

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D C 20523
BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY

Batch 91

1. SUBJECT
CLASSI-
FICATION

A. PRIMARY

Food production and nutrition

AS00-0000-G570

B. SECONDARY

Human nutrition--Asia

2. TITLE AND SUBTITLE

Seminar on Nutrition Policy: Integrated Rural Development; report

3. AUTHOR(S)

(101) Sem.on Nutrition Policy: Integrated Rural Development, Hong Kong, 1977; Asia Society, Inc., New York

4. DOCUMENT DATE

1977

5. NUMBER OF PAGES

18p.

6. ARC NUMBER

ARC

7. REFERENCE ORGANIZATION NAME AND ADDRESS

Asia Society

8. SUPPLEMENTARY NOTES (Sponsoring Organization, Publishers, Availability)

9. ABSTRACT

10. CONTROL NUMBER
PN-AAG-012

11. PRICE OF DOCUMENT

12. DESCRIPTORS

Development
Health
Meetings
Nutrition

Rural areas
Indonesia
Pakistan
Philippines
Thailand

13. PROJECT NUMBER

931115500

14. CONTRACT NUMBER

AID/ta-C-1476

15. TYPE OF DOCUMENT



AID/td-C-1476
Asia Society
THE ASIA SOCIETY, INC.
PN-AA6-012

ASIAN DEVELOPMENT SEMINAR PROGRAM

Contract Number: AID/ta-C-1476

SEMINAR

on

"Nutrition Policy: Integrated Rural Development"

*December 28-30, 1977
Sheraton Hotel
Hong Kong*

NOT FOR FURTHER CIRCULATION OR DISTRIBUTION

This report is intended to inform the reader of the general content and the major conclusions of the meeting. It does not attempt to recapitulate all of the discussions or to specify all of the contributions of individual participants.

AGENDA

Wednesday, December 28, 1977

9:00 a.m. - 12 noon

Problem of verification: review of predictions made at the previous Asia Society seminar on administrative prediction

2:00 p.m. - 5:00 p.m.

Techniques for monitoring program performance

Thursday, December 29, 1977

9:00 a.m. - 12 noon

Designing programs to maximize information flow for management decisions

2:00 p.m. - 5:00 p.m.

Relationship between social services and rural development: integrated rural development approaches

9:00 a.m. - 12 noon

Comments and reactions to paper on AID approaches to integrated rural development

2:00 p.m.

Conclusion

PARTICIPANTS

John D. Montgomery, *Chairman*
John F. Kennedy School of Government
Harvard University
Cambridge, Massachusetts 02138

Amorn Nondasuta
Ministry of Health
Government of Thailand
Bangkok, Thailand

Soekirman
Academy of Nutrition
P. O. Box 8 KBYB
Kebayoran Barat
Jakarta Selatan, Indonesia

Aree Valyasevi
Dean
Faculty of Medicine
Ramathibodi Hospital
Rama VI Road
Bangkok, Thailand

Jerry Weaver
U. S. Agency for
International Development
Washington, D.C.

Rudolfo Florentino
Assistant Director
Nutrition Center of
the Philippines
South Superhighway
Makati, Metro Manila D-3116
Philippines

Sia Zaidi
Assistant Chief
Nutrition Cell
Planning Division
Government of Pakistan
Islamabad, Pakistan

OBSERVER

Sadiri Malapit, Chief
Management Planning and
Information Service
Manila, Philippines

Charles P. McVicker
The Asia Society
New York, New York

REPORT OF MEETING

This report of the third meeting of the Nutrition Policy Seminar¹ will include (1) summary of recent program developments in the four countries; (2) verification and analysis of predictions made at the second meeting; (3) predictions for the next 6-12 months.

I RECENT PROGRAM EXPERIENCE

Thailand

Current plans call for integrating nutrition activities into the existing health care network at the periphery. At district and provincial levels, integration includes agriculture, education, interior (community development), and health functions. There are now 2,000 village health volunteers providing simple medical care, family planning, and nutrition services. The total will reach 7,000 by the end of 1978. The planned ratio of health volunteers to "communicators" is 1:10. These volunteers are given \$25.00 worth of drugs as they begin their work. By selling these drugs they create a revolving fund from which they can buy future supplies.

