

Thailand's National Nutrition Program

Lessons in Management and Capacity Development

Richard Heaver

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I. INTRODUCTION

A. BACKGROUND, OBJECTIVES AND RATIONALE

In a recent review of the World Bank's health, nutrition and population project portfolio, the Bank's Operations Evaluation Department concluded that more attention needed to be paid to institutional capacity development issues: 'OED has consistently rated institutional development as substantial in only about a quarter of completed HNP projects; for FY97/8 this is well below the Bank average of 38%. Institutional impact thus remains the Achilles heel of the HNP portfolio' (World Bank, 1999). A recent internal nutrition portfolio review concluded that the Bank requires 'a well-planned capacity-building effort for client countries over the medium-term, and in the short-term for the Bank, so that it can better assist the client' (World Bank, 2001). A joint assessment of the Bank's work in nutrition by the Bank and UNICEF also confirms the OED and nutrition portfolio review's assessments of the importance of management and capacity problems (Gillespie et al. 2001).

In response to these findings, the World Bank has taken some initial steps to improve its work in management and capacity development in nutrition, including

- commissioning a paper defining the main management and capacity development problems and issues (Heaver, 2001)
- cooperating with the International Food Policy Research Institute, UNICEF and other agencies in developing a methodology for assessing capacity constraints in nutrition at the sectoral level (this process is just beginning)
- commissioning case studies of successful nutrition programs, and how they were managed. This is the first nutrition management case study.

Objectives

The objectives of this case study are to review Thailand's national nutrition program and (i) try and account for its success, with particular reference to how it was managed, and to how capacity was built; and (ii) to discuss what lessons may be learned for other countries. The intended audience for this paper is nutrition policy-makers, planners and managers in other developing countries; and project staff in the World Bank.

Others have already written about what happened in nutrition in Thailand, most notably Winichagoon et al. and Kachondam et al., both in 1992; Winichagoon et al. in 1994; and Tontsirin and Winichagoon, and Tontsirin and Gillespie, both in 1999. The last of these studies looked at community nutrition in a variety of Asian countries, but included a case study of Thailand. The other 1999 study, Tontsirin and Winichagoon's *Community-Based Programmes: Success Factors for Public Nutrition Derived from the Experience of Thailand*, and Winichagoon's 1994 study *Essential Elements in the Process of National Nutrition Development* cover much of the same ground as this study, although more briefly. Their lists of key success factors are therefore included for reference at Appendix A.

This study attempts to avoid duplication of previous work, by

- going into greater detail on management and capacity development than previous reviews
- analyzing what actually happened in the field, as opposed to what was supposed to happen according to policies and strategies, which was the main focus of some previous reviews

- discussing how far Thailand's special political, cultural and administrative context helps to explain what happened, and whether this special context may limit the replicability of Thailand's approach elsewhere
- reviewing Thailand's experience primarily as a success story, but at the same time looking at several unresolved problems and issues, and the implications these may have for future management and capacity development strategies.

Why choose Thailand?

The Bank chose Thailand for four reasons:

- i. Thailand has been much more successful in reducing protein-energy malnutrition (PEM) than most other countries in Asia.
- ii. Thailand's approach to nutrition improvement has relied on empowering local communities, an approach which the Bank and UNICEF believe is key to success, and therefore should have lessons for other countries.
- iii. Thailand now faces a number of second-generation problems in nutrition, which may affect other countries as they reach a similar stage of the epidemiological transition.
- iv. Thailand has financed its nutrition program domestically, and the Bank wishes to learn from programs with which it has not been involved, as well as those which it has assisted.

Thailand has been successful in reducing PEM, and iodine and vitamin A deficiency. Like other developing countries, Thailand has been much less successful in reducing iron deficiency. It is for its success in reducing PEM that Thailand has become best known. However, there is confusion in some of the literature about the extent and speed of the achievement, because of problems with the PEM data. In some instances, erroneous presentation of the Ministry of Public Health's growth monitoring service statistics as nutrition prevalence estimates has substantially exaggerated Thailand's achievement. In others, the unqualified presentation of sample survey data using the Thai national reference standard, which is significantly different from the internationally accepted NCHS standard, has underestimated Thailand's achievement. Because of the confusion generated by the use of different and sometimes inappropriate data-sets, we have summarized some of the problems with the PEM data, and what can be concluded from them, in Appendix B.

A rate of reduction in PEM of 2.9 percentage points per year between 1982 and 1991 has commonly been quoted in the international literature for Thailand. This rate is significantly higher than has been achieved by any large scale program elsewhere in the world. For several reasons (see Appendix B for details), we believe this estimate may be flawed. First, it is based on growth monitoring data, which do not give a true picture of prevalence rates at any time during this period. Second, growth monitoring data were only collected on a large scale from 1985. Prior to that time, the growth monitoring program had not stabilized, and estimates based on the figures prior to 1985 are particularly prone to error. Third, the growth monitoring data show moderate and severe PEM falling by more than half between 1983 and 1984, a drop which is very unlikely in a single year. No less than two thirds of the overall decline in PEM between 1982 and 1991 was the result of this one year decline in 1983/4, casting serious doubt on the validity of the estimated decline for that period as a whole.

We have therefore preferred to use only the independent survey data for reductions in PEM. These show that Thailand reduced moderate malnutrition from about 25% in the under five population in 1986 to about 15% in 1995 (NCHS standards, <-2SD from the mean, weight for age), thus almost eliminating PEM as a national public health problem. Weight for age malnutrition among children under five fell at a rate of over

1.1 percentage points a year during this period. This is more than double the 0.5 percentage point per year decline in PEM which has been found elsewhere due to general development, and in the absence of a nutrition program (see Mason, 2000 for details of how the 0.5 point figure was calculated). Thailand's success in reducing PEM is therefore unambiguous—even though we believe that the level of achievement may be substantially less than what has been claimed in the international nutrition literature.

B. SCOPE AND METHODOLOGY

To keep the scope of country case studies manageable, the Bank has asked authors to focus mainly on community nutrition programs for pre-schoolers and their parents, including interventions for growth promotion and vitamin supplementation; and analysis of overall sectoral capacity and management strategy development. The authors were advised not to go into detail on

- school-based nutrition programs for older children
- direct food or income transfer schemes for the very poor and nutritionally vulnerable
- food security and income generation programs having an indirect impact on nutrition
- food fortification.

Even within this rather limited scope, the number of potential management and capacity development issues in each country is very large. Both to ensure feasibility and a consistent approach across countries, the Bank has asked authors to focus principally on the key issues defined in 'Improving Nutrition: Issues in Management and Capacity Development' (Heaver, 2001). The Executive Summary of that paper, which outlines these key issues, is attached for convenience at Appendix C. This case study follows a similar structure to the issues paper, dealing first with field program management, and then with nutrition management at the sectoral level, and foreign assistance.

Three main approaches were used in preparing this study:

- A review of major items in the literature in English (for a list of these see the References).
- Discussion with many of the leaders of the Thai nutrition program in the 1970s and 1980s (a list of key informants is given in Appendix D).
- Brief field visits to Khon Kaen City, Khon Kaen Province and Chachoengsao Province.

In an ideal world, this study would have looked at the different elements of the nutrition program, analyzed which were most successful in improving nutrition status, and then tried to relate their performance to how they were managed. However, because the various elements of Thailand's multi-sectoral nutrition program were implemented simultaneously, it is impossible to determine which elements made the most difference to malnutrition--and hence it is impossible to draw conclusions about what worked best managerially, based on impact analysis. On the other hand, there is sometimes data indicating poor implementation quality, suggesting that a particular management strategy may have been problematic. Most often, we have had to make qualitative judgements about what worked and what did not, and why. These judgements generally reflect a consensus between the authors and the key informants interviewed. Judgements are signalled in the text by the use of qualifiers such as 'seems to have been', or 'those involved with the program believe that....'.

Drawing conclusions about what lessons from the Thai experience may be applicable to other countries is even more difficult than judging what worked in Thailand, and why. Given the differences between countries in political and administrative systems, in cultures and traditions, and in levels of capacity and

commitment, what may be transferable and what may not be is a matter of speculation as much as judgement. To signal the difference between consensus judgements about what happened in Thailand and why, and speculations about potential lessons learned, we have presented the latter in separate sections at the end of each chapter, headed 'Discussion and Implications'.

C. EVOLUTION OF THE NATIONAL NUTRITION PROGRAM: AN OVERVIEW

Thailand's nutrition program has evolved through four main phases.

1. *Pilot projects.* Malnutrition was acknowledged as a problem in Thailand's first and second National Economic and Social Development Plans, which ran from 1962 to 1971. During this period, the most systematic nutrition intervention was a pilot Applied Nutrition Program implemented in part of one province of the north east, Thailand's poorest region. In line with the thinking in international nutrition at the time, this project mainly focused on the growing and consumption of protein-rich foods. But it did foreshadow the future in one important way, by emphasizing the need for cooperation between the agriculture, health, education and community development sectors in tackling malnutrition.

2. *Commitment to a national program.* During the third national development plan period (1972-6), national food and nutrition policy guidelines were developed, and by 1976 a first National Food and Nutrition Plan (NFNP) had been drawn up. This was financed as part of the fourth National Economic and Social Development Plan (1977-81). This first NFNP formally adopted a multi-sectoral approach to improving nutrition, emphasizing not only improvement of the food supply, but also health care and hygiene, nutrition education, and broader economic development programs for the poor. The Plan was targeted on pregnant women and children under five and to a lesser extent school-age children, as well as on economically disadvantaged groups. Regionally, there was a heavy concentration on the poor north east of the country. Targeting of high risk groups, whether defined by age or economic disadvantage, has been another consistent feature of the Thai nutrition program, in addition to the multi-sectoral approach.

Specific activities financed by the first NFNP included

- health, nutrition and family planning education through the health center system
- provision of locally produced food supplements to malnourished children
- integration of nutrition into the Ministry of Agriculture's extension programs
- training in nutrition for the community development workers, youth groups and day care center workers of the Ministry of the Interior
- nutrition education in the schools, together with some pilot school feeding programs.

3. *Outreach, community involvement and poverty alleviation.* The Government felt that the first NFNP had been unsatisfactory in several ways: inadequate outreach had meant that coverage of the target groups was limited; the top down approach to service delivery had done little to involve communities in improving their own situation; and insufficient resources had been put into poverty alleviation to make a real difference. The fifth national development plan (1982-86), and the second NFNP financed as part of it, set out to remedy these problems.

Thailand was one of the first countries to implement the concept of primary health care adopted at the 1978 Alma Ata conference. The primary health care approach had been piloted on a gradually increasing scale during the first NFNP period, but it was during the second NFNP period (1982-6) that the village

health volunteer scheme was massively expanded. By midway through the sixth plan, in 1989, more than half a million volunteers had been trained, giving the scheme almost universal outreach in the rural areas. As part of a broader package of health services, volunteers were responsible for organizing growth monitoring for children under five, nutrition education for parents, and the community-based production of supplementary foods for malnourished children. The ethos which was instilled as part of the primary health care movement was that nutrition was a family and community responsibility, and not just the Government's.

But although health led the nutrition program in terms of the extent of its outreach in the villages, the fundamental assumption of the second NFNP was that malnutrition was a symptom of poverty, and therefore that a multi-sectoral attack on poverty was needed to deal with malnutrition. The attack on poverty was reflected in a new national Rural Development Plan to which the Government was strongly committed. On top of that, a Poverty Alleviation Program provided additional funding, targeted on 288 disadvantaged districts and subdistricts in 38 of the poorer provinces in the north, north-east and south--approximately 40% of the total number of districts and half the number of provinces in the country. The Rural Development Plan and the Poverty Alleviation Program funded a wide range of programs, including

- provision of basic primary health and nutrition services
- provision of latrines and clean water¹
- a literacy program
- agricultural production projects
- village development projects, such as the creation of fishponds or the development of water sources
- employment schemes during the dry season in disadvantaged, non-irrigated areas.

In this context, it is difficult to delineate what the national nutrition program was, either conceptually or in terms of investments financed, because the rural development and poverty alleviation programs as a whole were seen, *inter alia*, as nutrition interventions.

4. *Improved targeting, and nutrition as part of quality of life.* Primary health care, rural development and poverty alleviation activities were continued along similar lines under the sixth national development plan (1987-1991). Within the primary health care approach, there was an effort to further increase community self-reliance through community financing. In the poverty alleviation program, new procedures were introduced to target financial support more tightly onto needy villages, not just needy districts and sub-districts. Intensive government support was targeted on about 10% of Thailand's villages, which lacked four or five basic needs such as adequate roads, cultivable land, health or sanitation; an intermediate group of about two thirds of villages received some additional government inputs; while the private sector was expected to be mainly responsible for development in about 20% of villages defined as advanced.

The overall objective of the sixth national plan was to improve the quality of life. The main way this was to be achieved at the community level was through the Basic Minimum Needs (BMN) approach. In this

¹ Thailand is famous for its water jar program, in which every rural household stores enough rainwater in the monsoon season in 1.5-2 thousand liter jars to provide clean drinking water throughout the year. Widespread availability of clean water helps to explain the low prevalence of intestinal parasites in Thailand, which must have significantly helped to improve nutrition.

approach, which is still in use in villages throughout Thailand today, quality of life is measured by 32 indicators in the following eight groups--in which nutrition comes first:

- i. Adequate food and nutrition
- ii. Proper housing and environment
- iii. Adequate basic health and education services
- iv. Security and safety of life and properties
- v. Efficiency in food production by the family
- vi. Family planning
- vii. People participation in community development
- viii. Spiritual or ethical development.

BMN was designed not just as a systematic approach to balanced, multi-sectoral development, but as a way to increase communities' control over and responsibility for their own development. The intention is for communities to assess their own needs using the BMN indicators; to draw up a development plan to meet them, with government funding to match community financing of priority activities; and for communities to be involved in monitoring and managing implementation of the plan. Progress in meeting these objectives has been uneven (and is discussed in more detail in Chapter II); but there is little question that the BMN approach has helped to consolidate nutrition's position as being at the heart of development in Thailand, both at the national policy-making level and in the eyes of village communities.

II. MANAGING THE FIELD PROGRAM

During the 1970s and 1980s, three main government departments developed outreach services related to nutrition at the village level:

- the Ministry of Public Health (MOPH), whose rural health centers supported a network of health and nutrition volunteers
- the Ministry of Agriculture and Cooperatives, whose extension agents supported volunteer housewife groups, and provided funds for small income generation projects
- the Department of Community Development under the Ministry of Interior, which supported a network of Community Development Volunteers, and also provided funds for income generation.

In addition to these new services, the already existing cadre of teachers was made responsible for nutrition education in village schools.

It is not feasible in this study to go into detail on the management of each of these programs at the field level. This chapter therefore focuses on the operation of the volunteer scheme run by the MOPH, as the one primarily responsible for the 'direct' nutrition interventions of growth monitoring and promotion (GMP) and food supplementation.

A. STAFFING AND JOB DESIGN

The Volunteers

From the outset, Thailand's health volunteers worked on nutrition too, since good nutritional care was seen as an inseparable part of good health care. There were two types of health/nutrition volunteer:

- (i) Village Health Communicators, whose job was to disseminate health and nutrition information, and
- (ii) Village Health Volunteers, who had a wider range of responsibilities, including the treatment of minor illnesses.

On average, one Village Health Communicator was recruited for every 10 households, and one Village Health Volunteer for every 100-200 households². 80% of the volunteers were women.

The staff of the local health center were responsible for informing villagers about the aims of the primary health care program, and seeking their participation. Health center staff then worked with the villagers to select the volunteers, according to five criteria:

- literacy
- being resident (defined as living and working) in the village
- being interested in health matters
- being willing to help fellow villagers without pay
- being someone whom local people turned to for advice.

Particular attention was paid to the last of these criteria, through the application of a 'simplified sociometric method' for selecting volunteers, which was applied in two parts. First, local health center staff were supposed to administer a questionnaire to each family in the village, asking 'who is the person in this cluster that you go to for advice most often and whom you respect?' Second, the people identified through the questionnaire were to be located on a village map, with arrows identifying the villagers with whom they most often interacted. The numbers of arrows were to be counted to identify those who were at the center of communication in a particular cluster. These would be the shortlist of potential volunteers, who would be approached to discuss their interest and willingness to be a Village Health Communicator or Volunteer. Details of the sociometric process are given in Appendix E.

In practice, volunteers were recruited in extremely large numbers over a short period. From discussion with a variety of people involved with the field program at that time, it is clear that this sociometric method was not always applied as intended. Nevertheless, most of the chosen volunteers were already good communicators, were well respected, and lived near the villagers they were to help. The emphasis on these factors, plus the fact that villagers were consulted about who best met these criteria, must have contributed greatly to the acceptability and effectiveness of the volunteers.

