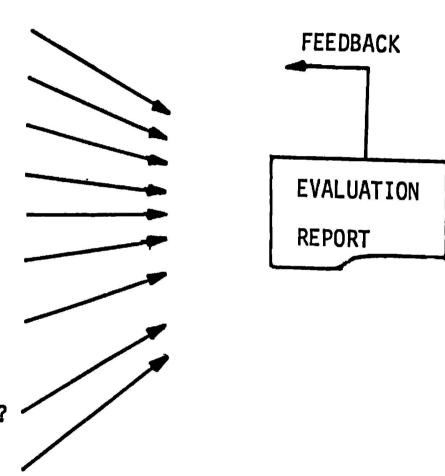
FIGURE 6

PHASE IV: EVALUATION

(1) PROCESS EVALUATION

FIND ASNWER TO KEY QUESTIONS

- Have any changes occurred?
- Were goals accomplished?
- Were methods effective?
- How well were needs identified?
- Were the objectives realistic?
- Was community participation satisfactory?
- How useful were teaching materials?
- Do benefits justify the effort/cost?
- Was there any contribution to the impact on the problem?



(2) FINAL EVALUATION

VI OBSTACLES FOR THE DEVELOPMENT OF FOOD AND NUTRITION EDUCATION

A. Political

FNE has not been assigned an important priority in relation to other components, and in those cases where its importance is recognized, no provision is made for adequate, sufficient or opportune resources.

Insufficient authority of the personnel involved in the coordination structures, as regards executive sectors or institutions of the countries.

Inadequate selection of FNE technicians at the levels of decision.

B. Resources

1. Human

Lack of insufficient specialized personnel who will dedicate their time exclusively to FNE and to food and nutrition planning.

The institutions in charge of preparing personnel specialized in nutrition are not training specialists in FNE.

2. Materials

Insufficient, if not absolute lack, in programs, of food and nutrition teaching equipment and materials.

Insufficient provision of resources such as transportation and others, which are indispensable for educational field work in FNE.

3. Financial

In general, no budget is provided for FNE in institutions and programs.

C. Educational Technology

Lack of unified criteria on FNE contents and methodologies.

Few investigations concerning educational methods applied to food and nutrition teaching.

Lack of manuals and technical documents on FNE at program level.

There are no programs of permanent training in education technology for personnel responsible for FNE.

D. Administrative

Lack of interinstitutional coordination in FNE. This means that everyone acts according to his own criteria, which results in an anarchy in FNE's contents and methods.

Insufficient communication among the institutions to share FNE's experiences.