

EVALUATION OF THE PHILIPPINE NUTRITION PROGRAM

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Working together to combat the nutrition problem of the Philippines is the whole network of nutrition committees at all levels of government administration as coordinated by the Nutrition Council of the Philippines at the national level. Aside from the survey being conducted every five years by the Food and Nutrition Research Institute, the Program employs Operation Timbang, Nutrition Surveillance and internal and external evaluation as monitoring and evaluation tools. Using bits and pieces of evaluation, the Program has grown from an infant scheme to the present full-grown undertaking, using the inputs of largely piecemeal evaluation from 1974-76. Since 1976, evaluation and monitoring, have been more highly emphasized.

In 1974, all nutrition efforts in the Philippines were unified under a national policy and action umbrella — the Philippine Nutrition Program (PNP). The PNP is defined as the sum total of individual and collective efforts planned and organized to solve the malnutrition problem of the Philippines. The program is being coordinated by the National Nutrition Council.

The Program recognizes the multi-faceted and multi-dimensional nature of the problem it is trying to solve. For one thing, malnutrition in the country covers a wide geographical area. For another, it affects several groups, the more vulnerable of which are the pregnant and lactating women, pre-schoolers, schoolers and newborn. The problem occurs in many forms too, the most prevalent of which are the following: protein-energy malnutrition, Vitamin A deficiency, iron deficiency, anemia, and goiter.

The multiplicity is also visible in the causes

of malnutrition in the Philippines. Lack of income, ignorance, and wrong food habits and practices are probably the most important factors. Infectious diseases, large family size, together with maternal factors, including labor force participation of the mother and her nutritional status, and other demographic variables are also significant contributory factors to malnutrition.

The Philippine Nutrition Program

The Philippine Nutrition Program is an answer to all these multiplicities. It consists of the following four intervention schemes:

1. *Food assistance.* This seeks to give the severely malnourished pre-school child emergency supplementary protein and calorie-rich food to rehabilitate him.

2. *Health protection.* While food assistance will relieve the malnourished child of his nutritional deprivation, health protection will prevent and treat him of illnesses associated with malnutrition.

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3. *Information and education.* This aims to generate mass awareness and acceptance of proper nutrition. To direct beliefs and attitudes towards desired nutrition practices, the campaign utilizes three vehicles: (a) mass media, (b) schools, and (c) nutrition classes.