Job Design

Health volunteers were supposed to work on eight basic elements of primary health care (Nondasuta, 1988):

- Education concerning prevailing health problems and the methods of preventing and controlling them
- promotion of food supply and proper nutrition
- maternal and child health care, including family planning
- adequacy of safe water supply and basic sanitation
- immunization against major infectious diseases
- prevention and control of locally endemic diseases
- appropriate treatment of common diseases and injuries
- provision of basic household drugs for the community.

² About 10 years ago, the distinction between the different types of volunteers was ended, with Village Health Communicators taking on the minor illness treatment role of Village Health Volunteers.

Volunteers were encouraged to work with the local community to define which health-related problems were worst in their area, and to focus the majority of their time on these as a priority. Nevertheless, MOPH saw nutrition as being of key importance, and health center personnel were instructed to see that growth promotion and supplementary feeding programs, among other nutrition-related interventions, were carried out in every village. While the volunteers had a wide range of functions, it seems that their workload was reasonable, because of the high ratio of volunteers to population. For example, a Village Health Communicator covering 10 households would have had no more than 5-10 children under five to monitor, a quite feasible number even on a part time basis.

Growth monitoring and promotion (GMP) was (and still is) carried out on one day every month--although on different days in different villages under a single health center, to facilitate supervision by the health center staff. All children under five are weighed and charted quarterly, and children with malnutrition monthly. Where there is a malnutrition problem, volunteers are supposed to analyze together with parents whether the cause is food insecurity, ignorance, or lack of care, and then decide how to intervene appropriately. The aim is for parents to learn about the causes of malnutrition, and gradually take responsibility for diagnosing and dealing with malnutrition themselves, with support from government programs only if necessary.

Senior MOPH staff involved with the field program in the 1980s agree that in practice, as with most other growth promotion programs around the world, weighing and charting were done much better than analysis and counselling. Evaluation studies (e.g. MOPH, 1992) confirm this. In response, a project was developed by MOPH in the late 1980s to improve growth promotion. A 1994 evaluation of this project, reported in Winichagoon, 1997, showed that child refusals to be weighed reduced from a baseline of 31% to 8%, the proportion of accurate weighings went up from 79% to 92%, and 84% of caretakers were informed of the child's weight. However, an analysis of the causes of malnutrition was still only done in the case of 46% of caretakers, and nutrition education was given to only 64% of caretakers.

These baseline measures of growth monitoring quality prior to this GMP Improvement Project suggest that in the 1980s, the quality of the GMP program was quite poor, especially in terms of counselling based on an analysis of the causes of malnutrition. And the facts that a) the GMP improvement project was carried out in only 78 villages, and b) even in the project area, analysis and nutrition education remained fairly unsatisfactory, together suggest that in much of the country, quality must have remained poor, or at least very uneven, into the 1990s. Of course, there were efforts to improve GMP outside the GMP improvement project area also, but it seems reasonable to assume that efforts to improve GMP through the routine training and supervision system would on the whole have been less successful than efforts through a special project.

Indirect evidence that the GMP program has had limited impact on behavioral change, at least in some important respects, comes from the data on Thailand's infant feeding practices. Winichagoon (1997) reports a 1994 survey by MOPH which showed that only 3.7% of infants were exclusively breastfed, and a 1996 MOPH survey which showed that, of children two months old or less, more than 35% were receiving infant formula, over 21% sweetened condensed milk, and nearly 14% were being fed rice in addition to breast milk. These figures support the conclusion that nutrition education may not have been

particularly successful, and they are worrying, coming as they do after many years of effort to change feeding behaviors through GMP³.

The GMP program has had problems of coverage as well as quality. Several reviewers have noted that the number of children weighed in the program, while increasing impressively during the 1980s, has always been significantly less than the number estimated to be in the country. One valid reason for this is if the nutrition program is missing out children who are too well off to need the service. However, data from independent sample surveys show much more malnutrition than the data reported from the GMP program. For example, a comparison of the growth monitoring data and the more accurate national sample survey data made by Winichagoon (1997), shows that in 1986 the prevalence of moderate malnutrition was underestimated by the growth monitoring data by between 35% and 72% in different regions of the country, and the prevalence of severe malnutrition by between 25% and 89%.

By 1995, when it might have been hoped that the coverage of growth monitoring would have improved, the differences between growth monitoring and sample survey data were still larger. Second and third degree malnutrition was 0.6% according to growth monitoring data, but was 2.2%, over three times as much, according to sample survey data (see Appendix B). This indicates that the GMP program has been missing many malnourished children who need access to services, as well as well nourished children who don't.

Supplementary feeding was part of the Thai nutrition program from the outset of primary health care. The initial concept was for communities rather than the state to be responsible for providing the supplementary food requirements of pre-schoolers. Villages were encouraged to produce supplementary foods themselves, using simple technologies for grinding rice, legume and sesame. The Government developed recipes for a nutritious supplement, and participating villages were given a grinding machine and seed money for a small revolving fund. The idea was for them to sell enough of the product to local families, or to other villages not producing supplementary food, to cover costs and make a small profit. Part of the profit was to be used to finance free supplementary food for indigent parents of malnourished children.

It seems there has been no systematic evaluation of the implementation of this supplementary feeding program. Making even a qualitative assessment of it is complicated by the fact that implementation was left to local communities, and varied widely. From discussion with informants involved with the program in the 1980s, it is clear that many villages made sure that children in poor malnourished families did get free access to supplements; but it is also clear that in many villages the supplementary feeding scheme did not go so well. Much depended on the extent of interest and leadership of the Village Development Committee, which differed from place to place. It appears that a large proportion of villages did not implement the scheme for more than a year or two, and some not at all. One reason for declining interest in the scheme was that the recommended supplement needed a lot of cooking and was not very tasty.

³ These figures also suggest some important research questions. If exclusive breast-feeding is as essential as is currently believed, how do Thailand's poor infant feeding data square with its good nutrition data? What is the correlation between non-exclusive breast-feeding and malnutrition in Thailand? Does feeding certain types of complementary food early on not in fact lead to malnutrition? Does the general availability of clean water mitigate the ill effects of non-exclusive breast-feeding?

This approach to supplementary feeding was replaced by a food coupon scheme directed at poor families with malnourished children. However, this scheme only lasted for about two years, and it seems that the budget for it was very limited. This scheme in turn has been replaced by one for providing soya bean milk as a supplement, which is still being implemented. Staff in the field say that MOPH funding is again limited and the budget releases irregular; it has probably only had a significant effect where enterprising local health officers have managed to raise funds locally to supplement the supplementation scheme's budget.

In the absence of systematic evaluation of the various approaches to supplementary feeding tried out in Thailand, it is difficult to draw conclusions. However, their limited timeframes and variable implementation suggest that they were probably not major contributors to nutritional improvement at the general population level.

Health sector nutrition activities were not limited to the interventions of GMP and supplementary feeding. They also included the widespread use of well baby competitions, cooking demonstrations and educational and advocacy materials, to help promote nutrition awareness and behavioral change. Among other widely available materials, a poster campaign featuring two children, one thriving, one malnourished, and captioned 'Which would you like to have?' was used to reinforce the notion to be communicated through GMP, that mothers should feel concerned and ashamed if their children's growth fell below the curve on the chart.

B. COMMUNITY EMPOWERMENT

There are many degrees of community participation in nutrition programs. Only if a program achieves all of the following can it be said to be fully empowering:

- Making communities aware of the nutrition problem, and of the importance of nutrition action.
- Involving communities in diagnosing the type and extent of the problem.
- Involving communities in planning an appropriate response.
- Involving communities in financing nutrition activities.
- Involving communities in allocating nutrition program resources and managing implementation.

Thailand's nutrition program intended to achieve all of the above. This section reviews how far it succeeded. Unfortunately, there seems to have been no formal evaluation looking at empowerment, or of how it varied over time or in different parts of the country. What follows therefore has to be qualitative and impressionistic, based largely on the judgement of key informants.

Awareness Creation

One of the Thai nutrition program's greatest strengths was the way in which it created a national consensus about the importance of nutrition, and communicated this to all levels of society; how this was achieved is reviewed in some detail in Chapter III. At the community level, the GMP and BMN programs were the main vehicles for increasing community awareness, supplemented as noted above by educational campaigns through posters and the mass media. Quarterly monitoring of child growth and public posting of malnutrition status data on the village BMN information board (further discussed in the section on program monitoring below) ensured that everyone in the village knew the extent of the local malnutrition problem, and communicated to all that nutrition was a basic need which the village needed to meet⁴.

At the community level, therefore, the GMP program was a success in terms of raising awareness and galvanizing commitment and action. It seems important to distinguish these key benefits of the GMP program at the community level from its often poor quality, in terms of inadequate counselling and missing malnourished children, at the individual level. Communities were bombarded with such a wide range of nutrition-related activities, including GMP, BMN, supplementary feeding, well baby shows, cooking demonstrations, agricultural extension, food production and community development activities that nutrition could not be forgotten as a core development activity. And even when specific interventions were of questionable effectiveness--supplementary feeding, for example--the variety of approaches tried out at least helped to ensure that nutrition remained at the forefront of attention.

Problem Diagnosis, Planning and Financing

The involvement of communities in diagnosing, planning and financing nutrition interventions was also very substantial in Thailand. Instead of the nutrition problem being defined through a survey carried out by outsiders, communities did their own survey through the health volunteers' growth monitoring program--and the careful choice of volunteers who were key communicators in their village cluster ensured that everyone was informed and involved. With the advent of the BMN system a few years into the PEM program, the survey data collected by the community began to be systematically formatted and displayed in a public place.

⁴ Publicly displayed community growth charts were also introduced as a device for reinforcing public awareness. But, as with several other nutrition program activities, they were apparently short-lived; the budget for them was discontinued after a couple of years.

From 1982, Village Development Committees were set up in each village to prioritize rural development needs and plan development activities, based on inputs from the BMN process and from other village level committees⁵. In theory, it was the Village Development Committee, with advice from the local level staff from relevant government departments, which was supposed to decide on the relative priority of nutrition among other activities; in practice, the decision to carry out activities in nutrition was driven not just by local felt needs, but by nutrition's central place in the BMN, and (see below) by the availability of line agency funds for nutrition activities.

Another feature of the Thai rural development program was the importance which all sectors attached to seeking community financial participation in development schemes; the ubiquitous water jars, for instance, were not provided free by the government, but part-financed by the village, just as the initial supplementary feeding program was not designed as a hand-out from government, but financed on a revolving fund basis.

This emphasis on local financial contributions could have its negative side. Some villages chose not to participate in certain schemes which could have benefited the poor, because they were uncertain whether loan funds could be paid back or revolving funds generated. An open question is how far community-financed development proved regressive in benefiting mainly--or at least first--those with greater ability to pay rather than the poor who most needed them. At least in the case of the supplementary feeding program, there was no evaluation of this. But from an empowerment point of view, these actual or potential disadvantages were offset by the fact that community financing gave communities increased control over local development planning, and ensured that only schemes which local people felt were important and well designed were implemented.

Resource Allocation and Program Management

It appears that local communities were much less involved in decisions on how resources were allocated between villages and between sectoral development activities, than they were in deciding, after the budget was allocated, (i) whether to provide local matching funds and implement it; and (ii) who in the community should benefit. BMN data were supposed to be the basis for deciding which community should get what resources for what programs. But in practice, it appears that the length of the national budget cycle meant that decisions had to be taken by the central government about resource allocations by geographic area and sector for a given year before the results of the BMN were available. Resources were then passed down to provinces, districts and sub-districts via the budgets of the line agencies, without local government or community control over the amount of resources allocated to a given sector or development program in their area.

As has often been noted, full community empowerment depends on a high degree of decentralization, including a substantial measure of financial devolution. Significant financial devolution to local government was only initiated in Thailand subsequent to the 1997 constitutional reform, and the strong managerial role for local governments which this reform also mandated is only now being implemented, through a gradual process of capacity development. The flow of funds through line agencies has effectively therefore meant continued centralized control over inter-sectoral resource allocation for nutrition.

⁵ There are committees for everything from Community Development, Housewives, Savings, Livestock Development, Fisheries and Sanitation down to Toothbrush Use. The numbers and level of activity of volunteer committees at the village level reflect the high degree of community involvement in all types of rural development in Thailand; nutrition was not unique in this respect.

The role of local communities in managing the implementation of local projects once funds had been allocated seems to have been very variable. In theory, the field agents of all government departments concerned with the rural development program were supposed to act only as supporters and facilitators to the Village Development Committees, program or sectoral development committees and volunteers. Whether this happened depended on the level of leadership in the Village Development Committee; for every Committee which took charge of local development programs, there were probably many more where the local offices of government departments continued to take the lead in program management.

C. TRAINING, SUPERVISION AND REFERRAL

Training

Volunteers were trained for very brief periods. Village Health Volunteers had 15 days of integrated pre-service training, covering the full range of primary health care duties; and Village Health Communicators had just five days, of which less than a day was devoted to nutrition, even though Village Health Communicators were to be the main front-line workers implementing GMP. Insufficient training seems to have been the single biggest cause of poor quality nutrition assessment and counselling. Initial pre-service training was often rushed as well as brief, partly because the primary health care program expanded so fast, and partly because training budgets were often released late in the financial year, so that the year's training load had to be compressed into a short period.

Another training-related factor affecting the quality of GMP was that the methodology for analyzing causation of malnutrition at the village level (Dr. Chawalit's innovative division of causation into food insecurity, ignorance and lack of care) was only developed some years after the primary health care system was put into place. It therefore missed the boat in terms of instilling a 'triple A approach' from the outset of the program, and was unevenly implemented even afterwards. A good in-service training program could have compensated for the brevity of pre-service training and facilitated the adoption of triple A, but senior MOPH managers who were in the field in the 1980s and 1990s agree that refresher training was also weak. This was because

- the huge numbers of volunteers made in-service training of the whole cadre a daunting proposition, and training budgets were extremely limited
- there was no systematic process of training needs assessment, which could have picked up weaknesses in performance and led to the design of problem-specific training interventions
- there was no professional trainer cadre, all training being handled by the existing staff of the local health centers, who were burdened with many other tasks.

Supervision

Most volunteers therefore did not receive more than a day or two a year of formal refresher training, and in-service training was mostly provided through routine supervision, either at monthly health center meetings, or in the course of field supervision visits. In the field, the technical supervision of volunteers was carried out by the two or three staff of the local health center. This was at the Tambon or sub-district, which covers on average a population of about 4,500, though with a considerable range (3-8,000). Volunteers were also responsible to the Village Development Committees, though in practice they looked mainly to the health center staff for guidance. At higher levels of the system, the technical supervision of

health centers was from the Amper or district hospital, and their administrative supervision from the district health office: districts have a population of about 60,000, again with a wide range (50-120,000).

Field supervision suffered from two different kinds of constraints. First, supervisors themselves were in general poorly supported: there was no cadre of specialist trainers to give them in-service training, and little on the job training was provided by supervisors from more senior levels. One study (Uttamavetin et al, 1990) showed that 78% of sub-district health personnel received less than two supervision visits a year, and 40% had never received any specific supervision on nutrition.

Second, the number of volunteers which health center personnel had to supervise made it hard for them to provide quality support. In a typical sub-district with 4,000-5,000 people, for example, each health center would have been responsible for 70-100 volunteers, giving a supervisory ratio in the range of 1:20 to 1:40. Given that health center supervisors were also responsible for clinic-based out-patient care, and for a wide range of health as well nutrition duties, only a minority of their time was available for field supervision of nutrition. Under these circumstances, it is unsurprising if GMP, which requires intensive person-to-person support of front line workers to be effective, was often of low quality.

The general problem of supervision ratios was exacerbated in many areas by the fact that most health centers were staffed on the basis of a standard allocation of personnel per sub-district. Given the wide range in sub-district populations, this could mean that supervisors in a large sub-district had two or three times as many volunteers to support as those in a small sub-district. This problem could be further compounded in hilly areas with large numbers of hard to reach villages (villages in Thailand are smaller than in many other Asian countries, having populations averaging around 700, but going as low as 3-400). In particular, hill tribes, whose nutritional status was much worse than average, often had much less intensive service and supervision coverage than average.

Referral

The nutrition referral system seems to have worked well, at least in terms of identifying children in need, and making sure that they saw a doctor. The referral process began at the monthly weighing days, at which a staff member from the local health center was present to check the health status of each child. Children with second or third degree malnutrition were referred to the health center, where a) malnourished children were divided into chronic and non-chronic cases and treated accordingly, b) records were kept on each malnutrition case, and c) needy cases were referred up to the district hospital. Referral sheets were kept at both the district hospital and the sub-district health center, so that information about diagnosis and necessary follow-up was passed down the system.

