

PD-ABN-647
92703

THE FOOD, NUTRITION AND RURAL DEVELOPMENT CENTER

FINAL EVALUATION

February 8, 1986

TABLE OF CONTENTS

Glossary

Foreword

CHAPTER I - EXECUTIVE SUMMARY

CHAPTER II - PROJECT APPROACH/DESIGN

A. Intended Beneficiaries and their Context

B. Objectives

C. Strategies

D. Site Selection

E. Administration

F. Evaluation Plan

CHAPTER III - PROJECT OUTCOMES/ACCOMPLISHMENTS

A. Introduction

B. Immediate Objectives

C. Post-Project Expectations

D. Long Term Objectives

CHAPTER IV - CONCLUSIONS AND RECOMMENDATIONS

A. Introduction

B. Conclusions and Lessons

C. Recommendations and Future Plans

APPENDICES

1. Relationships Among the FNC, FTE, the Rural Youth Program and the FNRDC

2. Expected Direct Beneficiaries

3. The Use of Paraprofessionals

4. A Comparison of Expected and Actual Beneficiaries

5. A Brief Description of Major Field Projects and Training Programs
6. The Proposed Organization of the Office of Extension and Continuing Education
7. Major Field Activities: Participants, Cooperating Agencies, Sites, and Seed Money
8. List of Group Interviews, Discussions, and Village Visits
9. References

Glossary

- ARD - Accelerated Rural Development Office,
Ministry of Interior
- FNC - Food and Nutrition Center; predecessor of
the FNRDC
- FNRDC - Food, Nutrition, and Rural Development Center
- FTE - Functional Teacher Education Project; an
effort to use rural schools as a base for
community development
- OECE - Office of Extension and Continuing Education,
Prince of Songkhla University
- PSU - Prince of Songkhla University
- Tambon - A subdistrict

FOREWORD

"As for literary criticism in general: I have long felt that any reviewer who expresses rage and loathing for a novel or a play or a poem is preposterous. He or she is like a person who has put on full armor and attacked a hot fudge sundae or a banana split.

"I admire anybody who finishes a work of art, no matter how awful it may be. A drama critic from a news magazine, speaking to me on the opening night of a play of mine, said that he liked to remind himself from time to time that Shakespeare was standing right behind him, so that he had to be very responsible and wise whenever he expressed an opinion about a play.

"I told him that he had it exactly ass backwards -- that Shakespeare was standing behind me and every other playwright who was foolhardy enough to face an opening night, no matter how bad our plays might be.

*** Kurt Vonnegut, Palm Sunday

It may be simplistic to suggest any parallels between a development project and a work of art. It may not be so simplistic, however, to view the roles and tendencies or postures of the evaluator and the critic in the same light. In any case, I have tried to avoid encasing and emboldening myself in the armor of the evaluator's paraphernalia and to recognize behind whom the project's beneficiaries are standing.

I wish to express my appreciation to the many people at PSU and the FNRDC and to the local officials and villagers who took time to share their knowledge of and thoughts about this project with me. I am particularly grateful to the FNRDC director and her husband, the project's assistant director and director of PSU's Office of Extension and Continuing Education, not only for their willingness to cooperate with this effort, but also for their infectious enthusiasm and seemingly inexhaustible energy.

Staff at The Asia Foundation, particularly the assistant representative, provided easy access to their records of the project, some valuable initial guidance, and important subsequent inputs that helped me keep the effort in an appropriate perspective.

Given the increasing and often protean information revealed most frequently at the joint reviews of the numerous earlier drafts of this report, I suspect even this final version contains a number of factual inaccuracies and some interpretations based on a less than complete understanding of what took place and why. I, alone, am responsible for such shortcomings. If, however, this report directly or indirectly stimulates some sustained, collaborative reflection on the project's experiences and the FNRDC's future by a broad spectrum of PSU/Pattani and FNRDC staff together with Asia Foundation and AID representatives, I will be satisfied that my effort has made a contribution.