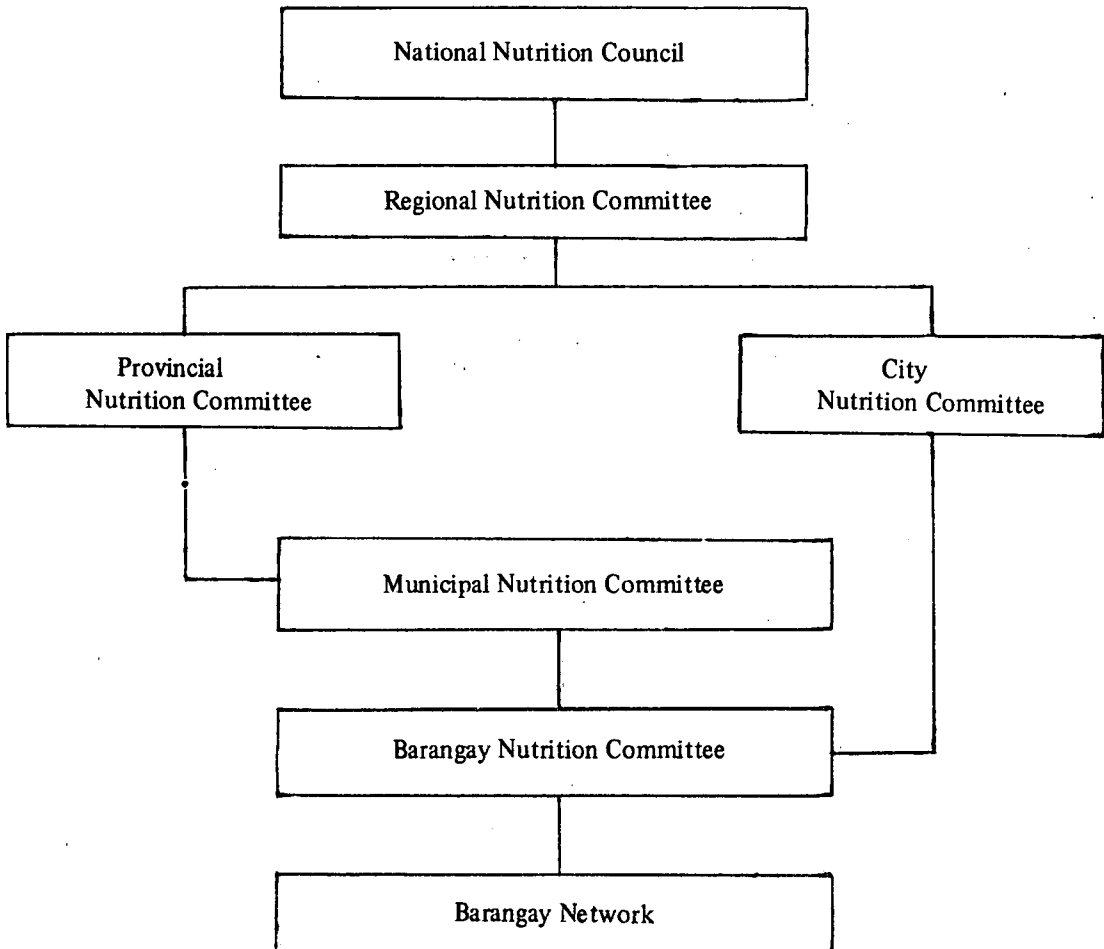
Family planning is integrated in relevant educational activities for homemakers and information materials developed cooperatively by the Population Commission and the National Nutrition Council.

4. *Food production.* This seeks to provide families with sufficient quantities of nutritious foods to supplement their daily food requirements and augment the family income.

Organization

To maximize the implementation of the Philippine Nutrition Program, a system of organization and programming at all levels of government administration has been adopted (Figure 1). At the national level is a Council composed of heads of government and private agencies to include the Ministry of Health, Ministry of Education and Culture, Ministry of Agriculture, Ministry of Social Services and Development, Ministry of Local Government and Community Development, National Science Development Board, Nutrition Foundation of the Philippines, Philippine Medical

FIGURE 1. ORGANIZATIONAL CHART:
PHILIPPINE NUTRITION PROGRAM



Association and Nutrition Center of the Philippines. Nutrition committees are organized at regional, provincial, municipal/city and barangay levels to coordinate and facilitate program implementation and monitoring of activities. The regional nutrition committee is created within the framework of the Regional Development Council. This is composed of regional heads of agencies represented in the Council. The provincial nutrition committee operates under the office of the Provincial Governor. It is composed of the Provincial Governor, Provincial Development Coordinator, Provincial Health Officer, Provincial Agriculturist, Veterinarian, Superintendent of Schools and heads of private and religious organizations and government entities engaged in nutrition activities in the province. The city/municipal and the barangay nutrition committees are composed of government, private, civic and religious organizations operating in the city/municipality and barangay, respectively. Thus, the responsibility for implementation of the nutrition program in a given area rests primarily on the local government leaders in that area.

On the premise that the solution to malnutrition should begin in the home, the organizational effort starts with the policy maker closest to the family. Since the Municipal Mayor is the only local government official closest to the problem who is vested with all three powers — executive, legislative and judicial — the municipality has been pinpointed as the focal point of planning and implementation of the nutrition program.

The Municipal Nutrition Committee creates a planning staff and invites representatives of different agencies in the community to discuss problems of malnutrition and share experiences and information on their own on-going programs.