Cases of 'failure to thrive' are notoriously difficult to diagnose and treat, because the origin of the problem often lies outside the domain of health, and because doctors at the referral level often lack detailed knowledge of family situations. That the first line of referral was through health center workers examining malnourished children in situ in their village social context was therefore a strength of the Thai system. There seems to have been little evaluation of the effectiveness of the treatment of cases referred for clinical examination. That good analysis and assessment of the origins of malnutrition was often not carried out at the referral level is suggested by the frequency with which the 'cause of malnutrition' column in health center records was reportedly filled in with the words 'child is not eating much'; the triple A process was apparently not institutionalized among professional health workers any more than it was among the volunteers.

D. PROGRAM MONITORING AND EVALUATION

Monitoring

The great strength of Thailand's nutrition surveillance system, in contrast to many other national nutrition programs, is that it generated data for use at the local level, in addition to feeding the data needs of higher levels. This was an important element of the community empowerment process. The key indicators relating to nutrition which were used at the community level (all 32 of the indicators of the BMN system are given in Appendix F) were

- proper nutrition surveillance from birth to five years, and amount of moderate and severe malnutrition
- school children receiving adequate food for nutritional requirements
- pregnant women receiving adequate and proper food, and delivery of newborn babies with birth-weight not less than 3000 grams.

In practice, there were two kinds of difficulty with monitoring based on these indicators. First, some were hard to measure, particularly those relating to the food intake of school children and pregnant women, raising questions about their usefulness at the local level for program management purposes. Second, with regard to under-five nutrition, the monitoring system failed to track a significant number of malnourished children, as we have already seen. In some areas, this was a consequence of large scale seasonal migration; mothers and children moving between jurisdictions often fell between the cracks of the monthly weighing system. More generally, the problem was that the monitoring system focused more on children brought for weighing by their mothers, with inadequate follow-up of absentees. A regular quarterly or six-monthly census of village children, carried out by the volunteers, could have helped to resolve this 'denominator' problem.

Information from the BMN system was fed up to health centers, district hospitals, provincial health offices and the MOPH on a regular basis--indeed, several senior MOPH managers commented that, as malnutrition levels fell, it was MOPH's demand for data to 'feed the system' which sustained the growth monitoring program, more than the demand from local communities! However, as in many other countries, it seems that the collection and reporting of nutrition data was better than its use for management purposes. More could have been done to distinguish poor performing areas and give them special attention on a 'management by exception' basis.

Evaluation

Many reviews of international nutrition programs have identified evaluation as a special weakness, both at the country level (e.g. Mason, 2000; Gillespie et al, 2001), and among the development assistance agencies (e.g. World Bank, 1999; World Bank, 2001). Seen in this context, Thailand's nutrition evaluation efforts were better than average, although not outstanding. Achievements included the setting up of an independent nutrition status sample survey system, carried out by the Faculty of Public Health of Mahidol university; and the many smaller scale evaluation studies carried out by the MOPH (e.g. the evaluation of the growth monitoring program discussed above) and by the Nutrition Institute of Mahidol University (whose role is discussed in Chapter III).

There were also notable gaps in program evaluation--for example, the failure to evaluate the food supplementation programs; or to evaluate what was happening in nutrition in the urban areas (an issue further discussed in Chapter V). And with the benefit of hindsight, the Thai nutrition program could also have benefited from more detailed evaluation of areas and population groups which were lagging

nutritionally, linked to the design of special programs for them; as well as from more attention to qualitative evaluation and to process documentation, as a complement to quantitative sample survey techniques. But these are gaps which persist today in nutrition evaluation almost everywhere in the world, and are not special to Thailand.

During the 1980s, Thailand was in a hurry to get its national nutrition program off the ground; the preoccupation was more with expansion to national coverage, than with evaluation and quality control. There was more attention to these factors during the 1990s. Compared to many other countries, Thailand's MOPH seems to have been open to evaluation; concerned to improve quality; and prepared to be self-critical. Rather than the lack of an evaluation culture, the issue has perhaps been an inadequate response to evaluation findings in terms of program redesign. Thailand's GMP program, for example, has continued basically unchanged, despite evaluation findings about inadequate coverage and poor quality counseling which were well known domestically, if not internationally.

Discussion and Implications

Thailand's community nutrition program was therefore a success, but it did not work as well in the field as some studies--which focused more on what was intended to happen than what actually did--have suggested. This section summarizes which elements of the program worked best, and which less well; and then considers the question of replicability in other countries--a question which is returned to in Chapter III in the context of how the nutrition sector as a whole was managed.

Outstanding Features

The outstanding features of the program were arguably

- the mobilization and motivation of hundreds of thousands of volunteers
- the use of BMN as a community-level assessment and monitoring tool
- the close working relationship between nutrition and health
- the emphasis on community self-reliance
- the high degree of community empowerment.

The *volunteer* system was effective because of

- a successful program to raise awareness about malnutrition and to build commitment to action, which preceded the mobilization of the volunteers, and which is discussed in detail in Chapter III
- the recruitment system for volunteers, which ensured that they would be acceptable and influential in their local community
- the motivation system for volunteers, which was based on local recognition rather than tangible financial rewards
- reasonable workloads of only 10-20 households per volunteer, which made it possible for part time workers to be effective.

The key features of Thailand's highly innovative *BMN* system were that

- communities collected all data, rather than outsiders
- data were posted in a public place, for local use, as well as transmitted to higher levels
- data were collected on a range of basic indicators, thus enabling communities to see nutrition in the context of the village's development needs more broadly
- data were used by village development committees to prioritize local development activities, and choose beneficiaries.

Key features of the *relationship between nutrition and health* were

- having volunteers work on both health and nutrition, which avoided the problems of worker cooperation which have plagued other programs
- making health check-ups at field growth monitoring sessions the first line of health referral, which avoided the disconnect between nutrition workers and health referral centers which is also common in other programs.

With regard to *community self-reliance*, key features were

- the use of volunteers rather than paid workers to spread awareness and deliver some essential services
- the requirement that beneficiary communities and/or individuals had to contribute financially to most interventions
- the involvement of a wide range of local stake-holders (e.g. local businessmen to donate awards for outstanding performance in nutrition).

With regard to *community empowerment*, the key features were community participation in

- assessing the extent of the local malnutrition problem
- deciding which nutrition interventions to implement
- selecting beneficiaries
- implementing interventions
- monitoring progress.

Less Successful Activities

Thailand's performance in *growth promotion* needs to be seen in both positive and negative perspectives. On the one hand, GMP is extremely difficult; few other countries have implemented it at scale as well as Thailand did, or sustained a volunteer-based growth monitoring system over such a long period. On the other hand, the large numbers of malnourished children missed by the system and the poor quality of nutrition assessment and counseling together suggest that Thailand's GMP model is not one which should simply be picked up and replicated without improvement.

It seems likely that the coverage problem would have been easier and cheaper to remedy than the quality problem. If the MOPH had paid as much attention to the data coming from the independent sample surveys as to the data coming from the growth monitoring system itself, the coverage problem could have been identified as early as 1987. Introduction of regular censuses of mothers and children by the volunteers (whose high ratio to clients would have made the additional workload quite feasible) could have helped to pinpoint missed clients.

Improvement in the quality of GMP would not have been so easy to achieve. MOPH's community nutrition program was financed on a shoestring. It piggy-backed on the primary health care program, and there were no special resources or staff for nutrition supervision or training. It seems unlikely that health center staff would have had enough time to train the large numbers of volunteers in high quality triple A and nutrition counseling, even if they themselves had had adequate training in these skills. To adequately improve GMP quality, either supervision ratios would have had to have been substantially increased, or a special cadre of trainers would have had to be created, or both.

The absence of evaluation information on *food supplementation* makes it impossible to estimate the coverage of this intervention, let alone its impact. Because this intervention was so unevenly implemented, and its design changed constantly, we can only draw the conclusion that there is no evidence suggesting that Thailand's approach to supplementation was effective enough to be a model for other countries.

Information on the intensity and coverage of *training and supervision* is much better, and indicates that both were weak; this is the main explanation for the uneven quality of GMP. Concerns include

- the under-financing of both training and supervision in the field, and in particular the lack of a formal refresher training system for volunteers
- the absence of a system for training needs assessment
- the absence of a professional cadre of trainers
- the lack of action to redesign the training and supervision system even after evaluation had shown the poor quality of GMP.

Replicability

Based on the above weaknesses in training and supervision, we believe that design options based on much more intensive support of volunteers⁶ should be considered prior to attempts to export the Thai GMP model. These options would have substantial additional cost and capacity development implications. We believe that it is an important operational research priority for other countries to determine what levels of training and supervision are required to support a quality volunteer-based system in their environment, and what it would cost.

Many reviewers have noted that the nature of Thai society and culture facilitated the success of volunteerism and community empowerment in the rural development program. Thailand--at least in the late 1970s, and in the villages--was without the extremes of inequality in income and class or caste which have marked society in, say, the Philippines or India. In the absence of elites with sharply different interests from the poor, it was easier to develop a local level consensus on development programs that would benefit the worst off. Buddhism, with its emphasis on compassion and kindness, ensured that basic needs programs such as nutrition had ready acceptance at all levels of society. The Buddhist tradition of alms-giving, and the Buddhist belief that help to others was a merit-making spiritual activity, meant that volunteerism and community service did not need to be inculcated, but were age-old features of village society.

The high level of literacy in Thailand made it possible for volunteers to carry out GMP with a minimal amount of training. In addition, the relatively independent role of women--women traditionally manage the money in Thai households, for example--was also important to the success of the volunteer movement;

⁶ It should be noted, however, that spending much more on training and supervision was probably not an option in Thailand during the first ten years of the primary health care program. Nutrition would probably not have been seen as so important as to justify more intensive training and supervision than other primary health care activities; and even if it had been, the budget would probably not have been affordable at a time when Thailand was simultaneously expanding so many other rural development programs.

women have a strong comparative advantage over men in providing maternal and child health and nutrition education, because of their ready access to and credibility with mothers. The traditional status of women made it socially acceptable for the majority of volunteers to be women, in contrast, for example, to the Village Health Guide movement in India, which was captured by traditionally dominant men and had little impact on maternal and child health. And finally, the level of poverty in Thailand was not so extreme as to prevent volunteers from putting enough time into growth promotion to make it a success.

We believe that volunteer-based systems have great advantages, in terms of avoiding huge salary expenditures, and even more importantly in terms of encouraging the spirit of self-reliance, which is key to community empowerment. At the same time, we are hesitant to advocate volunteerism as a universal approach, based on the Thai model and the Thai experience. Thailand's success with volunteerism was related to high pre-existing levels of literacy and a cultural tradition of community service, which made it possible to expand the volunteer movement fast and with minimal community preparation. The experience in less favorable environments is that community preparation can take up to eighteen months, and requires skills often only found in a limited number of non-government organizations. As with training and supervision, we believe that it is an important operational research priority for other countries to determine what human resources are required to launch a quality volunteer-based system in their environment, and what it would cost.

We also believe that volunteerism, even with a higher intensity of support, may not be the best approach to nutrition outreach in all environments. If it is true that volunteerism worked in Thailand because a) it was possible to create strong commitment at all levels of Thai society to eliminating malnutrition; b) there was a cultural tradition of mutual help at the community level; c) village society was relatively homogeneous; and d) rural women were literate and able to devote sufficient time to community service, then we would hypothesize that paying workers to do nutrition outreach might work better where

- commitment to poverty alleviation is not strong enough, either at the national or local level, to encourage a spirit of volunteerism
- there are very low levels of education among potential volunteers; and
- women have little time to devote to community service, either because they are extremely poor, or because they have full time formal sector jobs.

In this context, the overall lesson that we believe should be drawn from Thailand's highly successful field nutrition program is not that Thailand did certain things, and therefore that they should automatically be replicated. Instead, it is that Thailand was successful because it chose a management strategy which fitted its environment. What should be replicated is the process of matching strategy to environment, rather than each element of the Thai strategy.

III. MANAGING NUTRITION AT THE SECTORAL LEVEL

Analysis of nutrition management at the sectoral level has often been preoccupied with the structural question of where in the government is the best 'institutional home' for nutrition, given its multi-sectoral nature. But, as the World Bank's issues paper on management and capacity development (Heaver, 2001) argues, management *processes* are usually as important as management *structures*, and which structures and processes are best is likely to vary depending on the administrative, cultural, and political context of the country. The issue is not what is the right location, so much as what is the best 'fit' of strategy,

structure and process to the environmental context. Taking this broad, strategic management approach, this chapter explores the following questions:

- How did Thailand build understanding about the nutrition problem, and commitment to action?
- How did Thailand coordinate and manage the nutrition sector, and build technical capacity in nutrition, once committed?
- What were the relative roles of individuals and institutions in the strategies, processes and structures used?
- What was peculiar to the Thai context, and what may be transferable to other countries?

A. BUILDING UNDERSTANDING AND COMMITMENT

Defining The Problem

Thailand's first national nutrition survey was carried out in 1960. It showed that malnutrition was a serious and widespread problem, affecting around half of children under five. But it was not only the scale of the problem, but policy-makers' perceptions about what caused malnutrition, which determined the way the nutrition program developed. Three Thais played a major role in shaping these perceptions during the late 1960s and 1970s. Dr. Amorn Bhummarat was an agricultural researcher, who became Director of the Food Research Institute at Kasetsart, the agricultural university; Dr. Aree Valyasevi was Dean of the Faculty of Medicine at Mahidol university's teaching hospital, Thailand's leading medical school; and Dr. Amorn Nondasuta, another doctor, became Director of MOPH's Nutrition Division and later the Ministry's Permanent Secretary.

These three men were Thailand's most influential nutrition specialists. Based on their field experience, and in particular on what they learned in the 1960s from the Nong Hai project--the applied nutrition program in Thailand's north east region (see Chapter I)--they defined malnutrition to be the consequence of poverty, rather than as a disease. This definition had far-reaching implications, that malnutrition was not just a health sector problem, but a broader, cross-sectoral issue. Thailand's first high level national food and nutrition seminar was held in 1967. That its key participants were at Permanent Secretary level in the government reflected the seriousness with which the nutrition problem was seen. That the ministries represented at this high level included Health, Agriculture, Education and Interior, together with the General Secretary of the National Economic and Social Development Board (NESDB, Thailand's planning ministry), reflected this understanding about causation, and paved the way for a multi-sectoral effort.

From Concept To Investment

The 1967 seminar concluded that

- nutrition was crucial to the economic and social development of the country
- nutrition needed a conspicuous national policy, reflecting this importance
- a nutrition institute should be developed as a center of technical expertise and focal point for nutrition work in the government.

But it took nine years of consensus-building and development of national food and nutrition policy guidelines, to move from the decision in principle that something needed to be done, to agreement on the 1976 National Food and Nutrition Plan. And it was a further year before Mahidol University's Institute of Nutrition was founded, in 1977. What happened in the intervening period?

Dr. Aree and the two Amorns (who came to be known as 'the three As' of nutrition) were not just leading technical specialists and advisors, but also Thailand's initial nutrition 'policy entrepreneurs'. They

shared key characteristics: talent and breadth of vision; excellent qualifications from domestic and foreign universities; charisma, energy and commitment; and communications and political skills. They were effective as entrepreneurs both because of these qualities, and because of the systematic process they followed in identifying key stake-holders related to nutrition in Thailand, and in building their understanding of the issues and their commitment to action. From the start, they approached the development of the nutrition sector as an exercise in constituency- and consensus-building.

The initial target of their consensus-building activities was not the politicians--whose power, they recognized, was transient--but senior civil servants. In particular, they sought to build nutrition awareness in the NESDB, which was of key importance, because it controlled the allocation of resources to the different sectors. In the early 1970s, NESDB thought of nutrition as a social welfare expenditure. The single most important achievement of the policy entrepreneurs was to reorient this view to an understanding that nutrition was a poverty alleviation issue, and that spending on nutrition was an investment in national development, and not a welfare expenditure. This was achieved through several complementary approaches:

- Individual dialogue with key officials, organized through informal, personal channels.
- Sending key NESDB staff, along with senior officials from key line agencies (health, education, agriculture, interior) for overseas training in nutrition.
- Holding a large number of seminars on nutrition, in which consensus gradually developed through discussion.

It was through these seminars on nutrition, which involved staff from other nutrition related agencies as well as NESDB, that the policy entrepreneurs began to develop a network of 'friends of nutrition' within the civil service. The 'three As' were already well connected in the Ministries of Health and Agriculture, through their own professional backgrounds. It was through the nutrition seminars, and the inter-agency networking that resulted from them, that the Ministries of Education and Interior also began to be brought on board as stake-holders in nutrition, once NESDB had endorsed it as a multi-sectoral effort.