There are 20,000 communicators in place. The plan calls for 70,000 by the end of 1978. Overall, about half of the villages of the country will be covered then.

In the total nutrition package, priority has been given to the population at risk: 2 million infants and pre-school children and 1 million pregnant and lactating mothers. Its efforts supplement the Primary Health Care program which does not always reach this target population.

The First-Order Decisions for this supplementary effort include problem identification (body weight and height), providing or advising on food supplementation, and providing nutrition and health education. The plan is to develop simple production units in each region (later in each province), using local materials and simple technology. The textured protein project will be turned over to the commercial sector; its target group will probably shift to upper-lower and middle classes rather than "the neediest of the poor." New local foods production are to be operational by the end of 1979, and will be distributed through the local communicators. Approximately 6,000 feeding stations are to be established over the next 5 year period. Foods will be developed to meet the local preferences. The Ministry of Agriculture will cooperate with food production projects. MOPH has approached the Central Planning Board (NESDB) to find ways to get other ministries to cooperate with the project. A Food and Nutrition Committee has been formed at the national

1. The previous meetings in this series were held in Penang, Malaysia, June 7-9, 1976, and Atlanta, Georgia, November 26, 1976.

and provincial levels, chaired by the Minister of Public Health and Governors, respectively. Members include agriculture, education, interior, and health representatives. The cooperative plan calls for three levels of cooperative action: (1) Data collection analysis points, to be developed in small projects with other agencies. This strategy will encourage people from different agencies to see problems the same way. (2) After common problems are identified, the various agencies will plan together for solutions. This means that the planning process will have to be standardized. The form of program planning that has been used in MOPH is now widely accepted. To get other ministries to adopt the same approach, MOPH will organize seminars and tours. Once a common planning process is accepted, programming can be transferred to other ministries. The first step is to identify key decision-makers in other ministries. During 1977-79, training will reach 30 governors, 50 health workers, 50 agriculture officers, 50 community development workers, 50 teachers, 50 provincial and district workers, 1,000 village supervisors, and 10,000 volunteer workers. The present hope is to develop integrated planning by 1981. Chiang Mai province is the first test case for the effort. (3) There is to be an interagency body with vertical structure from *tambon* to national levels, following the system being used in Chiang Mai.

The first year's experience has shown that means of livelihood is the central issue in improving nutritional status; social services are effective only after economic programs are begun. Experience has also shown that village shopowners are very effective as volunteers: they know how to keep records, and they can provide simple medical care. They can also legitimately charge for medicine supplied by the government at a fixed rate.

The new plan will give priority to areas where nutrition needs are great. RTG has designated 25 top priority provinces. The population program involves 20 provinces; 12 provinces have both nutrition and family planning; 8 have population activities alone; 13 nutrition alone. Evaluation will be done by planning groups from MOPH drawn from different program clusters.

The MOPH Training Division has prepared 60 modules, including topics in nutrition, family planning and primary health. Eventually the services will be basically the same in all 33 provinces. At the moment, the "nutrition" provinces are RTG funded while the "population" provinces will be supported by IBRD (\$30 million), and other donor agencies (\$70 million). There will be some differences between the "nutrition" provinces and the "population" provinces: for the former, there will be less infrastructure (buildings) investment and some differences in level of training of staff, since there will be fewer medical personnel in the "nutrition" provinces. But operationally the provinces are expected to be about the same.

The DEIDS/Lampong Project has also produced some interesting and valuable experience. The concept is to use volunteers to give medical care, though RTG disagrees with details of DEID's plan for training paraprofessionals. It displays too much emphasis on their curative role, which will reduce their preventive health role. Traditional medicine will be introduced to community health volunteers. RTG will use traditional healers to supervise and instruct volunteers. The MOH wants to promote herbal and traditional remedies; it does not want to limit its support to modern medicine, where the increase

in demand for drugs will enrich the pharmaceutical companies without producing much improvement in health status.