Under the city/municipal nutrition committee is the Barangay (village) Nutrition Committee, which assumes responsibility for implementing and coordinating the nutrition program at the barangay level. It organizes the Barangay Network which is composed of a teacher-coordinator, *purok* (zone) and unit

leaders, and some 20 families under each unit leader. This Barangay Network is the final link between the nutrition agencies and the program's target: the family. At present, some 18,000 villages have organized Barangay Networks which serve as a two-way system for delivery of nutrition services and information materials and the conduct of other nutrition-related activities. Within this Barangay Network is a village-based part-time volunteer worker called the Barangay Nutrition Scholar. He takes care only of one depressed barangay. His main responsibility is to deliver basic services in nutrition health.

Thus, *while there is a Philippine Nutrition Program, the program is not a nationally-canned-and-handed-down-to-the-local-area-type program. Each municipality, province and region develops and implements a local nutrition program.*

Planning the Nutrition Program

Planning and evaluation are two defined points in the cycle. Evaluation is the measurement and comparison of actual progress versus prior plans oriented toward improving plans for future implementation. Thus, evaluation is really part of a continuing management process consisting of *planning, implementation, and evaluation*. Ideally, each phase follows the other in a continuous cycle until successful completion of the activity.

The above considerations presuppose that before any discussion on evaluation is done, planning must be clarified. Do nutrition plans exist? What is their content? Who formulate these plans? Do they lend themselves to evaluation?

As previously mentioned, each level of organization on the PNP is mainly responsible for the nutrition program in the local area. In fact, there exists a barangay action plan and municipal, provincial, regional and national nutrition plans, formulated at their respective level.

These plans are generally funded from local

sources. In some cases, however, the National Nutrition Council provides inputs to these programs upon request by the local implementors. While all these plans exist, the most pivotal planning levels are the following: barangay, municipal and national. This is because the provincial and the regional plans as of this period are only consolidations of the lower level plans. In the immediate future, however, the NNC expects to produce more interaction between the province and the municipality in the development of their respective plans.

Content of the Plan

Whatever the level of the Plan — municipal or national — the plan is usually identifiable by certain characteristics. One, the Plan usually consists of several projects, probably in answer to the multiplicities of problem, target and causes of malnutrition. The actual mix of the problem is dictated by area specifics. The other characteristic is that the Plan usually follows a series of hypotheses which run in the following manner:

- (a) If adequate *inputs* are provided, then planned *outputs* will be produced.
- (b) If these outputs are produced, then *purpose* will be achieved.
- (c) If purpose is achieved, then a planned degree of progress toward a higher *goal* will occur.

These hypotheses can be well illustrated by dissecting one project. (See Table 1.) Note that the development of this project assumes the transformation of inputs into outputs, of outputs into purpose, and of purpose into goal.

Evaluation

Evaluation of the National Nutrition Program varies by area and project development level. Two significant precepts of the evaluation mechanism must be underscored. First, there is no external evaluation at subregional levels except for occasional visits by National

Nutrition Council personnel. This is on the assumption that the cycle of planning, implementation and evaluation is most meaningful if done entirely by the group responsible for the project. This may not be the classical way evaluation is done but this is seen to reflect a growing confidence in Filipino responsibility.

Second, some of the written performance documents start from the bottom and move up. This flow permits operation of the *kahiyayan* value. Somehow the Filipino is made more efficient if the records of his performance are accessible to his immediate superior. This system is pervasive in the PNP. The performance of the Barangay Nutrition Scholar (BNS) is easily reviewed by his superior, the Municipal Action Officer or the Mayor. The performance record of the Municipal Mayor, acting as chairman of the municipal nutrition committee, is also easily available to his Governor, and so on.