Whereas leading doctors elsewhere, by defining malnutrition as a medical problem, have often effectively marginalized it as a health sector issue, Drs. Aree and Amorn took the opposite approach, and helped to bring it center stage, as a core, cross-sectoral developmental problem. The fact that two of the three initial champions of nutrition in Thailand were doctors arguing that the skills and resources of the health sector were necessary but insufficient to combat malnutrition also made a political impact on other line agencies; health was not claiming nutrition as its turf, but asking for help.

The National Food and Nutrition Plan of 1976, which resulted from the consensus-building process, reflected a shared view among all key agencies about the seriousness of the malnutrition problem, the causes of malnutrition, and the best means of tackling it. It was a key document in that it was more than just a policy paper; it was an investment plan sanctioning substantial new program funds. It also embodied NESDB's recognition that, as a multi-sectoral program, nutrition could no longer be planned and budgeted as part of the health sector, as it had been in the past, but needed a plan and budget of its own. This gave nutrition separate standing and visibility, as well as funds.

But the Food and Nutrition Plan, despite its importance, was neither the start of commitment to nutrition in Thailand, nor the culmination of the consensus-building process. Rather, it was a mid-way point in this process. It was implemented, rather than remaining as a paper plan, partly because it was already the

product of solid understanding and commitment at the central government level; but it was also implemented because it was followed by a similarly systematic process of consensus-building among the general public and a broad range of government stake-holders in the provinces.

Widening The Consensus

Non-government organizations and the private sector were important contributors to the efforts made to build public awareness about malnutrition. Reports from the many small non-government organizations working in the north east of Thailand during the 1970s and 1980s helped to put a human face on the statistics about malnutrition. In particular, one report about children in the north east who were so hungry they were forced to eat earth was the inspiration for a much-repeated advertising spot on national television in the early 1980s, which was paid for by private sector sponsors.

The press was as influential as television in shaping opinion about malnutrition. The Prime Minister and the press corps were invited to the north of the country, to visit areas where goiter and cretinism were then endemic. The public began to feel a sense of outrage that half of the nation's children were malnourished, when the country as a whole was an exporter of food. And it was impressed on Thai opinion leaders, who aspired to match the economic growth of Japan and Korea, that this could not be done unless Thailand first dealt with the problem of malnutrition.

Commitment to nutrition was therefore built up first among civil service leaders and then among the public. Political leaders did not play a major role at the beginning. Their support for nutrition grew over time, both as a response to public concerns, and as they saw the nutrition program beginning to make an impact. More consistent and probably more important than the support of politicians was the support of the Royal Family, which has enormous respect at all levels of Thai society. The present King, who is known for his commitment to rural development, became a patron of the iodized salt movement. Crown Princess Sirindhorn, too, has sponsored rural development projects on a large scale, and has been a keen supporter of nutrition interventions as part of them.

By the time the focus of commitment-building moved from Bangkok to the provinces, there was already a ground-swell of public concern and interest in nutrition. As in Bangkok, a systematic process of awareness creation was undertaken among key civil servants. The lead in this was taken not by NESDB, which had been the prime mover at the national level, but by the Ministry of the Interior (MOI) and the provincial governors. In Thailand, the MOI wears two hats related to nutrition. It acts as a line development agency, with responsibility for community development, funds for income generation projects, and a large network of community development volunteers. Second, MOI is in charge of local government affairs, and hence responsible for fostering local government commitment to national development priorities of all kinds; for building local government institutional capacity; and for monitoring the performance of priority programs.

The Governors of Thailand's 76 provinces are not elected politicians, but appointees who report to the MOI. Two batches of seminars were held in the early 1980s to develop provincial Governors' understanding of the nutrition problem, and enlist their support. This support has been expressed through both formal and informal channels. In terms of formal structures, in the period 1980-82 each Governor set up and chaired a Provincial Nutrition Committee, which brought together the representatives of all the government departments dealing with nutrition. Many of these committees became inactive after a few years, and in practice the level of the governor's personal enthusiasm for nutrition has counted for more than the committee structure. For example, committed Governors have used their influence to elicit

contributions to the nutrition program from the private commercial sector, and to involve non-government organizations.

At the district level, the program was similarly coordinated by district nutrition coordinating committees, headed by the district chiefs (Nai Amper), who are also MOI officials. When many of these committees, like the provincial level committees, became inactive, responsibility for coordinating nutrition activities fell to the already existing district health committees, whose meetings were irregularly attended by representatives from agriculture and education. At the district level and below, the primary drive behind the nutrition program was the commitment of the individual line agencies interested in nutrition (principally health, agriculture, interior and education), rather than the committee structure. Each agency was responsible for advocacy specific to its program, aimed at a) bringing on board local governments at sub-district and village level (whose heads are elected rather than appointed), b) increasing the awareness of the general public, and c) encouraging people to become community volunteers.

B. CONTROL, COORDINATION AND LEADERSHIP

Control and Coordination

A striking feature of Thailand's nutrition program is that no one agency is responsible for managing it (the Institute of Nutrition at Mahidol is the lead technical agency for nutrition, but has no management role). Instead, nutrition is managed by a Committee, which coordinates the activities of the various departmental programs. In many countries, committees and coordination have proved ineffective, because

- committees fail to meet regularly
- principals send low level representatives to meetings, who lack the power to take decisions
- committee decisions are not binding on committee members
- coordination proves too weak an influence to change established priorities or ensure cooperation from other agencies.

In the face of these kinds of difficulties, many governments have concluded that, since committees do not work and coordination is too weak a form of management, they need to create an apex agency for nutrition, which controls resources and either implements programs itself or has significant control over implementing line agencies. Much time has been spent deciding where such agencies should be in government, and what their working relationships should be with other institutions. As Levinson has pointed out (Levinson, 2000), there was an evolution in thinking about the locus of control for nutrition sector management, which in the 1970s favored multi-sectoral nutrition units in ministries of planning, and in the 1980s and 1990s favored making one of the line ministries (usually health, agriculture, or social welfare) the apex agency in charge of nutrition.

Thailand has neither developed an apex agency for nutrition, nor is nutrition run by the planning ministry (in this case, the NESDB). The overall direction of the program is set by the National Nutrition Committee, which has representatives of all concerned line agencies, and which is chaired by the Deputy Prime Minister. The national committee is serviced by a small Secretariat, headed by the Deputy Secretary-General of NESDB, which was initially housed in the NESDB offices. But neither the committee nor the secretariat is responsible for implementation of the nutrition program, which is the role of the line agencies--although, of course, as with all finance and planning agencies, NESDB exerts significant indirect control, in that a line agency's performance in previous years is a factor in determining its plan allocation in the next.

From a planning perspective, there is therefore a single Thai nutrition program, governed by a National Food and Nutrition Plan, and with allocations controlled by NESDB. But from an implementation perspective, there is not one national nutrition program, but a series of programs run by different agencies. This is an important distinction, in terms of commitment and ownership. At the national level, the Plan has visibility and standing, and is the focus for financial commitment. But commitment to implementation is ensured by each line agency's ownership of the particular program for which it is responsible. In this way, Thailand has avoided the common problem of systems which make a single ministry responsible for nutrition, which is that nutrition is seen as the business of that ministry, rather than a common priority: e.g., where nutrition is 'given' to health, agriculture feels it is not its business.

The multiple centers of nutrition program management are coordinated on an intermittent basis by the National Nutrition Committee and through the resource allocation process; and on an on-going basis through monthly coordination meetings between the Permanent Secretaries of the Ministries of Interior, Health, Agriculture and Education. As noted in the previous section, the coordination committee system has worked less well at the province and district levels. What has kept the nutrition program going in the field has been each line agency's commitment to the part of the program which it is responsible for implementing.

Leadership

It is therefore difficult to say who leads the nutrition program in Thailand. In a formal sense, the Deputy Prime Minister and NESDB lead the program, in that they chair the National Nutrition Committee and Secretariat, respectively. In an informal sense, the policy entrepreneurs have led the program; but their strategy has been to lead from behind, by encouraging other individuals and agencies to take charge. In practice, leadership of the nutrition program is diffused among the line agencies managing its constituent programs; and, at lower levels, among the provincial governors and to a lesser degree the tambon and village heads. This was a conscious aim of the policy entrepreneurs; making nutrition everybody's business, rather than someone else's business, was seen as the way to maximize commitment to the program. And making sure the nutrition program was not dependent on a single individual or agency was the best way to insulate it from changing political fortunes.

That said, among the various agencies who played a lead role in nutrition as the program got off the ground in the early 1980s, health became *primus inter pares*⁷. This was partly a consequence of the technical vision of the policy entrepreneurs, based on their field research experience. They believed that nutrition should be a multi-sectoral effort. But they also believed that health should come first as a field intervention, since their experience was that if income generation activities came first, increased incomes were often spent in ways that did not benefit child nutrition. The nutrition education messages sent through the GMP program were crucial to changing nutrition behaviors. The emergence of health as a lead agency was also opportunistic; the primary health care movement was rapidly gathering momentum at the beginning of the 1980s, and, promising as it did the rapid creation of a huge network of village volunteers, health was the obvious bandwagon to jump on.

⁷ One marker of health's de facto leadership in nutrition was the transfer of the secretariat of the National Nutrition Committee from NESDB to MOPH in 1987. But it should be noted that this did not give MOPH any formal management control over the nutrition program.

Health may therefore have been seen as the most appropriate lead vehicle for nutrition at the time; but another vehicle might have been more appropriate at another time. To use the words of Dr. Amorn, the philosophy was that nutrition needs to be able to ‘transfigure itself’, so as to become part of whatever development activities are the current priority--whether it was primary health care and MBN in the 1980s, or the village councils now being created as part of the 1997 constitutional reform process. Health and nutrition need ‘to be lost in other sectors’, otherwise they will be a priority for a few years, and then neglected when new governments adopt new programs. Nutrition management, and leadership in nutrition, is about ‘passing on the torch to whoever will carry it’.

C. THE NUTRITION PROGRAM SUPPORT ORGANIZATIONS

Technical institutions which contribute to nutrition programs in a support role can be distinguished from line agencies which implement programs. In Thailand, such institutions include the Faculty of Public Health at Mahidol University, which has carried out most of the national nutrition surveys; the Nutrition Association of Thailand, which publishes an academic journal on nutrition; the Food Research Institute at Kasetsart University, which carried out key research on supplementary feeding; and, most prominently, the Institute of Nutrition at Mahidol University (INMU). This section briefly discusses the development and role of INMU, as the main technical resource for Thailand’s nutrition program.

Although INMU was created as a technical resource for the government program, it was set up as part of Mahidol University, rather than as a government agency. The university location was intended to give the Institute academic freedom, as well administrative freedom from the government bureaucracy. Its independent university location also gave INMU another advantage; it could take a multi-sectoral view of nutrition, since it was not tied to any one of the line ministries involved in the nutrition program. INMU is guided by a Policy Committee chaired by the President of Mahidol University. Ministries such as Health and Agriculture have the right to nominate and vote for individual participants of the committee, but they have no ex officio representatives on the committee.

Despite its structural independence from government, INMU’s working relationship with government has been close. The INMU Director⁸ was for many years chairman of the technical committee which drew up the NESDB five year plan for food and nutrition. Many INMU staff were members of nutrition-related technical committees set up by the line ministries to plan or evaluate field activities. Such appointments were not ex officio; INMU staff were approached because they were competent and respected. Personal relationships have grown up between staff in INMU and staff in client agencies, which have been as important in cementing the working relationship as official linkages.

INMU grew quite rapidly. In 1986, when it was given its own building on the Mahidol campus, INMU had about 20 research and 10 teaching staff; now it numbers about 50 researchers and 25 teaching staff, of whom more than a dozen hold PhDs from leading universities. In the early days, fellowships provided by the United Nations University helped to train many of INMU’s faculty. Less overseas assistance has been available for updating the staff’s skills. INMU itself pays for staff to attend international conferences, and for specialists from overseas to visit to give short courses and seminars. INMU is also a member of a

⁸ From 1978 to 1987, INMU was headed by Dr. Aree, and from 1991-99 by Dr. Kraissid Tontsirin, who became the most well known of the second generation of Thailand’s nutrition ‘policy entrepreneurs’.

network of four Asian nutrition institutions⁹, which facilitates the inter-country transfer of nutrition research and field experience.

Parts of INMU's work program have remained constant over time; parts continue to evolve. From the beginning, INMU has emphasized policy advice to government; teaching; technical research and training; operational research; and nutrition education/communications. During the 1990s, INMU began to develop a role in nutrition monitoring and evaluation, as well as its role as a regional resource in training and technical assistance--INMU staff have provided substantial help to other Asian nutrition programs, often as consultants to UNICEF. INMU has not had a role in management training for nutrition, or in the institutional capacity development of the nutrition sector beyond its role in training.

INMU has played a leading role in nutrition training. It has produced more than 30 nutrition PhDs and more than 260 graduates at the level of Master of Science and 250 at the level of Master of Community Nutrition (this latter course being taught jointly with the Universities of Queensland in Australia and Kabangsaan in Malaysia). It has also trained 12 United Nations University Fellows, and held short course training programs for more than 200 international participants.

As well as in training, INMU's professional strengths have been in pure research (e.g. testing the efficacy of different micro-nutrients); and in developing and field testing new technical interventions for the nutrition program (e.g. new types of food supplement, new channels for nutrition communications, applications of social marketing approaches). INMU does not seem to have given as much emphasis to evaluating¹⁰ and helping to solve several of the main field implementation problems of the nutrition program, for example, uneven implementation of the food supplementation schemes; inadequate training and supervision; or uneven coverage of the program in the urban areas.

Several factors may help to explain what INMU has and has not emphasized in its research and field program support activities:

- As the nutrition program rapidly expanded, tested technical intervention models were in high demand from implementing agencies;
- while the program's subsequent needs were probably more for evaluation of implementation quality and impact, evaluation--especially of program management--is always a sensitive issue, and INMU's evaluation mandate, versus that of the line agencies, was never fully clear;
- like most nutrition institutes around the world, INMU's evaluation capacity was anyway limited--only three staff are specialists in evaluation; and
- again as with nutrition evaluation world-wide, the emphasis in Thailand has been on traditional statistical evaluation techniques, rather than the qualitative methods which are often more appropriate for looking at program implementation issues.

INMU is currently at something of a crossroads. The Institute, and Mahidol University as a whole, have recently been developing a new vision for their role in the new century. There are different views about where INMU should head. One vision would have the Institute give greater emphasis to clinical nutrition,

⁹ The other members are India's National Institute of Nutrition; Indonesia's Institut Pertanian, Bogor; and the Philippines' Food and Nutrition Research Institute.

¹⁰ Winichagoon's 1997 analysis of the 'Protein-Energy Malnutrition Situation and Growth Monitoring and Promotion Program for Underfives in Thailand' is an outstanding exception.

and technical training and research; this would tend to move INMU in an academic direction, developing its role as a traditional university faculty. Another vision would emphasize work on solving the problems of the public nutrition program; this would reinforce INMU's links with government, and imply a focus on implementation management issues, more than technical research.

D. THE ENVIRONMENTAL CONTEXT

As the above story shows, Thailand's nutrition program worked partly because of a systematic consensus-building strategy orchestrated at the sectoral level, and partly because of the attention that was given to the development of technical support capacity. But, perhaps less obviously, the program also worked because of a number of positive environmental factors, in development, culture and politics, in addition to those already mentioned in Chapter II (the homogeneity of village society, the influence of Buddhism and the tradition of community service), as helping to make the volunteer movement so successful.

Education and Infrastructure

Thailand had some outstanding educational institutions at the national level, which helped to produce the leaders of the nutrition program and the technical specialists who supported it. Considerable attention had also been paid to primary and secondary education by the time the nutrition program took off. As a result, the literacy rate was already more than 80% by the late 1970s, and it was easy to find volunteers with enough education to handle GMP.

The nutrition program also benefited from a rapid expansion of infrastructure during the early years of the program. By the beginning of the rapid expansion of the nutrition program, health centers had already been established in 85% of the sub-districts, although the number of staff at that time was usually not more than two per center, as against an average of three by the late 1990s. This made it easier to give the volunteers support in terms of training, supervision and referral. The water and sanitation programs must also have contributed greatly to the impact of the nutrition program. Their progress is summarized in the following table:

Intervention	1985	1990	1995
% of Households with Hygienic Latrine	47	73	96
% of Households with Access to Safe Drinking Water	65	74	92

Society and culture

A consensual approach to decision-making, following substantial group discussion, together with a tradition of community group activity, has also been a feature of Thai culture. In many parts of the country, community groups have traditionally organized development activities--for example, managing the communal irrigation systems essential for rice cultivation, or helping maintain the village temple and the services, such as schooling, which the monks provided. Community groups were therefore an established way of organizing village activities, even before the formation of the committees which have been a feature of Thai rural development.