The target is integrated rural development, including family planning and medical care which are to become available to the poorest. Food and nutrition programs can follow; they require a higher level of economic development on the part of the population. There seems to be a sequence of development interventions and consequences: family planning (perceived as the greatest need), medical care, economic improvement, and, finally, nutrition improvement.²

Indonesia

The sequence of programs in Indonesia in the First and Second Five Year Development Plans (Repelita) (1969-1973 and 1974-1978) gives higher priority to family planning than to nutrition, though Repelita-II gave more attention to nutrition programs. Efforts are now being made to incorporate nutrition into family planning (FP) programs. In regions where FP programs are successful, the National Family Planning Board (BKKBN) moves to support nutrition programs. Administratively nutrition and FP remain separate, but in a few areas nutrition activities have been integrated functionally into FP programs. More significant relationships between FP and nutrition will be established in the future.

Repelita-II also gives more emphasis to rural development. Through the Presidential Instruction Programs (INPRES Programs), each village in Indonesia (there are about 63,000 villages) receives government subsidy of \$843 annually to be used for development activities decided by the village itself. Other Inpres-Programs for rural development include: Rural Health Center, Primary Schools, Reforestration, and Small Credits for home/small industries.

The Indonesian Government is also concerned with the ever increasing imports of rice caused by accelerating demands that cannot be met by domestic production. Alternative crops are being developed to reduce the rice imports, including maize, sorghum, and tubus. To support this program, the President issued an Inpres-14 on Food Diversification Campaign. The urban population is being urged to consume wheat.

Inpres-14/1974 assigned the Minister of People's Welfare as chairman of the 10-Ministers Forum to coordinate nutrition programs in Indonesia. As yet there have been no meetings at the ministerial level. The Minister of People's Welfare did, however, establish a Technical Committee to deal with specific issues, such as: the Applied Nutrition Program (UPGK), Salt-

2. Contrasting experience: Philippines and Pakistan found that family planning had to "hide" behind health. In Indonesia, family planning was also the first priority in most villages.

Iodization, Nutrition Education, and Fortification of Wheat, a new proposal not yet developed into a program.

The Applied Nutrition Program as revised and subsequently developed in Indonesia started under FAO/UNICEF sponsorship. Monthly pre-school-children weighing is a relatively new activity in UPGK. It is now widely implemented, using parents and local/village cadres. This weighing is adjusted for accuracy and used for base line data and nutrition education, as well as for evaluation purposes. UNICEF has a major role in supporting the development of a "revised-UPGK," with the collaboration of the Ministry of Agriculture--a collaboration made easier because of the UNICEF activity.

Since 1977 IBRD has provided loans for nutrition programs in Indonesia, one of which takes the form of Nutrition Intervention Pilot Project (NIPP). This Pilot Project started in 18 villages in East Java and Lombok Island. It will be extended to reach 63 villages in 7 provinces within 4 years. NIPP is a rural development with nutrition goals. OPAK is especially active in NIPP areas.

In nutrition education, emphasis has recently focussed on the promotion of breast feeding to offset increased bottle feeding, particularly in urban and suburban populations. Pediatricians, young physicians, nutritionists and midwives in 1977 established an organization called Working Group on Breast Feeding Promotion, which soon became a national program with support from the mass media. The campaign also stresses weaning food in rural areas, making use of local supplies.

Salt Iodization is still the most successful of the nutrition projects. As a first order decision it was easily implemented. Marketing and distribution is the problem. The iodized salt is produced mainly by a government-owned salt industry, P.N. Garam. But in the marketplace, other salt is also available, produced by local salt-farmers. This so-called "People's Salt" is not iodized. In some provinces the local governments have prohibited the marketing of uniodized salt. Such regulations could have the effect of reducing the income of salt-farmers. Moreover, some rural consumers prefer the uniodized salt, which is cheaper.³ Several months ago the ministerial cabinet passed a law prohibiting monopoly in the marketing and distribution of salt. This law creates new problems for the introduction of iodized salt, which is produced solely by the P.N. Garam. Moreover, floor and ceiling prices exist for "People's Salt," to raise the salt farmers' incomes. The government buys and sells people's salt seasonally to control prices. One possibility is iodizing this salt before marketing. Distributing iodine

3. In Pakistan, it costs one-fourth as much to buy iodized salt, but even with this 400 percent subsidy, the local population still prefers it uniodized. They think iodized salt includes crushed birth control pills.

through health channels to deal with high incidence of goiter and cretinism is against present policy.⁴

In 1979, the Government of Indonesia will present the Third Five Year Development Plan (Repelita-III). It is expected to devote more attention to nutrition.