Table 2 shows the evaluation tools used by areas and project development levels. Evaluation commences with the barangay action plan or work program prepared by the BNS. This plan is a simple listing of the current profile of his barangay and what he wants to accomplish for his community within a given period. This evaluation may be looked upon as a self-evaluation, i.e., an assessment of the BNS of how much he has done and what remains to be done. This may also be viewed as his report to the Municipal Action Officer who in turn looks at it as a performance evaluation sheet which when consolidated with other barangay programs becomes the municipal plan.

In addition, a quarterly meeting of the nutrition committees at the barangay, municipal, provincial, regional and national levels provides the venue for the quarterly evaluation of the program at the input, output and purpose levels. Reports of this quarterly meeting are submitted to the next higher level of organization.

The BNS work program, and the quarterly meetings are the main evaluative tools at sub-

Table 1
METRO MANILA BARANGAY MOBILE TEAM
(An Example of a Project Under the National Nutrition Program)

Narrative Summary	Indicators	Means of Verification	Assumptions
Goal: To contribute to the PNP in improving the nutritional status of the population, particularly the vulnerable groups	By the end of December 1978: 1. Reduction of 3rd degree malnourished children in Metro Manila by at least 70% 2. Reduction of 2nd degree malnourished children in Metro Manila by at least 30% 3. At least 50% of families adopt better health practices 4. At least 50% of families have established gardens 5. At least 50% of families accept family planning practices	1. OPT Results for Metro Manila (December 1977 and December 1978) 2. Sample Survey of families in Metro Manila	1. No major economic changes occur in Metro Manila. 2. No major environmental changes occur in Metro Manila.
Outputs: To demonstrate the feasibility of a mobile team approach in delivering health and nutrition services in depressed areas in an urban setting	End of Project Status: By the end of December 1978, BNHAs can follow up and monitor the needs, activities and status of the malnourished children assigned to them.	1. Index cards submitted by BNHA 2. Monthly report of CIS nutritionist	1. Willingness of the local government to provide technical or material support to the Mobile Team 2. Willingness of NCP to fund the project
1. OPT 2. Nutrition Education 3. Medical Intervention and Services 4. Private and local government-supported food assistance 5. Organized BNC 6. BNHAs	By the end of December 1978: 1. Pre-schoolers in 3 target communities weighed 2. Mother's classes conducted to 20 mothers 3. a. Distribution of private- and local government-donated medicine to those who have immediate need b. Referral to hospitals of severe cases of malnutrition and other diagnosed illnesses 4. Distribution of appropriate number of nutripak, superpan, and nutri-noodles to 2nd and 3rd degree cases 5. Regular meetings of BNC 6. Training of all BNHA volunteers	1. CIS Survey Forms 2. Reweighing records	Community members apply for training as BNHA.
Inputs: 1. Target Community 2. Technical or material support from local government, local agencies, and private donors 3. Organized MNC 4. Materials 5. Personnel for mobile teams 6. Volunteers for BNHA	1. 3 target barangays chosen on the following basis: a. It is a depressed area in Metro Manila. b. There are no existing forms of nutrition intervention. 2. Needed medicine, nutripak, nutri-noodles donated by the local government and private donors upon the request of the Mobile Team 3. Regular BNC meetings 4. a. Bar Scales b. Nutrition Education Materials c. CIS Survey Forms d. 2 vehicles 5. a. 1 physician b. 1 nutritionist		

regional areas at the input, output and purpose development levels. These are joined at the regional and national levels, by a system of internal and external evaluations. At the goal level, three major projects are utilized for both evaluation and monitoring. These are the Operation *Timbang* (OPT), Nutrition Surveillance Project and the Dietary Surveys of the Food and Nutrition Research Institute. These evaluation tools and their uses and limitations are discussed below.

Internal and External Evaluation

There are two kinds of evaluation covering input to purpose levels being done nationally. These are the internal and external evaluation.

Internal evaluation is carried out by the National Nutrition Council staff and the Nutrition Program Implementation Task Force through periodic field visits and meetings with the Provincial and Municipal Program Staff. During such meetings, field observations and problems on coordination and implementation are discussed, and those requiring higher level decisions are brought to the Council. A minimum of two visits per province every year are made by a joint visiting team of NNC and the task force.