Traditional consensual approaches to decision-making also help to explain the success of 'management by committee' at the national level. It is true that endless discussion among stake-holders slowed the launch of the nutrition program by several years; but it also ensured that, when a design was finally agreed on, it

was with the understanding and support of all parties. Implementation was then rapid and relatively efficient, because it was based on consensus and commitment.

Other, perhaps less obvious aspects of Thai culture were also significant. Pride in Thailand as a unique culture and a never colonized country helped to ensure that outstanding young Thais who went overseas for specialized training returned to do something for the country, rather than joining the brain drain. Traditional respect for the medical profession meant that many of the best and brightest students went into that field, and became a resource for the nutrition program. And respect for the medical profession also helped to ensure that Drs. Aree, Amorn and Kraissid had the ear of people in senior positions. Even in the villages, the perception of health volunteers as village doctors helped ensure their acceptance by local people, and gave them a certain prestige, which helped to compensate for the lack of financial rewards for their work.

Geo-politics and Security

Reviewers have paid little attention to Thailand's geo-political and security situation as a factor in the success of the nutrition program, yet this was of crucial importance. During the 1960s, when the nutrition program was conceived, Thailand was a military dictatorship worried that the country might become another domino in the spread of communism in east Asia. The USA shared this fear. Significantly, the first national nutrition survey of 1960 was financed by the United States Committee on Nutrition for National Defense. That it received the attention of the highest levels of government--it was addressed to the Prime Minister, who was a Field Marshal--reflected concerns which were as much about security as humanitarian.

The leadership was acutely conscious that economic disparity was a breeding-ground for insurgency, and that Thailand's poorest, north east region lay just across the Mekong from communist Laos and Cambodia. In the late 1970s, Thailand's national security strategy shifted from one of containing insurgency through military means, to one of winning hearts and minds through systematic rural development. The government of General Prem was responsible for the big increase in outlays for rural development from 1980 onwards. Successive governments saw rural development not just as the business of the development ministries, but as a central priority for national stability and perhaps even survival. This helps to explain the commitment to the nutrition program in general, and in particular the important role which the MOI (which was responsible for internal security as well as local government and community development) played in the program in the provinces.

Activism

Politics, as well as a traditional, cultural and religious concern for the poor, also helped to explain the high level of social activism in Thailand in the 1970s and 1980s. This period saw the emergence of a young generation which was resentful of military rule, and increasingly ready to challenge it. As part of its shift away from a policy of containing opposition to one of inclusion, at the beginning of the 1980s the government offered an amnesty to political activists, many of whom rejoined the mainstream and put their energies into social development rather than political opposition.

The vitality and community empowerment focus of the nutrition program were therefore very much the product of a generation of young idealists, committed to social change and development. A handful of these became the policy entrepreneurs and leaders of the program. But equally important, though less visible, were the large numbers of committed Thais who joined the non-government organization movement and helped to raise social awareness and empower communities in the north east and other disadvantaged regions; or the hundreds of young doctors who, for ideological reasons, opted to serve in

uncomfortable provincial postings, and who also became a key resource for the nutrition program. Some of these doctors, promoted to senior positions in MOPH, helped to preserve the empowerment ethos of the program into the 1990s.

Governance

Last but not least, some features of Thai governance helped to ensure the success of the nutrition program, including

- salary levels in the civil service and in academia which, though much lower than the private sector, made them a reasonably attractive option for able people
- merit rather than seniority-based promotion which ensured that able people got to the top¹¹
- well developed government procedures and a fairly high standard of administration
- a relatively low level of corruption, at least in the health sector.

Somewhat less obviously, the stage which Thailand had reached in the process of decentralization probably also aided the nutrition program. As part of a progressive move away from centralized control toward a peoples empowerment approach, the government gave more autonomy to provinces and villages in the 1970s and 1980s; this was an important motivator for civil servants, such as Provincial Health Officers, and for Village Development Committees alike. But while local areas were given more freedom to assess their needs, draw up plans, choose beneficiaries and raise local financing, tight control was, as we have seen, kept by the NESDB and the line agencies over the allocation of budgets to different sectoral activities. While today's conventional wisdom is to deplore decentralization without financial devolution, central control over allocations nevertheless ensured that a coherent set of interventions got implemented as the national nutrition program.

E. DISCUSSION AND IMPLICATIONS

This section draws three lessons for other countries from the way Thailand managed its nutrition program at the sectoral level:

- The importance of building at least one institution with strong nutrition training and technical support capacity, which can also be a focal point for developing nutrition awareness;
- the importance of developing capacity through building the commitment and harnessing the energy of potential stake-holders, as well as through technical training and traditional institution-building; and
- the importance of matching sector management strategies, structures and process to the environmental context.

Building Technical Support Capacity

Thailand's Institute of Nutrition is one of the best in the developing world. The training and technical assistance it has provided have been important to the nutrition program's success. Lessons for other countries from the development of INMU include

- the need to establish technical support capacity early in the program, since institution-building takes a long time

¹¹ And which, for example, allowed Dr. Amorn to become Director of the Nutrition Division of MOPH at the age of 34, and Dr. Aree to become Dean of the Faculty of Public Health at the age of 37. Still today, it is possible to become Permanent Secretary of a ministry in Thailand in one's 40s.

- the prior need for a broad multi-sectoral consensus on the usefulness of such an institution, so that all potential client agencies are involved and supportive
- the importance of incentive salaries to attract staff of the right caliber
- the advantages of a location independent of any implementing line agency, so that the support institution can develop a truly multi-sectoral outlook.

The benefits of support organizations like INMU go beyond the specific training and technical assistance services they offer. The existence of a focal point for nutrition in an independent location can also be an important element in maintaining commitment to nutrition. Having a venue for staff from different agencies to participate in short courses and seminars on nutrition helps build up informal inter-agency nutrition networks, which are probably as important to the maintenance of consensus and commitment as formal policy statements. Having a permanent institution working on nothing but nutrition helps ensure that attention to nutrition is not lost, in situations (unlike Thailand's, but common elsewhere) when the priority given to nutrition temporarily wanes, due to a change of government or the emergence of other development priorities.

A Commitment-building Approach To Capacity-building

The establishment of INMU is an example of one traditional approach to capacity development--the building of an institution from scratch; INMU's training role represents another traditional approach. But capacity development elsewhere in the Thai nutrition program followed a very different path. Although new institutional structures were created, these were committees rather than traditional organizations; and, although the training of nutrition specialists was important, the real key to the nutrition program's capacity to make things happen was the way in which it harnessed the capacity and energy of so many ordinary, non-specialist individuals throughout Thai society, and most importantly the energies of hundreds of thousands of village volunteers.

This points to a vision of capacity development which is different from the traditional concept of institution-building. It emphasizes the exploitation of *existing* rather than the creation of new capacity, through building understanding and commitment among broad groups of potential stake-holders in the program. This makes economic sense in developing country environments, where the funds and management capacity needed to create new organizations are scarce.

Thailand was exceptionally successful in building the commitment of a wide range of stake-holders, including planners, line ministry managers, politicians, NGOs, the media, local government officials, elements of the commercial private sector, and the general public. That Thailand did so well at harnessing the capacities of all these in the service of nutrition was partly due to the period in Thailand's history in which the program took off. The recognition that social sector development was crucial to internal security and national independence, coupled with the desire of most Thais to compete with other fast developing east Asian nations, meant that the ground for building commitment to rural development, including nutrition, was already fertile.

But it was also due to a carefully crafted consensus-building strategy, elements of which might be replicated in other, less favorable environments. Some lessons from Thailand's approach to capacity-building through commitment-building include

- the need to identify and involve a very wide range of stake-holders if a true national consensus is to be reached, and existing capacity fully exploited

- but at the same time the need to follow a phased approach, targeting key opinion-leaders first¹², and then widening the consensus to a broader range of actors
- the need for simultaneous use of a range of methods for awareness-raising and consensus-building, including person-to-person contacts, seminars and meetings, formal training, and the mass media
- the need to allow enough time. The lesson from Thailand is that consensus-building takes years, rather than months.

The role--or relative lack of it--of nutrition policy in the consensus-building process in Thailand suggests another, probably more controversial lesson. Although Thailand did develop nutrition policy guidelines on the way to developing its National Food and Nutrition Plan, the development and promulgation of a national nutrition policy never got the degree of emphasis which it has had in many other countries which have achieved far less in nutrition. Thailand focused much more attention on agreeing an implementation-oriented investment plan with significant resource allocations tied to it. The lesson may be that this is more important than the polishing of politically correct policy documents, which in so many countries have remained paper achievements.

Sectoral Management and Environmental Context

The Thai case shows that where the ‘institutional home’ for nutrition is located within government can be less important than creating a climate in which the major stake-holders in nutrition share a common vision of where the country wants to go, and have independent control over the implementation of the program activities for which they are responsible, within the framework of that overall vision. In Thailand, the National Food and Nutrition Plan provided the framework for that vision, and the budget for each line agency’s contribution. But each line agency then had the autonomy to run its own nutrition program, with the result that nutrition was seen as everyone’s business, rather than the responsibility of any one agency. Where the program was coordinated from was a secondary issue; the Secretariat of the National Nutrition Committee moved from NESDB to the MOPH without any appreciable impact on the program.

But is the Thai ‘coordination-based’ approach to nutrition sector management a model for other countries? The evidence from the failure of committee and coordination based approaches to managing nutrition in other countries suggests that it is not, necessarily. We would argue that the Thai sector management approach worked because of two key environmental factors:

- Strong geo-political incentives to give priority to nutrition in the national development strategy, which facilitated the development of a common program vision and strong commitment to it; and
- a cultural tradition of management by consensus which made management by committee and coordination an appropriate mechanism to implement that vision.

By contrast, in a more authoritarian cultural and administrative environment, and especially one where there is no strong national consensus on poverty alleviation, we might hypothesize that:

- commitment to a broad-based, multi-sectoral nutrition strategy would be difficult to build and sustain
- investment might be better directed into a narrower program implemented by just one or two agencies

¹² It is *not* clear that the specific order which Thailand followed (e.g. planners before politicians) should automatically be replicated (in another environment, politicians may be a more effective entry-point than planners). A pragmatic approach is more likely to be successful, based on assessing a) who has power or influence, b) who can most easily be brought on board, and c) which key stake-holders are the key to bringing which other key stake-holders on board.

- a ‘command and control’ approach to management, coupled with a paid worker system in the field, might be more effective than a committee-based approach to sector management, coupled with the use of volunteers in the field.

As in Chapter II, the overall lesson that we believe should be drawn is not that Thailand’s approach to sector management should be replicated, simply because it was successful. Instead, it is that Thailand was successful because it chose management strategies, structures and processes which fitted its political, cultural and administrative environment. What should be replicated is the process of matching strategy to environment, rather than all elements of the Thai strategy.

IV. THE ROLE OF DEVELOPMENT ASSISTANCE

Although Thailand is well known for having financed its nutrition program domestically, foreign assistance nevertheless played a significant role, especially early on in the program. Unfortunately, no estimate is available for the amount of support.

A. FORMS OF ASSISTANCE

The United States Government provided three extremely significant types of assistance in the early years of the program. First, as noted in Chapter III, the Defense Department funded the 1960 national nutrition survey, which first showed the seriousness of the malnutrition problem. Second, USAID, together with UNICEF, financed a key inter-ministry nutrition workshop in 1973, which began the process which ultimately led to the first National Food and Nutrition Plan.

Third, USAID support for short term overseas training had an enormous impact. In the mid 1970s, a large group of civil servants was sent for three months training in nutrition at Harvard. The group included the Director of NESDB’s Social Development Division, a number of other staff from NESDB, and representatives from health and agriculture. This training helped key officials to understand malnutrition as an inter-sectoral problem. It also helped develop informal working relationships between key civil servants in different sectors; on their return to Thailand, members of this group continued to interact as ‘friends of nutrition’, and several later became members of the Secretariat which supported the National Nutrition Committee. It was crucial, in terms of consensus-building, that those sent for training were generalist civil servants, rather than nutritionists.

In addition to Thais being sent overseas for training, foreign technical assistance in Thailand was important at a slightly later stage. A team of advisors financed by USAID and the World Health Organization, including Dr. Nevin Scrimshaw, helped to define the causation of the nutrition problem, and to put the First National Food and Nutrition Plan together. UNICEF helped with funds for related seminars and workshops.

Foreign assistance was also important in the development of INMU. The United Nations University funded the post-graduate training of many of INMU’s faculty (Chapter III). The Rockefeller Foundation supported INMU’s research program over a 14 year period, as part of which internationally respected researchers came to Bangkok on three year assignments. UNICEF, the World Health Organization and

the International Development Research Center have also helped to fund INMU's research program, and UNICEF has provided indirect capacity-building support by financing a number of INMU training courses for government officials from other countries.

Finally, there has been assistance for pilot projects and quality improvement efforts, although on a fairly small scale. Examples include UNICEF and the Italian government's support for the Nong Hai Project, referred to in Chapters I and III, under the Joint Nutrition Support Program; and UNICEF's support for the Growth Monitoring Improvement Project, discussed in Chapter II.

The role of development assistance was therefore significant. That this role is not better known is partly because much of the key assistance was in the 1960s and 1970s, while the Thai program became internationally known in the 1980s; and partly because there has been no large scale assistance for program implementation.

B. DISCUSSION AND IMPLICATIONS

Thailand's decision to implement its nutrition program without large scale assistance, and in particular without assistance from the development banks, reflected the philosophy of self-reliance which permeated the nutrition program. The advantages of this decision seem to have much outweighed the disadvantages. It is true that, if Thailand had sought foreign assistance for training and supervision, more support could have been provided to the volunteers, and the quality and coverage of GMP might have been much better. But involving development assistance agencies might have also had negative consequences, for example:

- Lengthy project preparation and clearance procedures would probably have slowed the pace at which the program expanded. This would have undermined the idea that the extent of malnutrition required action on a crash basis, an idea which helped to motivate people at all levels.
- Thailand's own nutrition management strategies might have been compromised, as donors sought to impose their own. This would have reduced country ownership and commitment.
- The availability of substantial foreign funding would have made it harder to sell the idea that Thailand could not finance its nutrition program unless everyone contributed from their own resources--a key philosophy which built ownership, commitment, community empowerment and accountability at the village level.

Thailand, of course, prospered rapidly enough to be able to finance its own social sector development programs; other, slower growing countries may not have the option of forgoing large scale assistance. But its absence in Thailand lends support to the idea that it is the quality and not the quantity of aid which is often important. Small amounts of aid can have a big impact if they are spent on training the right people; building the capacity of nutrition support organizations; piloting key activities; and quality improvement.

The Thai case also underlines the importance of small amounts of aid *at the right time*. Foreign training and technical assistance had the impact they did because they arrived when needed, and were not driven by the programming schedules of donor agencies. Long term technical training to build a basic skills base in nutrition came first; short term awareness-building training for key civil servants came second; short term technical assistance for plan preparation came third; and more substantial assistance for the development of INMU came only after there was a solid commitment to the institution. The sequencing was mainly orchestrated by the policy entrepreneurs, and unfolded over a ten year period.

This in turn raises several issues for development assistance agencies, in the context of how aid is currently managed. First, funding for long term overseas training is much more limited than it was. Agencies have become discouraged, because so many trainees join the brain drain, or leave the sector even if they stay in the country. Yet long term training was clearly a key input in Thailand, both in the initial development of a small cadre of nutrition specialists, from whom the policy entrepreneurs emerged; and in the development of INMU as a center of excellence.

Second, at least for the development banks, there is little scope for providing funding for training, technical assistance and capacity development outside the context of large scale projects. Yet in Thailand, it is clear that the most valuable training and technical assistance inputs were those which took place before the program expanded, and which a) built up a shared vision of the causation of the nutrition problem, b) fostered commitment, and c) helped prepare a sound investment plan. The development banks have no vehicle for providing training and technical assistance over the long timeframe which is required for capacity development outside the context of a project; and yet a project is often premature until some commitment and capacity can be built. (Even if the development banks had such a vehicle, the price at which they provide aid would also be an issue; few countries would be willing to borrow for small scale training and technical assistance activities delinked from major program assistance.)

UNICEF and some bilateral agencies, on the other hand, do have grant funds for short term training and technical assistance. This suggests the need for a closer partnership between the development banks and their grant donor partners, in which the latter provide more up front funding for commitment-building and capacity development, and the Banks fund implementation of the program once agreed. For this to work, both countries and donors would need to agree on a common vision for a) commitment-building, b) capacity development, and c) national nutrition strategy, something which is currently rarely achieved. In particular, the development banks find it difficult to participate in the process of developing a common program vision unless they are already preparing a major project, because they lack specialist staff in their field offices. Working on a mission basis makes it difficult to participate fully in partnerships with countries and other donors.