Pakistan

A major problem in nutrition programs is that the population does not trust government-supplied food. Even when government weaning food was sold at 10 percent of the market price, people avoided it. Package and brand labels may explain this behavior in part, but the history of government distribution of spoiled wheat in the past is also in the public consciousness.

Pakistan has almost completed its survey of the nutrition situation, using teams made up of one doctor, one lady interviewer, and one lab assistant. The teams have studied 1,095 households, made up of 6,738 individuals, including 6,473 who were clinically examined, 1,209 who received biochemical examinations, 1,974 pre-school children who were weighed, with height readings for 926. Findings: Protein-calorie status: 56 percent less than 80 percent of weight standard; 30 percent less than 80 percent, by height. Vitamin A status: 13 percent deficient. This latter finding called to a halt the 1974 project on Vitamin A fortification.

Unfortunately, there is some doubt as to the validity of the survey. The Pakistan Medical Association found no evidence of Vitamin A deficiency, but nutritionists had pushed for fortification because dietary surveys had found deficiencies in the past. Now the issue is clouded. Evidently the methodology for detecting Vitamin A deficiency in the field is too crude. Another finding was that 3 percent of the population had goiter. The sample design excluded areas in the north where goiter is prevalent, however. In unsurveyed regions, there was earlier evidence of up to 70 percent goiter. As a result of the uncertainty, the government decided to continue the use of iodized salt. Iron deficiency: 25 percent marginal, 6 percent deficient. (These figures, too, are challenged.) Fifty percent of the children up to one year eat no solid food; 10 percent of children up to 2 years eat no solid food.

The questionnaire used was comprehensive, including socioeconomic data. But some questions were badly worded (e.g., Do you have a "bogus ration card?"). In designing the survey, there was professional rivalry between the health ministry and nutrition cells which helped explain why it took two years to design the questionnaire. There were also irregularities in the field work. In the end, the government decided not to wait for full agreement to do the comprehensive nutrition survey, and instead to begin using the micro-nutrient element that is completed. AID agreed to support the reduced effort (U.S. \$120,000.) to get some work for the nutrition cell which had only one year remaining on its 3-year support from AID.

⁴. In the Philippines, the main problem in reaching the mountain provinces, where no salt is available, is the cost of transportation. Government officials sometimes use their own vehicles; otherwise the population will not consume salt.

Salt and tea fortification has begun. A government subsidy covered the price, but much entered the market illegally, without the subsidy.

Ration shops now cover 100 percent of the urban population, which has access to them with a maximum of one hour's travel. Seventy percent of the rural population has access. Wheat and sugar rationing is now in effect, also, and it covers middle and upper classes, since everyone has a card. One problem is that the profit margin is so low that shopkeepers cannot live on it. In the case of sugar, for example, the buying and selling prices are the same, so shopkeepers cannot live on it. In the case of sugar, for example, the buying and selling prices are the same, so shopkeepers can make money only on the bags. The black market price for sugar is double the official rate. As a result, some shopkeepers sell bogus cards and black market commodities to keep going.

Philippines

There are four new projects: Nutripak; Barangay Nutrition Scholars; Nutrihuts; and nutrition surveillance. The GOP is now emphasizing local level, micro-planning. Prior to 1970, there was not much coordination of these efforts. But in 1974 the National Nutritional Council was formed by Presidential Decree to coordinate all nutrition activities of both government and private groups and to develop a national nutrition plan. The plan will be implemented in an integrated way. Misunderstandings and hesitance have been reduced at the national level; there are still problems at the municipal level, however. Training for micro-planning has begun for a core group of nutrition workers from different agencies, to be based in Manila but with the expectation of moving around to local levels. "Facilitators" will include a Provincial Action Officer plus representatives from provincial/city nutrition committees. After these people are trained, they themselves will conduct training for municipal people to do local nutrition planning. Facilitators go to province and city level; they sometimes spot-check municipal planning activities. GOP is now working to integrate municipal planning with provincial planning. Thirty percent of the municipalities have now submitted plans to the Nutrition Council. It is still hard to get agreement between local authorities and the Nutrition Council. Starting in 1978, Grants-in-Aid from the Council for nutrition will be available only to municipalities which have submitted plans.