Lou Setti
Songkhla
February, 1986

CHAPTER I
EXECUTIVE SUMMARY

Project Design

The FNRDC Project was planned as a three-year endeavour (March, 1982 to February 1985) involving a total budget of US\$461,196, approximately 65% of which was an AID grant through The Asia Foundation. The remaining inputs were provided by PSU and other Thai government agencies. A six-month extension involving no additional AID funds was subsequently granted, extending the project through August 1985. The major PSU collaborators were the Home Economics Department, then part of the Faculty of Education, and the Office of Extension and Continuing Education. Both these units are based at the University's Pattani campus.

The project was designed to consolidate and expand the scope of three ongoing rural development activities being undertaken by PSU's Pattani campus; the Food and Nutrition Center, the Rural Youth Training Program, and the Functional Teacher Education Project. Its intended beneficiaries were to be the faculty and students at PSU's Pattani campus and the people of the 14 provinces of southern Thailand. Among this latter group emphasis was to be directed to rural residents, particularly those in key community leadership roles or those who were in a position to influence others. Attention was also to be placed on government development workers, teachers, and administrators who could introduce food and nutrition issues into their regular activities.^{*/}

The project's two major "immediate objectives" were to "re-locate and

^{*/} For a list of these intended beneficiaries and the benefits expected to accrue to them, see Appendix 2.

enlarge the scope of the Pattani-based Food and Nutrition Center" and "engage in research, experimentation, demonstration, training, production, (and the) processing and marketing of local products." There were also eight long-range objectives which were intended to indicate the project's impact on political and socio-economic problems in Southern Thailand. At the conclusion of the project it was expected that 1) the FNRDC would be supported by university budget and would continue to provide data for extension services; and 2) southern residents would be benefiting from "observable but unmeasurable improvements in income and outlook."

The project strategy included domestic and overseas staff training; the construction and equipping of a research, demonstration, and training station at a location relatively equidistant from the universities two main campuses and the regional government center of Songkhla; and the conduct of research and development, training, and village level field activities.

Project Operations: A Brief Overview

The project undertook four basic rural outreach approaches, i.e., the inhouse training of rural leaders and local officials and schoolteachers, village level field projects, and two approaches to the training and use of volunteer paraprofessionals. Field activities were originally intended to be conducted in 7 village sites (3 to receive "intensive" inputs and 4 "less intensive"). In fact activities were eventually conducted in approximately 20 villages.

Three individuals; the project director, the temporary project director, and the assistant project director (also the director of the Office of Extension and Continuing Education); were responsible for daily project

operations at varying points in, and periods of, time. The lack of continuity here was due to the project director's overseas doctoral study and the assistant director's overseas study tour.

An interfaculty, interagency policy and advisory committee, chaired by PSU's vice-rector for the Pattani Campus, reviewed and guided general project directions, while an operations committee served as an operational planning and coordinating mechanism. There was considerable turnover among the membership of this latter committee, again due largely to overseas study supported by both this and the Functional Teacher Education projects.

The Asia Foundation provided support in the areas of project management and the improved reporting and financial systems. This organization's contributions, effective at several critical junctures, were weakened by staff transition and, apparently, changes in programming priorities.

Major Accomplishments

The project's accomplishments were substantial. First, with a relatively small amount of external funding (equal to approximately 40% of the estimated current above-ground value of the facility) an attractive, comprehensive food, nutrition, and rural development center has been constructed and equipped to the extent that it can, in a number of respects, function effectively. Second, this center has collaborated with a significant number of government agencies, helping these agencies improve the quality of their rural development programs. Particularly close relationships have been established with the National Primary School Commission, the Center for the Administration of the 5 Southern Border Provinces and the local officials of Pattani Province and Chana District. Third, the university has included the FNRDC as a section within its Office of Extension and Continuing Education. This latter Office was officially approved in December by the

State Universities Bureau and the Cabinet. It is expected that the FNRDC's inclusion in this office will be approved within the next year or two.