It is, of course, easier for the development banks to provide assistance for capacity development once a project has been agreed; and there is more incentive for countries to borrow for capacity development if this represents only a small proportion of a large project. But then a third issue arises: the fact that capacity-building--the development of INMU is an example--takes place over a much longer timeframe than individual projects, which normally last five years. This suggests that project financiers need to think in terms of

- sequences of investment projects financing an overall capacity development strategy which extends over the life of several projects; or
- wider use of Adaptable Program Lending¹³ as a means of providing continuity in program and capacity development strategies over a longer timeframe than traditional project lending.

¹³ Adaptable Program Loans are usually for 10 or 12 years. They are intended to promote flexibility and learning by doing. An overall program vision is agreed for the whole period, and cleared by the Bank's Board. The Bank then finances several three or four year plans to implement the overall strategy; their content and phasing are flexible, depending on progress with the previous plan and what has been learned during implementation. The Bank's staff must appraise each plan, but can authorize a new tranche of funding for it without going back to the Bank's Board, providing it is in line with the original vision and within the overall agreed funding ceiling.

The assistance agencies are currently not well placed to help prepare and implement long term capacity development strategies. Thailand's commitment-building and capacity development process was master-minded by its own policy entrepreneurs. In countries which cannot provide this level of leadership, donor agencies need a common methodology for analyzing management capacity at the sectoral and local levels, and tools for helping put together plans for developing commitment and capacity. Until a common language and approach are agreed for capacity-building in nutrition, it will be difficult for donors and client countries to work together to develop a common vision for what should be done.

V. UNRESOLVED ISSUES

Though broadly successful, Thailand's nutrition program has some unfinished business, and also faces a number of newly emerging issues. This chapter discusses the challenges presented by these, along with their relevance for other countries.

A. THE ISSUES

Iron

The prevalence of iron deficiency has been slowly falling, and is now at a level of about 14% of pregnant women and 8% of children under five. Though this is much lower than in most Asian countries, Thailand is no exception to the universal phenomenon that iron deficiency reduction has not been as successful as efforts to reduce vitamin A and iodine deficiency. Reasons include difficulties in persuading women that

- a problem with few visible manifestations is actually a serious one
- it is worth persisting with daily supplementation for months at a time
- iron's often unpleasant side-effects are worth putting up with.

The logistics of supply have apparently not been as big a problem in Thailand as they have elsewhere.

MOPH is at the beginning of a new campaign to reduce iron deficiency, which is being mounted progressively. It has begun in the schools, where one school per district has been made a 'health promoting school', in which iron supplementation among other health and nutrition inputs is provided; if successful, this will be expanded to nation-wide coverage. Another pilot is going on to reach adolescent and reproductive age women, through developing outreach services in the factories where a high proportion of urban women now work. No strategy has yet been developed to improve the coverage of supplementation among pregnant and lactating women, although a mass mobilization and communication campaign is planned. Thailand's efforts to counter iron deficiency should therefore be carefully watched, but are at too early a stage for lessons for other countries to be drawn.

Moderate Malnutrition and Community Development

Although moderate malnutrition is no longer a significant problem at the population level, it is prevalent enough in certain sub-populations to warrant continued attention (as well as requiring continuation of the national growth promotion program, in MOPH's view, as a measure to prevent moderate malnutrition re-emerging more widely). Some moderate malnutrition is geographically concentrated, e.g. among hill-tribes; some, more complicated to identify and deal with, is more scattered in the general population, e.g. among

families suffering from AIDS; among the families of illegal immigrants; and among the children of seasonally migrant workers, who are often left in the care of grand-parents or other relatives.

Much of the remaining moderate malnutrition appears to involve problems of care, related to extreme poverty and/or social dislocation. The solution therefore usually lies less with the health sector, than with much broader development programs--for example, community development programs to provide more economic opportunities and better living environments in villages in north east Thailand, with the underlying aim of reducing the incentives for seasonal migration. Such programs are complex to design and manage, since they can involve social and ecological as well as economic development interventions. Their objective is an improved quality of life, not just higher incomes or less malnutrition.

A number of non-government organizations have developed approaches to community development along these lines, which seem to be working; Appendix G gives one example, of the work of the Sustainable Community Development Foundation in north east Thailand. The issue is how scale up these kinds of approaches, including

- how to train enough skilled village level facilitators and higher level managers
- how to ensure that quality does not drop as scale increases
- how to bring in government financing without bureaucratizing NGO processes, or compromising community empowerment
- how non-government organizations working on community development can best cooperate with local governments which are being given increased authority and financing under devolution (see below).

Over-nutrition and Chronic Disease

In Thailand as in many other countries, increasing prosperity has led not only to declining under-nutrition, but also to over-nutrition among some adults and children. Over-nutrition significantly increases the risk of non-communicable disease, particularly heart disease and diabetes, later in life. Growth monitoring data suggest that in Thailand, between 5 and 8% of children are over-nourished, a proportion which may well increase, unless action is taken, as incomes continue to grow. Over-nutrition is therefore emerging as a significant public health problem.

Over-nutrition can probably be combated through the same communication and service delivery system as under-nutrition has been. But since dietary habits are hard to change, and since the target group is wider than the target group for under-nutrition (i.e. adults of both sexes and children of all ages, rather than pregnant and lactating women and children under five), over-nutrition presents a significant management challenge. Both MOPH and INMU have identified over-nutrition as an emerging priority, but have not yet agreed specific strategies for dealing with it.

The Urban Areas

Thailand's nutrition strategy was conceived primarily in the context of the rural development program, and therefore with a greater focus on rural than urban areas. As in many other Asian countries, developing effective urban health outreach services has proved difficult, for a number of reasons:

- rural-urban migration has been rapid and on a huge scale¹⁴, and plans and budgets have not kept pace with it;

¹⁴ Urban migration, and not weak motivation, was apparently the main explanation for the 15% per year drop-out rate among rural health volunteers.

- health services are the responsibility of municipalities rather than the central government, and municipalities can seldom match the central government's level of commitment, management capacity or spending;
- urban slum communities are generally less socially cohesive than rural ones, and some have a rapid population turnover due to migration. This makes empowerment more difficult; and
- because more people in urban areas are in full time, formal sector employment, it can be harder to find volunteers able to put in significant time on nutrition.

The urban problem needs to be seen in perspective. Thailand's slums almost all have access to sanitation and clean water; houses are nearly all permanent constructions; and most slum areas have paved paths and lighting. Though good data are scarce, nutrition status is probably better in the slums of Bangkok and other major cities than it is in the rural areas, unlike the situation in Manila, for example. Nevertheless, there are pockets of moderate under-nutrition, and at the same time very widespread over-nutrition, due to a combination of higher incomes, sedentary lifestyles and access to junk food. In the context of the service delivery constraints noted above, special efforts will need to be made to understand the urban nutrition situation; devise appropriate social marketing and delivery strategies; and develop the management capacity to support them.

Devolution

As already mentioned, Thailand is in the process of a substantial financial and managerial devolution to local government, as mandated by the 1997 constitutional reform. This devolution will take community empowerment a step further than in the past, by giving sub-districts and village development committees much more funding, and wide discretion in how to spend it. This presents risks as well as opportunities. Local governments may give lower priority to nutrition and social sector investments, and more to spending on politically appealing local infrastructure projects. This has happened in many parts of the Philippines, which implemented a similar financial devolution, beginning in 1993.

MOI is currently undertaking a large scale capacity development program for the sub-district councils, to prepare them to use their new powers. A key challenge for the nutrition program is how to make sure that nutrition considerations get an appropriate place in the new local level planning and resource allocation process. It is likely that an integrated strategy will be required for this, combining tailor-made social marketing efforts, training in health and nutrition planning, and the preparation of model technical and communication packages appropriate to the needs of different local government situations. While, as Dr. Amorn said, nutrition must reinvent itself and 'lose itself' in new programs if its momentum is to be maintained, care must also be taken for it not to become completely lost!

B. DISCUSSION AND IMPLICATIONS

The issues which Thailand's nutrition program faces are common to many countries. The iron problem is universal. Over-nutrition is becoming a public health problem not just in countries as far through the epidemiological transition as Thailand, but also in countries like India. Devolution and empowerment through community-driven development are gathering pace in both Asia and Africa. Even the problem of the urban areas is not exclusively Thai; in Asian countries as different as Bangladesh and the Philippines, health and nutrition services for the urban slums lag behind rural services, and for similar reasons. How Thailand deals with all these issues over the next five or ten years should therefore be of great interest to the international nutrition community.

Dealing with these issues will put a premium on three types of skills:

1. *Social marketing* will be crucial to
 - doing better with iron
 - developing new strategies for over-nutrition
 - making sure that financially autonomous communities and local governments do not neglect nutrition.
2. *Operational research on management systems* will be key to:
 - developing practical procedures for targeting scattered sub-populations with moderate malnutrition, and developing appropriate interventions for them
 - testing better ways to deliver services in the urban slums
 - working out new partnerships for central governments, local governments, communities and non-government organizations to work together after devolution.
3. *Qualitative* (as well as quantitative) *evaluation* will be key to finding out whether social marketing and new management systems are working, and will require
 - Formative research with a variety of target population segments
 - techniques for choosing appropriate ‘sentinels’ for different sub-populations, whose behavior can be monitored and fed back into program redesign
 - process documentation
 - development of indicators of service quality as well as service statistics
 - improved management systems for feeding formative evaluation findings back into program design changes.

In Thailand, INMU could play a key role in each of the above areas. In social marketing, it already has world-class experience to build on. INMU’s social marketing approach to promoting the consumption of vitamin A rich foods is internationally known (see Smitasiri, 1994, for example). What is now needed is for social marketing to be incorporated on a routine basis into the field operations of MOPH and local governments; this is a management as much as a technical challenge. On the other hand, INMU may need to do more to develop capacity in qualitative evaluation, and in operational research on management systems (as opposed to the testing of technical interventions, where INMU has much experience). This will require the development of closer partnerships with MOPH and other agencies.

Whether INMU meets these challenges will depend on the vision which is agreed for its future; this is currently uncertain (Chapter III). Those who would prefer to see INMU become more of a conventional university department--emphasising traditional disciplines, ‘pure’ quantitative research, and independence from government--may well oppose giving greater priority to the development of skills in the ‘soft’ disciplines of qualitative evaluation and management and capacity development, and moving in the direction of a closer working relationship with MOPH and other government agencies. Yet we believe that this is the direction in which INMU should go, if it is to maintain its operational relevance to the nutrition program in Thailand.

In his 1991 Martin Foreman lecture ‘Sliding Toward Nutrition Malpractice?’ (Berg, 1993), Alan Berg argued that nutrition researchers around the world focus too much on clinical research using quantitative methods, because this is what they are trained in and can get funding for, and too little on operational and

management issues, which are the main constraints facing nutrition programs in the field. The choices facing INMU are therefore those facing the international nutrition research community too.

VI. CONCLUSIONS

These conclusions pull together some of the lessons which may--and in some cases may not--be drawn from the Thai nutrition program.

A. THE BIG PICTURE: A CAVEAT

Thailand's nutrition program consisted of simultaneous investment in

- GMP, food supplementation and basic health care
- clean water and sanitation
- primary and secondary education
- targeted income and employment generation projects for poverty alleviation.

For methodological reasons, it is impossible to know which of the above program components were most important to its success--or whether, as is most probable, all were required together to produce synergistic benefits and a rapid reduction in malnutrition. Therefore, the only certain 'big picture' conclusion which can be drawn for other countries is that they might be equally successful if they too implement all of the above. This conclusion is of little use to the many countries which, even if they have the commitment, do not have the financial or management capacity to implement substantial, simultaneous programs in several development sectors related to nutrition.

Most countries are therefore obliged to prioritize among activities. Where everything cannot be done at once, the current consensus, at least in the World Bank and UNICEF (see Mason, 2000; and Gillespie et al, 2001) is that the 'direct' intervention of GMP, linked to a package of basic health care, is likely to make faster inroads on malnutrition than 'indirect' poverty alleviation programs. We stress that no evidence to support this consensus, even though it may be entirely correct, can be drawn from the Thai nutrition program. It is tempting for nutrition policy-makers and practitioners who support direct nutrition interventions to point to the way GMP and primary health care were done in Thailand, note the rapidly declining rate of malnutrition, and conclude that 'this is the way to go'. But this conclusion cannot be drawn from evidence based on impact analysis.

We are cautious, therefore, about making recommendations about priorities, from the way Thailand did things. In a paper on management rather than economics, the most we can do is to point to those elements of the Thai program which seem to have been well organized, and then discuss which of them *might be replicable* in other environments, rather than which *should be replicated*.

B. ELEMENTS OF SUCCESS IN MANAGEMENT AND CAPACITY DEVELOPMENT

In Thailand's case, these included at least the following:

1. *Building a strong consensus* at the national and local levels that
 - malnutrition was a serious problem, requiring priority action
 - money spent on nutrition was an investment, not a welfare expenditure
 - malnutrition was a problem of poverty, as well as a health problem
 - all sections of society should get involved in eradicating malnutrition
 - nutrition was ultimately a community and family rather than government responsibility.

2. *Involving community volunteers on a huge scale*, as a way of
 - cutting costs
 - involving and empowering local people
 - instilling an ethos of self-reliance
 - communicating effectively with target groups.

3. *Partially empowering communities* by
 - involving them in needs assessment, planning, beneficiary selection, program implementation and monitoring; but at the same time
 - keeping central government control over resource allocation between areas and sectors, thus ensuring a coherent national program.

4. *Seeking local financial contributions* to almost all interventions, as a way of
 - cutting costs
 - involving communities
 - instilling the self-reliance ethos
 - ensuring interventions were acceptable to local people
 - increasing the chances of sustainability.

5. *Making the most use of limited financial and managerial resources by targeting*
 - needy provinces, sub-districts and villages in the poverty alleviation program; and
 - high risk population groups in the GMP and primary health care program.

6. *Using national nutrition investment plans* (rather than policy statements unlinked to resource commitments) as a way of
 - generating a national vision of what needed to be done
 - giving visibility to nutrition
 - giving each implementing agency clear responsibilities.

7. *Managing implementation* of the nutrition sector *through* a series of *committees*, rather than by fiat through a single agency, which encouraged a wide variety of interest groups to feel that nutrition was their business, rather than another agency's.

8. *Building a strong nutrition technical support organization*, which also helped maintain commitment to nutrition.

9. *Using small amounts of aid* to complement domestic resources to
 - build understanding and commitment through short term, generalist training for the right people at the right time

- build technical skills through specialist training
- build research capacity, especially operational research capacity
- pilot key activities
- help improve program quality.

C. REPLICABILITY

It is easier to say what Thailand did right, than to draw conclusions about which of the things that Thailand did would work as well in other countries.

Thailand's *commitment-building* process worked because of an unusual combination of able nutrition policy entrepreneurs; a systematic process for building consensus among stake-holders in all parts of society; and a favorable environment, including

- a relatively well educated population
- a cultural and religious tradition of helping others meet basic needs
- a fairly homogenous society at the village level
- a sense of shame that Thailand could export rice, yet still had high levels of malnutrition
- a desire to compete with other nations in the region
- pressing national security concerns, which ensured high level political support for investment in poverty alleviation, including nutrition.

Where such environmental advantages do not obtain, it is clearly harder to develop consensus on a large scale multi-sectoral nutrition program like Thailand's. In some less favorable environments, it might be more prudent to seek commitment to a less ambitious, narrower program, which would have a higher chance of being implemented. Yet whatever the environment, one lesson from Thailand is that following a systematic process for identifying key stake-holders; phasing the consensus-building process in a politically appropriate way; and using a variety of channels and approaches for education and advocacy is the best way to get results.

Thailand's success with using *volunteers*, not only for primary health care and GMP but also in the community development programs, was facilitated by the commitment-building strategy, which mobilized society at all levels; and also by favorable environmental factors, including high levels of literacy, and village traditions of community service and group action. While in Thailand these factors allowed mass mobilization of volunteers with minimum government support, we believe that in most other environments, volunteers would need much more support in terms of mobilization, pre-service and in-service training, and supervision. And even in Thailand's favorable environment, it would have been desirable to invest more in training and supervision, for a better quality growth promotion program.

One lesson for other countries is therefore the need to carefully cost the support that a successful volunteer program might require; volunteerism elsewhere is unlikely to be as cheap a solution to the nutrition problem as it was in Thailand. Also, as noted in Chapter II, we believe that using volunteers may not be an appropriate solution at all in environments where

- commitment to poverty alleviation is not strong enough, either at the national or local level, to encourage a spirit of volunteerism
- there are very low levels of education among potential volunteers
- women have little time to devote to community service, either because they are extremely poor, or because they have full time formal sector jobs.