The Barangay (Village) Nutrition Scholars Project trains village-based nutrition workers who are expected to devote 30 percent of their time to these functions. The selection process begins with nominations by the village chairman, to the mayor, then to mobile training groups who screen applicants. Local politicians have tended to nominate friends, which suggests that the post is considered desirable. Nutrition-priority villages initiated the program. Scholars receive 2 weeks' training plus 15 days' practical field work. Women make up 95 percent of the group. Minimum criterion is elementary school (6 years). The highest educated do not stay long (as predicted). Scholars hold monthly meetings and have formed an association. Their ages range from

18 to 55. There is no fixed salary; it depends on local capabilities, sometimes running as high as 50-60 pesos. Some BNSs get full-time jobs if they work in the richer municipalities. They give food supplements, follow-up on children, visit "critical" families, engage in environmental sanitation, and refer sick children to health units. They stay in local villages.

Nutripak, an emergency food package designed to rehabilitate malnourished children, is being produced in 92 plants throughout the Philippines. A commercial firm produces Nutripaks on order, and NCP also has a plant (Tolosa) supported by NNC and Coca Cola. Municipal plants make up most of the remaining plants. Most of the technical difficulties have now been ironed out. The packets are now uniform in size (not 3 sizes, as before), and are designed to supply one-half RDA. They are subsidized by the government, and sell at 50¢ per pack (7¢ US). Municipalities buy them for distribution. Many are still given out free of charge, but policy is gradually to shift to distribution through sales. There is a plan for provincial and municipal governments to subsidize cost up to 50 percent so that "scholars" can distribute packs for 10¢ to families and keep it as an incentive. Locally, Nutripaks compete with donated commodities. It is up to local officials to coordinate and integrate different commodity programs in their own communities. The GOP wants to use some donated commodities in the Nutripak kits. Because of both national and regional subsidies, there are few production problems and some economies of scale.

"Nutrihuts" started because malnutrition wards in hospitals cannot fill the need for curative treatments. They are simple local facilities where severely malnourished children can be treated. Rural health units administer the program. Mothers are taught to prepare foods there, and children are kept under surveillance for one month or more. There are 153 in operation now. They have been enthusiastically received; indeed, sometimes mayors and governors set up too many to be adequately supervised.

Nutritional surveillance, a pilot project has been established to define the extent of malnutrition and find factors related to malnutrition. It will be able to predict where and when it occurs. Municipal data will cover health statistics, birth weight; there will be household level data on weight of preschoolers; food intake, money value of food consumed, breast feeding. At provincial level, crop yields, food prices, and meteorological data will be studied. Probably the project is collecting too many types of data, but it is trying to find out which are the best predictors. In 1978 the program will expand to 5 provinces. Household data will be collected by hired enumerators using a random sample. A simpler type of surveillance, Index Municipalities Project, will also be started in 25 provinces. Simple health statistics and weight of preschoolers will be collected to get rapid assessment of nutritional status. Operation Timbang data are not considered accurate enough for national surveillance purposes.

II. VERIFICATION OF PREDICTIONS

(The numbers below refer to predictions presented in the report from the Atlanta Seminar.)

Indonesia

- A. 1. First prediction has been confirmed; we are using the planned items but in different packages.
- 2. Not yet confirmed. We do not have a Nutripak production center yet; there is, however, a draft manual.
- 3. Partly true (only labor-intensive, confirmed).
- 4. A study is planned for village storage scheme. Others not yet materialized. The problem has been that the technicians ignored or forgot problems of implementation and bureaucratic support.
- B. 1. Not confirmed. The signing of the loan was in March 1977 instead of December 1966. The NIPP becomes operational in September 1977 instead of April 1977.
- 2. Created special "body," but no professional personnel in nutrition to back up the new "body."
- 3. Lack of professional and motivated personnel in Nutrition. It will be evaluated in January 1978, might upgrade the capacity.
- C. 1. Not yet confirmed. Motivation from local government officials appears good. Management cannot be evaluated just now, perhaps in 6 months.
- 2. Adopted as primary health care scheme; not yet materialized. Prediction: next year.
- 3. Not yet materialized; next year.

Philippines

- A. 1. Prediction fulfilled, largely because the Tolosa plant has proven very efficient. More demand for mung beans than expected. Bureau of Plant Industry has assigned plots for mung beans which turned a large profit; next year production will be increased.
- 2. Prediction verified.
- 3. Prediction disconfirmed; now only one type of Nutripak is being produced. There has been no loss of demand because of standardization.