The value of a number of other important accomplishments or positive initial actions faces the strong possibility of being diminished unless the FNRDC is able to find a way to continue operating at a level similar to that achieved during the latter part of the project period. These included; staff training (for both university faculty and project-hire personnel who were expected to form the core full time staff of the center); research and development, especially in the areas of food production and processing; the development of training programs for rural leaders and youth and government development agents and administrators; the development of lesson units in food and nutrition and food production/processing occupational activities for rural primary schools; and some new approaches to the training and use of volunteer paraprofessionals.

Lessons Learned

The project experiences offer several important lessons or evidence reinforcing lessons learned elsewhere. The first concerns project design. A project with relatively minimal funding which seeks to simultaneously build, buy, develop staff, conduct R&D in diverse areas, and operate relatively extensive training and field activities within a short period of time in a non-urban setting is ambitious at best. When the highly centralized bureaucratic context of the Thai university system as a whole is taken into account and "institutionalization" is added as a goal, the project develops Sisyphus-like dimensions. I personally find it difficult to believe that there was not some informal understanding among the three parties involved that there would be a follow-up phase to the effort.

A second lesson is that the roles and functions of institutions such as the FNRDC need to be reexamined or further clarified frequently during their initial years of operations. In the case of the FNRDC project, experiences indicate issues such as the following require reexamination: the mix of research and development and operational responsibilities, the range of research and development activities, and strategies for collaborating with major operational agencies.

A third lesson relates to center-university linkages. Here, too, reexamination and further clarification are essential. The basic issue is whether in the long run the FNRDC is to be a self-contained, self-supporting operation, the rural outreach arm of a particular department and/or faculty, or a unit through which a wide range of departments from various faculties can contribute to and learn from rural development action.

There are a number of other specific lessons that the center director feels have been learned through the project. These, like the broader ones discussed above, are largely impressionistic as evidence supported by systematically collected and analyzed data is not available. These lessons include; the value of one and two day training programs, the effectiveness of village level training programs that are conducted in a series of short phases, and the limitations of the village (as opposed to the school service area, the subdistrict, or the district) as a basic unit of operations.

Conclusions/Recommendations

If the prior FNC, FTE, and Rural Youth Training projects are taken into account, this project should be considered a highly successful second step. The project's weaknesses, while many, are neither unusual nor beyond resolution. They certainly should not be the factors which determine whether or not AID, The Asia Foundation, and PSU are to collaborate on a third step.

It is recommended here that this collaboration take place or that AID and/or The Asia Foundation continue to provide some low level of support (e.g., for center core staff salaries, etc.) and assist the center to identify and secure larger funding from other donors. This external support will be essential for at least several more years.

CHAPTER II
PROJECT APPROACH/DESIGN

A. INTENDED BENEFICIARIES

The intended beneficiaries of the Food, Nutrition and Rural Development Center (FNRDC) Project were 1) the faculty and students of the Prince of Songkhla University (PSU) itself, particularly those at its Pattani Campus, and 2) the people of the 14 provinces of southern Thailand, particularly those living in rural areas.

With respect to the university, the project aimed not only to expand the functions and improve the programming quality of the previously established Food and Nutrition Center (FNC), but also to provide further impetus to efforts to create within the university's organizational structure a permanent rural development programming unit with core support from regular budget. To understand how this latter concern was to be addressed it is necessary to review briefly three prior PSU rural development activities, i.e., the Food and Nutrition Center (FNC), the Functional Teacher Education Project (FTE), and the Rural Youth Development Program.^{*/}

The FNC was established in 1976 with support from USAID and The Asia Foundation through a 3-year Operations Program Grant (OPG). Within a short time the center expanded to the point where its campus-based headquarters in Pattani were no longer adequate in terms of lab equipment and space, land for crop experimentation, and classroom and dormitory facilities for training.