The external evaluation, on the other hand, is being done by an agency contracted by the National Nutrition Council. The first evaluation done in 1975 covered input, output and purpose levels while that of 1977 covered all, including goal. The sampling design for the 1975 evaluation was intended to provide only a national picture while that for 1977 includes regional profiles also.

This evaluation in general is an attempt to answer the questions: Is the program successful? If yes, what are the factors contributing to its success? If not, what factors are causing it to be a failure? How can program implementation be improved?

The 1975 evaluation dealt more with PNP organization conducted through an in-depth analysis of decision-making and operational

processes including degree of functional and vertical differentiation, coordination and integration, decision-making mechanisms, information exchange, and control mechanisms. The data for the organization study was gathered through interviews with key management and administrative personnel at national, provincial and municipal levels in the PNP and of participating agencies as well as from organization charts, manuals, records, reports and other sources of information regarding the PNP organization.

The determination of the validity and deficiency of the strategies then employed by the NNC was also done. This was undertaken through the use of complementary and quantifiable measures of program effectiveness developed in terms of administrative and substantive program results. Administrative results were measured in terms of reach, usage, and participation of target groups in the PNP projects. Substantive results were measured on the basis of the extent to which the PNP projects have achieved the preconditions to proper nutrition among the target groups, namely: awareness of better nutrition concepts, improved composition of food basket, and increased activities to produce domestic food requirements.

The 1977 evaluation looks at three groups:

1. community workers, such as municipal nutrition committee members, teacher coordinators, and *purok* leaders.

2. community recipients, including children, and pregnant and nursing mothers.

3. heads of local government and support institutions at all levels including personnel at the national level, the Regional Nutrition Program Coordinator, the Governor, the Provincial Nutrition Committee, the Mayor, and the Barangay Captain.

The main issues being probed follow closely the diagram presented earlier.

1. Are the inputs — cooperation of the local government, commitment of local government, financial and otherwise — being provided? Are the workers doing their assigned tasks? Is the manpower available enough?

Table 2
EVALUATION TOOLS USED BY AREAS AND
PROJECT DEVELOPMENT LEVELS

Project Development Areas	Input	Output	Purpose	Goal
Barangay	BNS Work Program Quarterly Meeting of the Barangay Nutrition Committee	BNS Work Program Quarterly Meeting of the Barangay Nutrition Committee	BNS Work Program Quarterly Meeting of the Barangay Nutrition Committee	BNS Work Program, Operation Timbang
Municipal	Quarterly Meeting of Municipal Nutrition Committee	Quarterly Meeting of Municipal Nutrition Committee	Quarterly Meeting of Municipal Nutrition Committee	Operation Timbang, Nutrition Surveillance Project
Provincial	Quarterly Meeting of Provincial Nutrition Committee	Quarterly Meeting of Provincial Nutrition Committee	Quarterly Meeting of Provincial Nutrition Committee	Operation Timbang, Nutrition Surveillance Project
Regional	Quarterly Meeting of Regional Nutrition Committee, External Evaluation	Quarterly Meeting of Regional Nutrition Committee, External Evaluation	Quarterly Meeting of Regional Nutrition Committee, External Evaluation	Operation Timbang, Nutrition Surveillance Project, External Evaluation
National	Nutrition Program Implementation Task Force (Internal Evaluation) External Evaluation	Nutrition Program Implementation Task Force (Internal Evaluation) External Evaluation	Nutrition Program Implementation Task Force (Internal Evaluation) External Evaluation	Operation Timbang, External Evaluation, Nutrition Surveillance, Food and Nutrition Research Institute Surveys

2. Are the outputs being realized? If the inputs are well provided, do the intended results come out? Are the intended results in appropriate quality and quantity?

3. Are the purposes for which these projects were set up met?

4. Is the goal achieved?

These questions can be seen more clearly if the reader goes back to the example given earlier.