4. Disconfirmed. No formal resource survey. Too many plants requested; some small producers are in danger of failing.
 5. "Falsified;" no shortage; have enough materials for Nutripaks. Philippines Nutrifoods Corp. (NCP) and other sources producing commercial foods.
 6. Confirmed.
 7. Disconfirmed. Base figure wrong, plant figures exaggerated. Difficulty of marketing from Leyte. Reached 40-50,000 per month.
- B.
1. Disconfirmed. Trying to identify potential BNS who are supposed to choose unit leaders.
 2. Confirmed. Allocation more than predicted.
 3. Confirmed. Soc. Res. Ec. Dev. continuing experiment with MIS.
 4. In operation. Nutrition surveillance piloted.
 5. Confirmed. KBP used funds within central office to train staff in radio announcing. Some announcers did not allocate much time to breast-feeding spots.
- C.
1. Confirmed. Getting 90 percent immunizations.
 2. Confirmed, mainly with displaced family areas, earthquake and tidal wave victims.
 3. Disconfirmed. Nutrition committees at different levels develop programs.
 4. Not yet evaluated.
 5. Not verified. Provincial and municipal leaders responded, not Barangay or village people. No subsidy for operational costs at municipal level. At Tolosa plant, there is a subsidy.
 6. Verified. VTR campaign doubled Nutripak consumption in experimental areas (30 barrios of Leyte).

Thailand

- A.
1. Verified. 62 modules introduced. Distributed to village workers by September on schedule.
 2. Disconfirmed. Change in emphasis: de-emphasized textured protein (public response unfavorable). Communicators will be working with

- 1-2 years age group, instead.
3. Confirmed
 4. Too soon; not apparent yet. Other agencies are watching. Perhaps in next few years.
- B.
1. Disconfirmed. Using public health office, not separate offices. Recommending provincial coordinating committee, including health, agriculture, education, and nutrition.
 2. Not yet confirmed. Have pushed planning down to district from provincial levels. Will reach village after village communicators are established.
 3. Not yet confirmed; experiment continues.
 4. Confirmed. Selecting in sensitive region (northeast region) of villages.
 5. Confirmed; have set up project at village level to form core group for future planning.
- C.
1. Confirmed. Behavior of communicators has changed; coverage has gone up tremendously.
 2. Confirmed.
 3. Not yet confirmed. Little demand for models from villages. Army and other programs have requested models.
 4. Not yet evaluated; expect that family planning will prove the most popular model.

Pakistan

- A.
1. Partly confirmed; completed survey and interim report, but data base is questionable and may not reveal national trends.
 2. Confirmed. Discontinued Vitamin A project, though decision not final.
 3. Disconfirmed. Only ration shops.
- B.
1. Confirmed; preparing 5 year plan. June 1978 -- will include chapters on nutrition and consumption.
 2. Disconfirmed. No progress. Training MHC staff, but MOH unresponsive.

3. Disconfirmed. No organization to distribute food commodities. Most were wasted. Managed by Food and Agricultural Ministry which lacked village distribution system. Tried to use MOH, which had the system but no funds. Provincial governments could not carry cost. Nobody felt responsible.
 4. Disconfirmed because aid was cut off.
- C.
1. Disconfirmed.
 2. Confirmed. Government wheat prices have gone up to farmers selling to ration shop.
 3. Confirmed. Plants established rose from 2 to 16. Not competing with other venders.
 4. Disconfirmed. Rice not being sold in ration shops because of need for foreign exchange; decided to export surplus rice instead.
 5. Disconfirmed; no decision; not working because of nationalization of milling; quality has declined; all wheat now uniformly poor throughout the country.
 6. Disconfirmed. GOP has de-nationalized milling in response to popular demand.