^{*/} The FTE Project is referred to in some documents as the School-Based Community Development Project. For a more detailed review of these activities and their evolution prior to and during the project, please see Appendix 1.

The FTE Project, a collaborative arrangement which began in 1979, has involved at various points in time PSU's Faculty of Education, the University of Missouri at Columbia, the Fulbright Commission, The Asia Foundation, and USAID (through the Thai government's Department of Technical and Economic Cooperation). Its key objectives were to improve living conditions in southern Thailand through integrated community development using the schools as development centers and school personnel and local leaders as development agents. It also sought to develop PSU faculty capabilities so that they would be able to offer relevant on and off campus (extension) programs for the primary and secondary school teachers and the local leaders who would serve as these development agents. Some individuals credit this project with providing inspiration for subsequent National Primary School Commission efforts to provide select primary schools in poverty-designated areas with special budget support to serve as centers for rural development. ^{*}/

The Rural Youth Development Project was one of the earliest community outreach efforts of PSU/Pattani. Originally limited in scale by university budget constraints, it was expanded with support from the King and subsequently from the Ministry of Interior's Accelerated Rural Development Office (ARD). This program emphasized leadership training and occupational skill development.

It was expected, then, that the FNRDC project would provide a common organizational support base for these three ongoing activities. In fact, it appears to have been the view of some that the FNRDC would be the focal point for the merger of these and, perhaps, other university-sponsored rural

^{*}/ Reference here is to the Commission's "Education for Rural Development" Project known by the Thai abbreviation "kaaw saaw phaaw chaaw."

development activities. In fact, one of the project's long range objectives envisioned the center as providing "a base for the university's proposed Research (and Development) Institute." (Proposal 82:5) It was assumed as well that the project would stimulate the university to direct a higher priority to community outreach activities, particularly those which focused on rural development, and that university education would become more grounded in practice and, consequently, more meaningful and relevant.

The other major group of beneficiaries were the individuals to be served by project training and field activities. The vast majority of these were rural residents, particularly but not exclusively those in leadership roles, and local rural development officials and teachers. The individuals who developed the project proposal were motivated by their own studies and those of their university colleagues and national planners which indicated that poverty and associated problems of nutrition, health, sanitation and food production in southern Thailand had in the past been underestimated as the macro-level picture had been heavily shaped by sizeable pockets of significant wealth. The project, then, aimed at directly improving the living conditions of over 12,000 people in the region. Through these individuals, it was estimated that the project's indirect beneficiaries would total in the hundreds of thousands.^{*/}

B. PROJECT OBJECTIVES

The FNRDC project proposal included two major "immediate objectives," eight "long range objectives," and several "post-project expectations."

^{*/} See Appendix 2 for a breakdown of intended direct beneficiaries and expected benefits.

The immediate project objectives were to:

1) "... relocate and enlarge the scope and dimension of the FNC by combining it with the School-Based Community Development Program and the Youth Training Program into a more cohesive and coordinated effort operating from a regional center equipped. (sic)"

2) "... engage in research, experimentation, demonstration, training, production, the processing and marketing of local products." (Proposal 82:7-8)

The "eight long range objectives" indicated how the project would "contribute to the solution of political and socio-economic problems in southern Thailand..." These were to:

1) "Establish a base for the proposed University Research Institute in a practical setting relevant to the region's rural development needs.

2) Train technical manpower to meet priority development needs of the region.

3) Support the establishment and undertakings of a rural youth development center at the same site.

4) Provide a base for local institutional cooperation in areas of development among surrounding schools, temples, mosques, and village organizations.

5) Encourage through all endeavours the self-help concept.

6) Help bridge the gap between the socially-advantaged and disadvantaged elements of southern Thai society.

7) Promote the center as a model for replication elsewhere in Thailand.

8) Stress the advantages of government and nongovernment institutional cooperation in maximizing the use of the human and other resources available locally.