The national external evaluation will discontinue its concentration on goal once the Nutrition Surveillance Project covers the whole country. Instead, it is likely to concentrate more on the input-output-purpose level. The external evaluation may be viewed, therefore, as a written supplementary evaluation to the internal evaluation being done regularly by National Nutrition Council. It may also be viewed as complementary to the Nutrition Surveil-

lance Project as the latter, together with Operation *Timbang*, is a goal-centered evaluation.

Operation *Timbang*

Operation *Timbang*, a system for locating and curing malnourished children, also serves some evaluation purposes at the barangay level. It is the more formal assessment of the goal achievement of the barangay and its workers.

As a monitoring and evaluation tool, Operation *Timbang* as implemented has certain inadequacies. First, not all target children are weighed every year, injecting possible systematic biases in the interpretation. These biases may be compounded by longitudinal analysis. Secondly, the reports are slow.

In its conception, the OPT was never meant to be used for evaluation. In fact, in the actual PNP experience, the OPT as an evaluation tool is most useful at the lower levels of program implementation. Great care should, therefore, be exercised in attempts to use it at higher levels due to inadequacies in the data.

Nutrition Surveillance

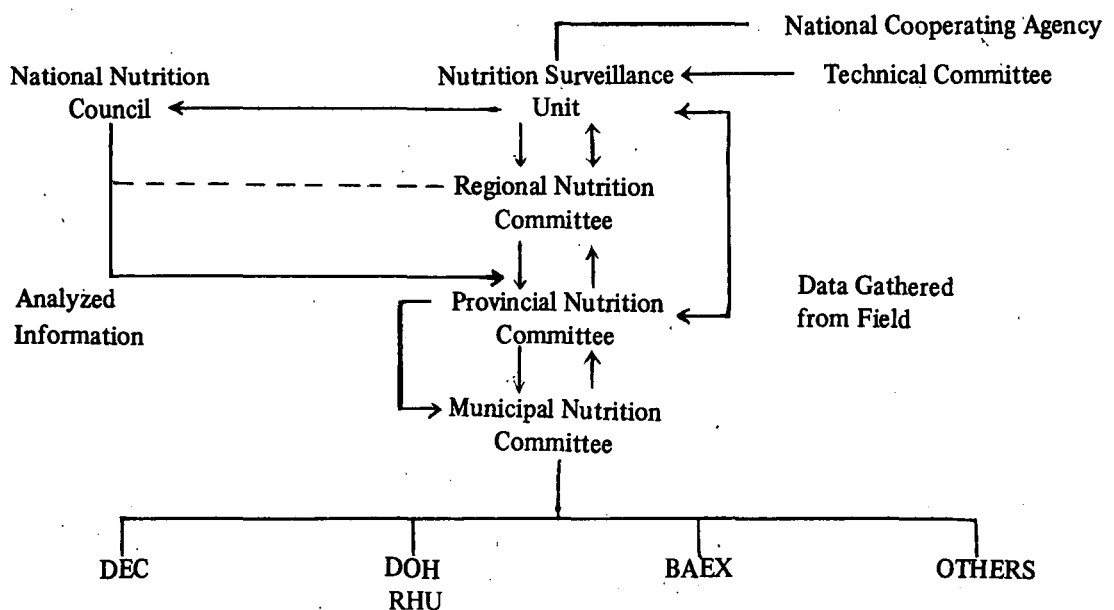
The Nutrition Surveillance Project is primarily a monitoring system and only secondarily an evaluation tool. The project is an answer to the difficulties of the Operation *Timbang*. It

has for its purposes the following:

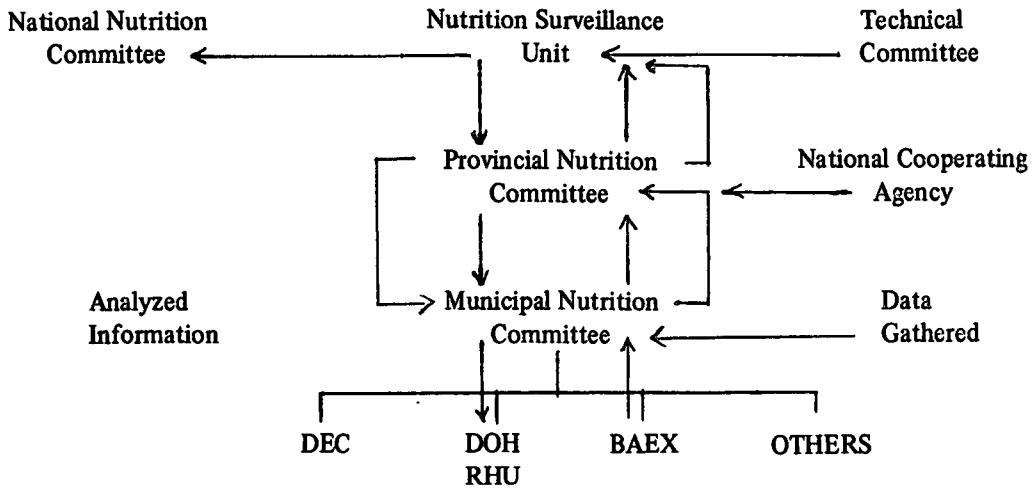
- 1) to describe on a regular basis the nutritional status of special groups such as the pregnant, the newborn, the pre-schooler, and the schoolchildren, and the community in general. The nutritional picture of the pregnant and newborn groups are established monthly, while the others are measured on a semi-annual basis.
- 2) to monitor the causes of malnutrition and thus permit a selection of preventive measures that may or may not be dietary in nature.
- 3) to predict the evolution or worsening of malnutrition and thus to be able to institute counteraction measures.

As an evaluation tool, the Nutrition Surveillance Project aims to be a measure of national, provincial and municipal performance. It is also capable of indicating the level of performance of an individual cooperating agency once the agency and target group assignment is fixed, i.e., if the newborn is to be taken care of solely by the Rural Health Midwives, the changes in the profile of the newborn may be attributed to the DOH Rural Health Midwife's effort.

These pictures are shown by the following system of data collection and feedback:



In 1978, the analysis of data is going to be localized so that the system shall look this way:



This localization is again based on the premise that the personnel would better appreciate the whole cycle of planning, implementation and evaluation if this were to be done at that level.

From our experience, data collection has not proved to be a burden to the local workers. In the case of the profile of schoolchildren, data for one province were collected from 24 grade one classes spread in five municipalities. The sample of the pre-schoolers was gathered from 350 households, yielding approximately 700 pre-school children. These sample sizes are large enough to generate accurate profiles of its respective populations. Sampling methods are likewise employed to collect information on the newborn and pregnant.

When extensive data gathering is required as in morbidity and mortality statistics, care is exercised in picking out the variables which have been historically collected by the existing system so that no additional burden is imposed.

This system has been tried in Albay in 1977 and was proven successful. Expansion is planned for 25 provinces in 1978-1979.

The FNRI Dietary Survey

The dietary survey which is conducted by the

Food and Nutrition Research Institute nationwide every five years is also used to evaluate the attainment of the PNP goals. This is basically concerned with the quality and quantity of intake of Filipinos of critical nutrients like calories, proteins, iron and Vitamin A. The descriptions generated are of the regional and national levels. This is done through a sampling of households throughout the country.

Concluding Statements

It may be in order to close the paper by looking at the history of the Philippine Nutrition Program. In 1974-1976, the Program was an infant. The main concern was to launch the program, see that the organization was working and that the intervention schemes were being implemented. From bits and pieces of evaluation, management became certain that the PNP was on the ground. In 1977, the NNC took a different focus. More emphasis was given to evaluation and monitoring. We hope, that like the Philippine Nutrition Program, it will grow and become a real and effective management tool.

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