Summary and Analysis

Of the 52 predictions produced in Atlanta, 21 have come true; 20 false; 11 unverified as yet; and 1 seems untestable.

| | <u>Indonesia</u> | <u>Philippines</u> | <u>Thailand</u> | <u>Pakistan</u> |
|--------------|------------------|--------------------|-----------------|-----------------|
| True | 0 | 10 | 6 | 5 |
| False | 3 | 7 | 2 | 8 |
| Not yet | 5 | 1 | 5 | 0 |
| Unverifiable | 1 | 0 | 0 | 0 |

These 52 predictions contained 18 First-Order decisions (44% confirmed); 17 Second-Order decisions (47% confirmed); and 17 Third-Order decisions (41% confirmed). It would appear that the program spokesmen at Atlanta were predicting fairly evenly across the three decision orders, and that their accuracy and prescience were remarkably (and unpredictably!) consistent.

Conclusions:

Indonesia: Progress slower than expected, perhaps because there is no central decision-making apparatus, no coordinating mechanism for oversight of implementation.

Philippines: Essentially on schedule, but there were some exuberant miscalculations.

Thailand: On schedule; progress "slow and steady."

Pakistan: Expectations unfulfilled, possibly for reasons of political uncertainty.

III. FURTHER PREDICTIONS

Indonesia

1. New development strategy guidelines will be formulated for the third 5-year plan beginning in April 1979. For this purpose, the new People's Assembly (Congress) is to convene in March 1978. The new strategy or guidelines (called "GBHN") is expected to include a statement on the importance of fulfilling the basic needs (nutrition, health care, environmental sanitation, and education) for the improvement of the young generation. The nutrition and health programs will be directed more to the low income groups than are the current efforts.
2. At least 6 of the 27 provinces will start with Operation Timbang (by March 1978).
3. A second workshop on food will be held under the leadership of the National Institute of Sciences (LIPI) supported by the Indonesian Food and Nutrition Society and the Indonesian Nutrition Association (the "Young Turks").

Philippines

1. A new marketing system for distributing supplementary foods will develop around the BNS (Barangay Nutrition Scholars) within 12 months.
2. Donated (including US-supplied) food will be released for use in Nutripaks, with the result that new varieties of Nutripaks will be available. (12 months)
3. Small village plants will decline in number, and their production will be replaced by provincial and regional plants. (12 months)
4. Duplication of roles among local nutrition workers, e.g., of Departments of Social Welfare, Health, and Agriculture, will be reduced over the

next 12 months as new mechanisms for coordinating their activities come in place.

5. New province-level BNS/communicators will be introduced to supervise BNS in one province in each of the 12 regions within 6 months. Half of their salaries will come from provincial funds.
6. By the end of 1978 there will be a nationwide training and deployment system for BNS.
7. Local and private groups will provide 40 percent of the funding for Barangay nutrition workers by 1978.
8. The four new programs described in Section I will continue and expand in 1978.
9. Experiments with Vitamin A fortification of MSG will begin in 3 provinces and AID support within 12 months.
10. Reports from Operation Timbang will be redesigned to provide more precise information and indicate results of nutrition intervention schemes.
11. A pilot cost-benefit comparison of various nutrition interventions will be completed in Bulacan by January 1979.

Thailand

1. Mung bean production in local programs will increase in 1978, with regularized MOA extension workers' support and assistance.
2. Provincial coordinating committees will be started within 12 months, including health, agriculture, education, and interior.
3. A national committee will be established in the Office of the Under-secretary of State for Health, an action which will require legislative approval.
4. Within 2 years, the joint interministerial projects in identification and analysis of nutrition planning will begin.
5. Because of anticipated drought conditions, a decline in food production will stimulate the nutrition focus of national planning. This action will also reflect rising demand from villages to national agencies because of the work of the communicators.

Pakistan

1. Within 5 months, the quality of *atta* will improve as a result of denationalization, but will decline to its present levels again by the end of the

year.

2. After the unexpected termination of US aid to the nutrition cell, UNICEF will come to the rescue.
3. UNICEF will also support nutrition education programs. A new set of surveys will begin, using private firms to establish a baseline by which to measure the effectiveness of radio, TV, and other media efforts.
4. Local stations will begin to subsidize spot announcements in support of nutrition programs before the end of the year. Networks will offer announcements as well, and will defer charges until 1979.

These predictions tend to emphasize current preoccupation with Second Order decisions in all four countries, with few exceptions. But clearly it would have been possible with a little more time to develop other predictions and to refine this group, for further use in program management and oversight.

The group turned its attention to the issues relating to Integrated Rural Development prepared by Dr. Weaver, and offered consensus views on all of the questions in the AID outline.