(Proposal 82:10-11)

The "post-project expectations" were that 1) an established demonstration and experiment station supported through university budget would

exist and continue to provide data for extension services and 2) "observable, but probably unmeasurable improvements in income and outlook will be occurring among the inhabitants of the southern region." (Proposal 82:11)

C. PROJECT STRATEGY

The project strategy had the following major components:

Staff Training

"... (To) provide special training for the Center's staff both within country and abroad in the following areas:

- ... Overall management, establishment, operation and development of the institute.
- ... Research and experimentation in food, nutrition, and agriculture.
- ... Production and processing of agricultural products.
- ... Marketing and distribution of products.
- ... Training and follow-up of various program(s)."

(Proposal 82:5-6)

This staff training was to range from one month to one and one-half years depending on need.

Center Development

Using land contributed by local government a center was to be established for training, production, processing, and product distribution. It was to include an integrated farming demonstration field station in which there would be no waste of any kind, a research lab for assessing the nutritional value of local foods and edible plants and the nutritional status of the southern Thai population, a food processing plant, and an exhibition and

sales center. ^{*/}

Research and Development

The FNRDC's research and development strategy was similar to that pursued by its predecessor, the Food and Nutrition Center. That is, in terms of anything systematic it appeared to continue, for all practical purposes, a major if not exclusive focus on research and development related to food production and processing. As far as R&D related to rural development approaches, training designs, and the like was concerned, the assumption was apparently that this work had been "done". ^{**/}

Rural Outreach

The center had four basic approaches to rural outreach. First was in-house training sessions ranging from 1/2 a day to one month for villagers, village leaders and paraprofessionals, teachers and school administrators, and government development workers and their administrators. Emphasis here was to be placed on individuals who would be in a position to train or influence others, although if time and facilities were available no group was to be turned away. A second approach consisted of field projects in both benchmark and, as it turned out, nonbenchmark villages. These projects ranged from training programs to development projects (e.g., the construction of latrines and rain-water catchment tanks, the establishment of a village

^{*/} See the Project Proposal pp. 6-7 and the Letter of Agreement, pp.5-7. For a more detailed PSU statement, see the Project Proposal (Revised Draft) pp. 14-15.

^{**/} The "Letter of Agreement" under the heading "Work to Date" includes the following statement. "Extension workers have been trained; education materials ...development; extension education techniques have been tested and refined." See p. 5.

medicine fund, fish-farming, goat raising, etc.)) and were often supported by project seed money or provision of equipment or necessary supplies. The third approach involved working with rural schools, with initial activities usually focusing on supporting school efforts to establish a school lunch program or to improve or expand activities related to the "work orientation" section of the curriculum.

The final approach involved the use of paraprofessionals. There were essentially two strategies pursued here. First, in Chana District, Songkhla the FNRDC trained approximately 12 villagers and 3 village development committees from each of 13 tambons in food, nutrition, home improvement, and food preservation to serve as village home economics extension workers and, more broadly, as volunteer FNRDC field representatives.^{*/} A second strategy, initiated shortly after the original project director returned from overseas study, involved intensive 1 month training for 50 young paraprofessionals. While the main purpose of this latter training was to prepare and select 15 full time staff for the FNRDC center, it was also designed to encourage those individuals not selected to return to their homes to organize and instruct village groups. The FNRDC indicated a willingness to provide those who did so with a small honorarium and other forms of support.^{te*/}

In both these strategies the individuals trained were selected by local government development workers, primarily the tambon community development agent. It was expected, then, that through this initial relationship

^{*/} The type of training these individuals received is described in detail in Food, Nutrition and Rural Development Center for Southern Thailand, Laksuud 2: Phuu Phey Phrae Khahakaam Nai Muu Baan (Curriculum 2: Village Home Economics Workers) B.E. 2527 (1984) 165p. (mimeograph)

^{**/} For a more detailed description of this approach and the efforts of two individuals, see Appendix 3.

established during their selection the trained paraprofessionals would subsequently be utilized in programs where their knowledge and skills were required. Such a situation has indeed materialized, particularly in certain tambons located close to the FNRDC in Chana District. In these areas the community development agents have not only used the paraprofessionals in their own activities, but also have on occasion arranged for them to teach "Interest Group" courses in food and nutrition-related areas with funding from the Nonformal Education Département.