Aside from commitment-building and cultural tradition, the process used in Thailand for recruiting volunteers also had much to do with their success. While rigorous application of the ‘sociometric method’ of recruitment may not be essential (and indeed was often not implemented in Thailand), the key lesson is the need to use a systematic process for determining which potential volunteers are **already** key communicators in the village. It should be noted that this recruitment criterion can usefully be adopted whether village level workers are volunteers or paid.

Volunteerism was a key part of the *community empowerment* strategy in Thailand. The sheer number of volunteers--one in roughly every ten households--reflects the high level of community involvement in communication and service delivery. Volunteerism helped to reinforce the empowering notion that nutrition was a community and family responsibility, as well as the government’s. Yet whether or not other countries find it appropriate to use volunteers at the village level, the lesson from the Thai program is that there are many other ways to encourage empowerment, through systematically involving communities in a) assessing the level of malnutrition, b) planning how to intervene, c) selecting beneficiaries, and d) monitoring progress.

Something which Thailand did **not** do as part of the empowerment process was to devolve control of inter-sectoral resource allocation to local governments. Where community-driven development includes devolution of financial decision-making to the local level, there is the risk of infrastructure investment being favored over social sector investment, as has happened since devolution in some parts of the Philippines, for example. Building the capacity of local governments and communities to take balanced decisions about resource allocation is a major challenge, and one which Thailand has opted to undertake only 20 years after the nutrition program began. The lesson is perhaps the need to develop the capacity for local government and community capacity-building, before abandoning national control over how much is invested in nutrition, in which regions, and in what activities.

The BMN technology for assessing needs and monitoring progress toward meeting them seems to be both valuable and suitable for implementation in most environments. It is an empowering technology, since it involves communities in collecting their own data, analyzing where the problems are, and deciding on priority beneficiaries for different interventions. It is also a useful tool for encouraging a balanced approach to development in community driven development programs. Wherever information about failure to meet basic human needs like nutrition is publicly displayed, it becomes harder for local governments to neglect basic needs and invest in other areas.

Making community or individual *financial contributions* a condition of accessing government funds was crucial in making Thai families see nutrition as their responsibility. But cost-sharing went far beyond nutrition; it was a feature of Thailand’s entire rural development program, sending the message that, while the government was there to help, it was not a ‘nanny’ state. This fostered a spirit of self-reliance and entrepreneurship, rather than dependence. Whether this approach to development is replicable in other countries again depends on the environmental context; India’s nutrition program, for example--the world’s largest--has developed in a context where socialism was taken to mean that the state must meet all basic needs. In a situation where people have become used to government hand-outs, cost-sharing in social sector development programs has until recently been unthinkable.

It should be noted that the issue is not whether cost-sharing is **financially** feasible in other environments; India’s NGO movement has proved that people are able and willing to make financial contributions to

development programs in an environment much poorer than Thailand's. The issue is purely political. Some countries are beginning to realize that development works better where local people have a financial stake in it, and are introducing financial contributions in some sectors. Other, more populist states still rely on government hand-outs to win votes. The issue is what is politically possible in a given policy environment, rather than what works best at the village level.

Targeting is often seen only as a technical and economic device, the aim being to minimize expenditures and maximize effectiveness by assisting only those who need it on nutritional criteria. But the tight targeting of Thailand's poverty alleviation program on the neediest provinces, sub-districts, villages and families also saved on managerial skills, as well as funds. Whether tight targeting can be replicated in other environments is, like cost-sharing, a political question. Populist governments often get the best political returns from announcing programs which ostensibly benefit everyone (even if during implementation they get skewed to benefit the better off). Weak governments find it hard to limit programs to one target group, when others are demanding them.

National investment plans giving high visibility to nutrition and providing a coherent framework for line agency programs are an essential complement to nutrition policy statements. But whether they are also a useful tool for program coordination and management depends on whether there is a real commitment to combating malnutrition. The Philippines, for example, has for many years had a national nutrition investment plan, along with a nation-wide volunteer program to reduce PEM and a law requiring the iodization of salt. But the nutrition plan has never been properly funded, the volunteers have made little impact on PEM, and the salt iodization bill has never been implemented, because policy-makers and ordinary people have not become convinced that malnutrition is a serious national problem, and they are therefore not committed to dealing with it.

The same applies to Thailand's approach of *managing the nutrition sector by committee*. This can work if all agency stake-holders are already committed to nutrition as a national priority; but committees without commitment lead nowhere. India's National Nutrition Council, which is headed by the Prime Minister, was set up in 1995, but has hardly ever met. The issue is not so much what arrangements have been made to coordinate or manage nutrition, or where they are placed in the government (Thailand's coordination mechanism moved between government departments without affecting the program), but whether consensus and commitment among all the relevant stake-holders have been generated.

INMU shows the contribution that a strong *technical support institution* can make to a national nutrition program. But whether other INMUs can be created elsewhere depends on environmental factors which are often outside the control of nutrition. Few countries can now afford to build a new institution from scratch; today's institutional development challenges usually revolve around how to resuscitate moribund existing institutions, or how to create networks of existing institutions, which each have some skills relevant to nutrition, but not the full range of INMU's technical support capacity. Country-specific issues of governance--to do with salary scales, hiring and firing policies, and attitudes to the private sector--often determine what can be done.

Thailand was able to fund its national nutrition program from domestic resources, without relying on *foreign aid*. But it is important to remember that when the program began in the 1970s and early 1980s, Thailand's boom was just beginning, prosperity was still a dream, and the nutrition program was financed on a shoestring. One lesson from Thailand is that countries can achieve a great deal with their own resources, if they target them well and leverage them with community and client contributions; other countries perhaps need not be as dependent on foreign assistance as they have become convinced that

they must be. Using small amounts of aid wisely, for example to access cutting edge knowledge from abroad, can have more impact than assistance for large projects, if these are seen as the donor's rather than the country's.

D. SUMMING IT UP: TWO KEY CONCLUSIONS

While some specific technologies or processes--for example, BMN--might be implementable in most environments, what is most striking about the Thai case is how much of what seems to have made the nutrition program work depended for its success on the Thai political, cultural and administrative environment. Trying to replicate volunteerism, or cost-sharing, or tight targeting, or management by committee, or many other features of the Thai program needs to be approached with caution in environments which may be less favorable to them.

But the need for caution about replication does not imply that little can be learned by other countries from the Thai case. It simply implies a different lesson. Our first key conclusion is not that there are certain management and capacity development strategies which are the right ones and should be copied, but that Thailand chose strategies which fitted its political, cultural and administrative environment, and that this is what other countries need to do too.

Our second key conclusion is that effective consensus- and commitment-building was more important to the success of Thailand's nutrition program than anything else. Without commitment, the most carefully crafted investment plans, organizational structures and management processes do not lead to effective change in villages and slums. Learning from Thailand and from other countries about how commitment can be built, and preparing best practice cases and guidelines in this area is therefore a very high priority.

The lesson from Thailand is also that consensus- and commitment-building take time, even when they are well planned. In the short run, nutrition programs may need to be designed to fit the current level of understanding and commitment; the question is what is doable, even if this may sometimes compromise what 'should be done'. In the longer run, the issue is how to create a realistic vision of what should be done and how to manage it, and build the commitment to getting there. Both countries and donors need to spend enough time on commitment-building, so that when programs are finally implemented, all parties understand and support them.

VII. APPENDICES

A. ESSENTIAL ELEMENTS IN THE PROCESS OF NATIONAL NUTRITION DEVELOPMENT

1. Advocating nutrition promotion as a country's investment in human resources development.
2. Building a critical mass and public awareness.
3. Addressing nutrition as a separate entity in national development.
4. Making a multi-sectoral policy and planning body for nutrition implementation.
5. Tackling the broad-based problem of PEM in a well-defined primary target group.
6. Institutionalizing nutrition within the existing infrastructure for nationwide implementation.
7. Redefining the national mechanism for effective resource allocation to strengthen implementation for nutrition improvement.
8. Strengthening the community-based approach for sustainability.
9. Ensuring continuation of policy commitment and refinement of program implementation.

Source: Winichagoon, P., Tontsirin, K. and G. Attig, 1994

SUCCESS FACTORS IN COMMUNITY-BASED NUTRITION PROGRAMS

1. Nutrition as a development agenda: micro and macro level.
2. Gaining momentum: effective communication of the ‘what’ and ‘why’ of nutritional concerns.
3. Effective, community-based social mobilization in nutrition programmes:
 - Community manpower
 - Ratio of mobilizers to households
 - Interface between facilitator and community leaders
 - Planning and implementing community-based programs
 - Setting impact goals: basic minimum needs indicators
 - Implementing concrete community menu of activities with community participation
 - Integrated, holistic approach
 - Monitoring and evaluating: basic minimum needs indicators
 - Interface between facilitator and mobilizer
 - Training
 - Supervision
4. Community nutrition action
5. Other supportive activities
 - Community organization and financing
 - Operational research addressing
 - nutrition intervention strategy
 - implementation/managerial/logistical issues
 - Training of facilitators
 - MIS at different levels (for different purposes and uses)
 - basic minimum needs indicators at the village level for action at the individual and family level
 - basic minimum needs indicators at the level of facilitators for resource allocation for action at the village organizational level
 - basic minimum needs aggregates at provincial level for resource allocation
 - Policy and planning at the national level well in place
 - Effective national mechanisms
 - decentralization of planning
 - intra- and intersectoral coordination efforts

Source: Tontsirin, K. and P. Winichagoon, 1999

B. PEM IN THAILAND: THE DATA AND WHAT CAN BE CONCLUDED FROM THEM

Growth Monitoring Data

It is unfortunate that one of the key references on the Thai nutrition program presents the data in Table 1 below, which are growth monitoring data from program service statistics, as nutrition prevalence and trend data without discussion of their possible inaccuracies. The data were presented as firm evidence of the program's success, and have been picked up as such by some subsequent writers.

Table 1

	Weight For Age of Under Five Children*	
Year	% with Moderate PEM	% with Severe PEM
1982	13.0	2.13
1983	5.9	0.8
1984	4.2	0.27
1985	3.9	0.21
1986	3.12	0.13
1987	2.3	0.06
1988	1.6	0.02
1989	1.14	0.01
1990	0.8	0.004
1991	0.77	0.0035

*Using Thai national standard and Gomez classification.

Source: Tontsirin (1992) in Winichagoon et al (1992).

The problem with presenting these data as estimates of prevalence is that throughout the period in the above table a large proportion of children were not weighed, and those not weighed were more malnourished on average than those who were. An analysis of the discrepancies between the growth monitoring data and the more accurate national sample survey data was made by Winichagoon (1997), who shows (appendix 4, Table A4.1) that in 1986, for example, the prevalence of moderate malnutrition was underestimated by the growth monitoring data by between 35% and 72% in different regions of the country, and the prevalence of severe malnutrition by between 25% and 89%.

It might have been assumed that by 1995 the coverage of growth monitoring would have improved to the point where the differences between growth monitoring and sample survey data would have substantially diminished. However, this was not the case. According to the growth monitoring data, second and third degree malnutrition combined was only 0.6% in 1995, while according to the sample survey data, second and third degree combined was 2.2%, more than three times as much. The growth monitoring or nutrition surveillance data therefore seriously underestimate the prevalence of malnutrition, and so they have not been used in this report.

There are also concerns about using the growth monitoring data as estimates of trend, as well as prevalence. The particular concern is with the data for the first three years in the Table 1 above. First, the data shown for 1983 were misquoted from the MOPH source material, and should have read 11.8 for moderate, and 1.9 for severe. The big apparent fall in malnutrition was therefore between 1983 and 1984, rather than 1982 and 1983.

Second, in any new GMP program, malnutrition tends to decline faster in early years than in subsequent years, as the 'easier' clients respond fast, but malnutrition persists among 'difficult' clients with hard-to-manage socio-economic problems. But in this case, almost two thirds of the total decline over nine years, as shown in the table, took place in just one year. The 50% decline in moderate malnutrition and the 58% decline in severe malnutrition between 1983 and 1984 (using the corrected figure for 1983) may have happened, but it seems suspiciously large for a program-wide estimate. According to the Ministry of Public Health (MOPH), systematic reporting of annual growth monitoring data began only in 1985. Data for the years before that were based on smaller samples, which may be presumed to have missed more malnourished children than in later years. Deriving population estimates from small samples of children who had a program intervention can lead to very large overestimates of program benefits. Using the growth monitoring data as estimates of trend may therefore be as dangerous as using them as estimates of prevalence.

Sample Survey Data

The first national sample survey of nutrition status was carried out in 1960 with technical assistance from the US Government. Unfortunately, the anthropometric classification used is unclear, and so it is impossible to compare the results of this survey with the results of the national sample surveys carried out by the Faculty of Public Health of Mahidol University in 1986 and 1995. These surveys, which did use a consistent methodology, are therefore the only valid basis for estimating levels and trends in nutritional status in Thailand.

The problem with the national sample surveys is that they are based on a national reference standard and the Gomez classification of degrees of malnutrition, which differ substantially from the internationally accepted NCHS standard. The national standard shows higher levels of malnutrition than the international standard. However, the differences are greater for older children, so that the national standard data provide an estimate of malnutrition which is pretty close to the international standard for children under two, the age when malnutrition is most damaging.

Fortunately, the national level data for children under five in the 1986 and 1995 sample surveys were retabulated using NCHS standards. The results for the two standards are presented in Tables 2 and 3.

Table 2: 1986 National Sample Survey

Indicators	% Prevalence NCHS <-2SD	% Prevalence National Standard, Gomez Classification		
		First Degree	Second Degree	Third Degree
Underweight	25.8	34.6	5.8	0.23
Stunting	22.4	17.7	2.53	0.05
Wasting	5.7	22.2	0.62	0.12

Source: Winichagoon (1997)

Table 3: 1995 National Sample Survey

Indicators	% Prevalence NCHS <-2SD	% Prevalence National Standard, Gomez Classification		
		First Degree	Second Degree	Third Degree
Underweight	15.4	29.1	2.0	0.2
Stunting	11.3	13.5	1.6	0.5
Wasting	5.8	8.8	0	0.2

Source: Data from 1995 survey retabulated using NCHS standard by Dr. Uraiporn Chitr-chaeng, INMU, 2000

These tables allow two conclusions to be drawn. First, by 1995 Thailand had almost eliminated PEM as a national public health problem (although it remained a significant problem among certain disadvantaged population groups--see Chapter V). Second, Thailand reduced PEM by about 1.1 percentage points per year between 1986 and 1995, or more than double the 0.5 percentage point per year decline in PEM which has been found elsewhere due to general development and in the absence of a nutrition program (see Mason, 2000 for details of how the 0.5 point figure was calculated).

C. IMPROVING NUTRITION—ISSUES IN MANAGEMENT AND CAPACITY DEVELOPMENT: EXECUTIVE SUMMARY

Most of the technologies needed to eliminate malnutrition as a public health problem now exist. The Bank has invested nearly US\$2 billion to diffuse these technologies through nutrition projects and programs, but with mixed results. The Bank has found that management problems, related to limited capacity to implement what is planned and budgeted, have held back improvements in nutrition. In most client countries, poor management presents a greater barrier to progress than the lack of good interventions, and as large a barrier as shortage of finance or lack of political commitment. In some countries, limited implementation capacity obliges the Bank to lend less than it would otherwise for nutrition, based on need.

The Bank has not yet defined the main issues in management and capacity development in nutrition nor has it developed methodologies for governments and project staff to identify and deal with these issues and systematically improve capacity. This issues paper is intended as a starting point for developing the Bank's professional capacity in nutrition management and institutional development. The nutrition community is invited to:

- Comment on or add to the issues set out in this paper.
- Suggest methodologies or conceptual frameworks that could be useful.
- Point out country or project cases from which lessons can be learned.
- Suggest projects in the planning stage that could be developed as “best-practice” cases for process documentation and dissemination.

The scope of this paper is limited to three priority areas: sectoral capacity analysis and strategy development; the management of multisectoral nutrition programs at country level; and the implementation of community nutrition programs for preschoolers and their parents (these usually include interventions for growth promotion and micronutrient supplementation). It does not attempt to deal with the implementation of school-based nutrition programs for older children; direct food or income-transfer schemes for the very poor and nutritionally vulnerable; food security and income-generation programs that have an indirect impact on nutrition; or food fortification.

A dozen sets of issues are detailed in the body of this paper. The first four relate to program management problems; the next five, to sector-level problems; and the last three, to development assistance management problems. The issues are:

Issue 1—Community Empowerment and Decentralization

Programs for growth monitoring and promotion and for micronutrient supplementation are acknowledged to work best when communities and local governments are involved in their design and management. Though part of the rhetoric, decentralization, community participation, and empowerment are seldom effectively implemented. Unresolved issues include finding ways to determine realistic decentralization and participation levels in different environments, and management structures and processes that best encourage them.