The Quality of University Education

The strategy here was essentially one of providing students, particularly in the Home Economics and, to a lesser degree, the Health Education Departments ^{*/} with a wider range of practicum opportunities. It also gave faculty members, again primarily those from Home Economics, greater opportunities for field research and for applying their knowledge in rural settings.

D. SITE SELECTION

Seven villages in Pattani and Songkhla were selected for field operations. Of these, three were selected for concentrated or intensive efforts in nutrition, health, child care, home improvement, and increased food production. In the remaining 4, similar efforts were to be made although on a less intensive scale. The project director indicates that the intensive/less intensive intervention strategy was chosen in order to determine what impact could be achieved with minimal inputs. It should be mentioned, in addition, that earlier drafts of the proposal and other pre-project

^{*/} Students from this department were involved primarily in FTE village activities and supervised by the FNRDC assistant director.

documentation refer to the villages as "lab sites," implying that they were to serve as important components of the FNRDC's research and development processes as well as focuses for development project action.

There was apparently some confusion or at least lack of continuity regarding site selection. Prior to their departure for overseas study and a 3 month study tour the project director and assistant director worked with the project's policy advisory committee to establish a criteria and process to be followed. For reasons, and in a manner not clear, the temporary acting director decided to adopt a different set of criteria: one used in northeast Thailand by the Ministry of Public Health. It consisted of the following points:

1. the presence in the village of people with a strong commitment to development,
2. 5-10 kilometers from a main road,
3. no electricity,
4. presence of a school or health station, and
5. primary occupation farming. (Year 1 Evaluation:4)

Project documents imply, and recent discussions with project staff confirm, a further criteria; that is, the inclusion of both Thai Buddhist and Thai Muslim communities among the sites earmarked for intensive as well as less intensive interventions. This criteria was considered important for research purposes.

The villages, selected in August 1982, were: ^{*/}

Intensive: JARANG AND NAMDAM in Pattani and BAN
LIAB in Songkhla

Less Intensive: Ban Khuanran in Songkhla and Ban Khokmak,
Thungpoh, and Tamun in Pattani.

^{*/} Prior to this selection, however, three field projects had already been approved and were underway in villages that were scheduled to be selected under the original criteria and process. These projects and sites were goat raising, double cropping, Ban Nakoh/Songkhla; crop rotation, Ban Lamsamed/Songkhla and rubber tree seedlings, Ban Nawa/Songkhla.

Of these villages all but Namdam (intensive) and Khokmak (less intensive) were Muslim. The intensive sites were located in different directions from both the PSU/Pattani campus and the new FNRDC site in Chana District, Songkhla. The director and key project staff felt this situation, exacerbated by problems related to senior staff time and transportation, made project monitoring more difficult than it needed to have been.

None of the sites selected were villages served by schools heavily involved in the Functional Teacher Education (FTE) project. I was not able to obtain a clear reason for this. ^{*}/

In concluding this discussion of site selection one observation might be worth considering for future efforts. Based on subsequent events, particularly program operations in Chana District, it is apparent that the idea of the village as the key unit of operations ran against the thinking of both the project director and assistant director. In all our discussions they emphasized working with the school and its community, i.e., the villages in its service area. This strategy, is, of course, consistent with that of the FTE and has, at this point in time, the added benefits of working from one of the FNRDC's strengths, i.e., supporting the development of school lunch programs. Perhaps, future pilot projects with the FNRDC, if they need to quantify sites, should consider the operative unit the "school service areas" as opposed to the village or simply the school.