Issue 2—Staffing and Job Design

Volunteers delivering nutrition services at the community level often have insufficient time, skill, or incentives to do an effective job, and full-time paid staff members are often health workers overburdened with duties or clients. The issues in staffing and job design relate to the use of volunteers or paid workers or some combination; appropriate staff-client ratios; the number and type of tasks that can be handled;

design of daily, weekly, and monthly work routines; and choice of performance incentives that best ensure quality and sustainability.

Issue 3—Supervision, Training, and Referral

Field nutrition workers, whether volunteers or government personnel, are seldom adequately trained, supervised, or supported by a strong referral system. The technical content of training is often well developed, but some questions have been inadequately explored. They include: what other types of training should field staff receive; which processes work best for pre- and in-service training; how can supervision be reoriented to be more supportive, while maintaining accountability for performance; and how can completion, proper diagnosis, and follow up on referrals be ensured.

Issue 4—Program Monitoring and Evaluation

Problems in program monitoring and evaluation include unwieldy systems that take up too much staff time and deliver data late or to the wrong users; and misdirected emphasis on performance statistics instead of service quality and client satisfaction. The challenges are: to design systems that serve the needs of clients as well as managers; and to collect enough quantitative and qualitative information without overwhelming field workers and processing systems. (The Bank's increasing and necessary insistence on improved monitoring and evaluation is overstressing many countries' capacity to deliver in this area.)

Issue 5—Sectoral Capacity Analysis and Strategy Development

The sectoral context affects what can be done at the program level. It includes: the capacity of the health and social welfare sectors through which many community nutrition programs are implemented; the general civil service environment, including the standard of governance and rules concerning pay, postings, and transfers; and the presence or absence of institutions or cultural traditions that can foster community participation and empowerment. The questions to study: how can sectoral capacity analysis be improved and what is the best way to prepare sectoral capacity-development strategies.

Issue 6—Understanding, Commitment, and Behavioral Change

Understanding and consensus on the causes of malnutrition and the seriousness of the problem are limited. For this and other reasons, commitment to implementing solutions is weak. The question to address is how should the process be managed so as to increase understanding and commitment and promote appropriate behavioral change among the many stakeholder groups involved in nutrition.

Issue 7—Managing the Nutrition “Sector”

Because nutrition cuts across sectors, managing the nutrition “sector” is problematic. The questions to address include: where should nutrition's home be located in government; and what are the best processes and incentives for coordinating and managing a country's overall efforts in nutrition within its specific management structure.

Issue 8—Managing Nutrition Program Support Organizations

Many line agencies implementing nutrition programs depend on specialist organizations for support in areas such as management training; information, education, and communication; research; and monitoring and evaluation. Issues common to the management of these support organizations include finding ways to: get the right balance between government, nongovernmental organizations (NGOs), and private sector support; divide roles and responsibilities among organizations; promote competition while avoiding duplication; develop individual support institutions as centers of excellence that are responsive to program needs.

Issue 9—Tools for Institutional Analysis and Capacity Development

The Bank has no generally accepted tools for capacity analysis and development or for bringing about institutional change through nutrition projects. The question to address is which tools can be usefully imported and applied from the Bank's experience in other sectors and different environments, from other development agencies, from academia, or from the consulting industry.

Issue 10—Building Technical Assistance Capacity

Both foreign assistance agencies and countries implementing nutrition programs suffer from capacity problems, including insufficient trained staff to provide effective assistance on technical aspects of nutrition or on management and capacity building. The question to address is how can the Bank strengthen its capacity in this area.

Issue 11—Improving Donor Cooperation

Donors could also do more to coordinate their projects and procedures. Questions to address include: can the Bank and UNICEF, already partners in nutrition, work more closely with each other and with other agencies to make the most of their comparative advantage in different areas; can donors lighten the administrative load they put on countries' scarce aid management capacity by developing fewer projects, but ones which are based on co-financing mutually agreed nutrition and capacity-development strategies?

Issue 12—Improving Coordination Across Sectors

Donors as well as countries have difficulties coordinating their nutrition efforts across sectors. Questions to answer include: how can "indirect" nutrition programs be targeted to clients whose problems cannot be solved by direct nutrition programs alone; and how can nutrition be incorporated into the multisectoral approach to community-driven development?

Priorities suggested for a work program in management and capacity development in nutrition include:

- Preparing *case studies of successful nutrition projects and programs*, focusing on what they did right in management and capacity development, and which issues they left unresolved. This is a gap in the current nutrition literature, which focuses mainly on technical design and impact evaluation.
- Developing practical *procedures for sectoral institutional analysis and strategy development*. Joint development of such procedures with the donor community would be a useful first step toward building a donor partnership to address nutrition-management issues.
- Applying these procedures to *preparing some best-practice nutrition projects with strong emphasis on capacity development*, cofinanced by the Bank and UNICEF, and perhaps also by bilateral partners. These projects would be an opportunity to test new approaches to donor cooperation.
- Assigning individuals or *creating groups to focus on management and capacity-development issues in nutrition*, with a mandate to act as a clearing house for information; to contribute to the tasks suggested above; and to disseminate work program results to agency staff and developing-country partner institutions. In the case of the Bank, the size of the nutrition portfolio and the centrality

of capacity-development problems to the portfolio's health call for the creation of a small core team to work on these issues.

Facilitating the creation of an informal, *interagency experience-sharing network* on nutrition management and capacity development. Through the network, identifying individuals and institutions in developing countries with strengths in nutrition management and capacity development, who could become part of a broader, North-South network interested in these issues.

D. KEY INFORMANTS

In Bangkok

Dr. Amorn Nondasuta, former Director, Nutrition Division and Permanent Secretary, MOPH.

Prof. Dr. Aree Valyasevi, founding and former INMU Director

Dr. Chawalit Suntikitrungruang, Senior Advisor, Department of Health

Mr. Komol Chomcheunchob, Assistant Secretary-General, NESDB

Dr. Luecha Wanaratana, former Director, Nutrition Division, MOPH

Assoc. Prof. Pattanee Winichagoon, Chief, Community Nutrition Section, INMU

Prof. Dr. Sakorn Dhanamitta, second INMU Director

Mr. Sa-nga Damapong, Senior Technical Advisor, Nutrition Division, MOPH.

Dr. Sangsom Sinawat, current Director, Nutrition Division, MOPH

Dr. Suttilak Smitasiri, Chief, Nutrition Communication Section, INMU

Mrs. Suwanee Kamman, Director, Social Section, NESDB

Dr. Uraiporn Chitchang, Nutrition Communication Section, INMU

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In Konkaen

Dr. Apisit Thamrongwarangoon, Director, Ubonrat District Hospital, Konkaen

Dr. Chainaronk Chetchotisakd, Director, Konkaen Regional Hospital

Dr. Chonlada Busayarat, Chief, Community Medicine Section, Konkaen Regional Hospital

Mr. Martin Wheeler

Dr. Sirijitt Vasanawathana, Chief Pediatric Section, Konkaen Regional Hospital

Dr. Thantip Thamrongwarangoon, Manager, Sustainable Community Development Foundation, Ubonrat District

E. SELECTING VILLAGE HEALTH COMMUNICATORS

Steps for House to House Survey

- (a) Survey the village and draw a map showing all the houses.
- (b) Ask the head of the household or the best informed person in the household information about the neighbours and problems using the simple form.
- (c) Mark on the map with arrows which household is contacted most often with advice and by whom, as soon as the interview is completed.
- (d) Organize groups or clusters of houses according to the communication lines.
- (e) Count the arrows pointing to a house in each cluster. The household with higher number of arrow lines should be the center of communication, or one of its inhabitants will be the most respected person within that community.
- (f) Identify person who are interested in volunteer work, who are usually found in houses with the heaviest concentration of arrows. If they are willing to share their time helping their neighbours, they will be selected as village health communicators. Village health communicators will be controlled not only by the village development committee but also the people in the community themselves.

Source: Nondasuta, A, 1988

F. BASIC MINIMUM NEEDS INDICATORS

The BMN system was jointly developed by four government ministries (health, agriculture, education and interior, led by MOPH. The system was piloted in Korat province in the north east, and then picked up by NESDB and implemented nation-wide.

There are 32 BMN indicators, divided into eight groups, as follows:

I. Adequate Food and Nutrition

1. Proper nutrition surveillance from birth to five years and no moderate and severe PEM.
2. School children receive adequate food for nutritional requirements.
3. Pregnant women receive adequate and proper food, and delivery of newborn babies with birth weight not less than 3000 grams.

II. Proper Housing and Environment

4. The house will last at least five years.
5. Housing and the environment are hygienic and in order.
6. The household possesses a hygienic latrine.
7. Adequate clean drinking water is available all year round.

III. Adequate Basic Health and Education Services

8. Full vaccination with BCG, DPT, OPV and measles vaccine for infants under 1 year.
9. Primary education for all children.
10. Immunization with BCG, DPT and typhoid vaccine for primary school children.
11. Literacy among 14-50 year old citizens.
12. Monthly education and information in health care, occupation and other important areas for the family.
13. Adequate ante-natal services.
14. Adequate delivery and post-partum services.

IV. Security and Safety of Life and Properties

15. Security of people and properties

V. Efficiency in Food Production by the Family

16. Growing alternative crops or soil production crops.
17. Utilization of fertilizers to increase yields.
18. Pest prevention and control in plants.
19. Prevention and control of animal diseases.
20. Use of proper genetic plants and animals.

VI. Family Planning

21. Not more than two children per family and adequate family planning services.

VII. People Participation in Community Development

22. Each family is a member of self-help activities.
23. The village is involved in self-development activities.
24. Care of public properties.
25. Care and promotion of culture.
26. Preservation of natural resources.
27. People are active in voting.
28. The village committee is able to plan and implement projects.

VIII. Spiritual or ethical development.

29. Being cooperative and helpful in the village.
30. Family members are involved in religious practices once per month.
31. Neither gambling nor addiction to alcohol or other drugs by family members.
32. Modest living and expenses.

G. THE WORK OF THE SUSTAINABLE COMMUNITY DEVELOPMENT FOUNDATION

Redefining the Problem

Ubonrat District Hospital in Konkaen province is in the heart of Issan, Thailand's poor, north eastern region. Like district hospitals everywhere in Thailand, it has to deal with many cases of chronic disease, which could have been avoided if there had been better preventive care. But the Director and staff of this hospital have decided that the solution to their difficulties lies in a non-medical approach to prevention. They see the roots of poor health and nutrition in their area as lying deep in poverty and social dislocation, which are the result of 20 years of national development policies which have, on balance, been harmful to the north east.

In particular, they tie the roots of the district's current problems to two failed government policies: the support for commercial logging which led to almost universal deforestation in the district, and the promotion of cash crops, such as rice, sugarcane and cassava. Deforestation has meant the loss of income from minor forest products, as well as dehydration of soils and periodic flooding. Mono-cropping of cash crops has depleted the soil, and has also proved to be a highly risky strategy for poor farmers. Several cash crops depend on expensive inputs, so that one crop failure can lead to a degree of indebtedness from which many farmers never recover.

The combination of deforestation and cash cropping have had far-reaching consequences. Some indebted and impoverished farmers have had to sell their land, and become laborers for better off farmers. Other farmers have had to migrate to the cities, either seasonally or permanently, in search of ways to pay off their debts—or they are obliged to send other family members to the cities for this purpose. The combination of poverty and social dislocation has proved to be devastating for many families: they show up in high rates of addiction to alcohol, tobacco or amphetamines; malnutrition among young children who are left behind in the care of grandparents, when their parents migrate to the cities; and a general sense of lack of control over the future, hopelessness, and unhappiness.

Several of the staff of Ubonrat Hospital are involved in the SCDF's community development work, because they see reversing poverty and social dislocation as the only way to deal with their increasing caseload of chronic disease, addiction and psychological problems. Their health development strategy is three-pronged, consisting of curative care at the hospital; preventive care provided on an outreach basis; and community development to deal with the underlying causes of health and nutrition problems.

The Work of the Sustainable Community Development Foundation

The origins of the SCDF are in two small scale projects in Ubonrat District, the Well-Child Survival Project and the Self-Care Development Program, which came together in 1993 under the name of the Self-Care Development Program (SCDP). The SCDP began with funding from Worldvision, but when this was cut back, the SCDP was in 1995 turned into a foundation--the SCDF--to make it easier to raise funds for the program.

The SCDF has no fixed recipe for development, in terms of a menu of inputs and activities. It leaves it up to communities to decide how solve their own problems, but helps them to do so by providing access to others' knowledge and experience, by helping set up savings groups in the villages, by putting them in touch with government and non-government sources of finance, and by providing small amounts of seed money from the SCDF's own funds.

SCDF's facilitators begin by looking for what they call 'natural leaders', people who are concerned about community development and prepared to act, and who are also well integrated into their community and good communicators, and hence in a position to influence others. Natural leaders from new villages are taken on study tours to villages which are already in the program, to show them what can be done. SCDF facilitators, the natural leaders and community members then hold meetings to diagnose problems and develop plans. Problem diagnosis starts with a comparison of peoples' past lives with their present; the conclusion is always that poverty and hardship have increased. The community is then asked to develop its ideal vision for the future, define the problems that stand in the way of achieving that vision, and find ways to overcome the problems.

Interventions which have been successfully implemented as part of communities' development plans include

- digging ponds to provide water sources for irrigation, and for fish rearing
- planting trees to provide income in the long term when the trees can be felled, and in the short run to improve soil water retention, provide shade, and beautify the environment
- moving from mono-cropping to multiple cropping, so as to reduce risk, and to provide a variety of nutritious food for sale or for home consumption
- changing from inorganic to organic fertilisers and pesticides, which is cheaper, and better both for the environment and farmers' health, in an area where many farmers have dangerously high concentrations of pesticides in their blood.

The SCDF's work is so far on a small scale, covering only 52 villages in four districts of Konkaen province. But in these villages, it has led to fundamental changes: 966 ponds have been dug; 200,000 trees have been planted; more than a thousand families have moved from inorganic to organic fertilisers and natural pesticides; 49 savings funds have been created; midday meals programs in 26 schools feature organic fruit and vegetables; and over two hundred members have been able to stop smoking or drinking. Because of the effects of these projects—not least of which is the demonstration that it is possible for people in the north east to transform their lives through their own efforts—48 members' children who had migrated to the cities have returned to help their parents with community development activities; and 22 families who were seasonal migrants no longer need to leave the region to find work.

The non-tangible benefits of the community development program are seen by the SCDF as being as important as its tangible benefits. Members are increasingly self-reliant, as they prove to themselves that they can take charge of their futures without depending on the government. They feel hope for the future, as they see how much change can be brought about in the 5-7 years it takes the program to show substantial benefits in most villages. Families which were split are together, and communities once again function according to the Thai tradition of joint decision-making and mutual self-help, a tradition which had been abandoned due to increasing poverty, and the demands of individual survival.

In short, people are happier, as well as better off. But one problem is that traditional indicators of development progress do not capture the intangible psychological and even spiritual benefits of participating in community development. The Foundation is therefore in the process of devising a 'happiness index' which will measure them, and for the first time make it possible to correlate psychological change with the prevalence of disease.

The SCDF now faces four challenges common to all community development NGOs which are successful on a small scale:

- How to find the money to expand, and how far it should draw on government resources to help in scaling up.
- How to find and train enough of the right kind of higher level managers and lower level facilitators for the program to keep up its quality at a larger scale.
- How to make sure that the Foundation's philosophy is not compromised as it goes to scale.

Implications for the National Nutrition Program

In a country where PEM has been eliminated as a national public health problem, most of the PEM which remains is concentrated in very poor communities such as those helped by the SCDF in Ubonrat. Its roots lie in complex problems of poverty and social dislocation, which the MOPH's traditional interventions of GMP and food supplementation cannot solve. If dealing with PEM requires multi-sectoral community development along the lines of what the SCDF and other community development NGOs are doing in the north east, this poses substantial challenges for the MOPH nutrition program, and for INMU as MOPH's main source of technical assistance in nutrition.

These challenges are likely to include

- accepting from a policy and strategy point of view that health and nutrition can no longer be achieved by traditional health interventions alone
- devising strategies for training provincial and local health and nutrition staff to work in a broader, community development framework
- developing procedures for working with multiple small NGOs, drawing on their skills and providing them with resources to work on a larger scale, without compromising their philosophies or bureaucratizing their methods of operation
- finding ways to develop three-way partnerships between the local staff of the MOPH, the staff of community development NGOs such as SCDF, and the Tambon Councils which, as a result of Thailand's constitutional reform, will soon have access to unprecedented resources and authority for community development developing new measures of progress which include non-tangibles such as psychological health and happiness, as well as the traditional epidemiological measures.

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