^{*}/ As stated earlier neither the project director nor the assistant director participated in the final selection of sites as they were both overseas at the time. The people who led this effort have either not returned from their FTE-sponsored overseas study or were not available for discussions during my visits to Pattani. It was, therefore, not possible for me to get a clear picture of the rationale behind many of these early decisions.

E. ADMINISTRATION

The key original actors in the administration of this project were instructors and staff from the Home Economics Department, the Functional Teacher Education project of the Faculty of Education, the Office of Extension and Continuing Education, and The Asia Foundation. It appears that involvement of the FTE staff waned early in the project period as many of the individuals involved either left for overseas doctoral study or were too involved with FTE activities in Pattani Province.^{*} On the PSU side, then, the key collaborators were the Office of Extension and Continuing Education, particularly its director who served as the acting project director for most of the first two years of the project period, and the Home Economics Department, whose chairperson was project director in name throughout the project period and in reality during the proposal development stage and the final year of project funding.

A Policy and Advisory Committee, chaired by the PSU Vice-Rector responsible for the Pattani Campus, provided policy guidance and direction. This committee's membership consisted of representatives from "most PSU faculties" at both the Pattani and Hatyai campuses; the directors or heads of cooperating Pattani provincial government agencies (e.g., Agriculture and Cooperatives, Community Development, Primary School Commission, Education, Nonformal Education, Industrial Promotions, Public Health, and Interior); the director of the Southern Regional Nonformal Education Center; and selected Songkhla provincial officials (e.g., primary education, general education, agriculture, etc.). This committee's main functions were to

^{*}/ My understanding is that by this point in time the FTE project had reached a point where different approaches were being pursued in Pattani Province and in Chana District in Songkhla. These efforts were, moreover, led by two different individuals or groups (i.e., the Faculty of Education/Pattani and the Director of the Office of Extension and Continuing Education/Chana).

review and give advice on project plans, monitor project progress, and facilitate interagency coordination efforts.

A second committee was established to be responsible for operations. Chaired by the FNRDC director, its membership included the FNRDC's assistant director (also director of the Office of Extension and Continuing Education), the chairperson of the Home Economics Department, and 19 individuals drawn from the Home Economics Department (5 professors/instructors) and Office of Extension and Continuing Education (14 academic, financial, and clerical personnel).

Daily project operations were the responsibility of the project director aided by two and at times three project supervisors. The latter included two instructors from the Home Economics Department, who were responsible for Jarang and Namdam villages in Pattani, and the director of the Office of Extension and Continuing Education, who was responsible for Ban Liab village in Chana District/Songkhla). The director and supervisors were, in turn, assisted by a support staff consisting of approximately 25 people divided into three sections; Food and Nutrition (12 individuals), Extension and Rural Development (11), and Finance and Clerical (4). These individuals included university teaching and non-teaching staff and project-hire personnel. ^{*/}

The project director was authorized to approve expenditures of up to 20,000 baht. The approval of the Pattani Campus Vice-Rector was required for larger amounts. The project director served for one month after the signing

^{*/} Sources for this information are various official university memoranda authorizing the committees and appointments. There are two major categories of university personnel; civil servants and non-civil servants. Within the former there are 3 subcategories; academic/teaching, academic/non-teaching, and business (finance, procurement, etc.) The latter include permanent and nonpermanent appointments and cover primarily maintenance and minor clerical positions.

of the agreement between The Asia Foundation and PSU before leaving for project-assisted doctoral studies in the United States. An interim acting director was appointed for the period from June to September 1982.^{*/} In October 1982 she was replaced as acting director by the director of the Office of Extension and Continuing Education and assistant FNRDC project director who had just completed a 4-month study tour in the United States funded in part by the project. This individual served until September 1984 when the original director returned with her doctoral degree.

The project supervisors performed several key functions. In the first instance each had overall responsibility for activities in one of the three benchmark villages earmarked for intensive inputs. Moreover, they also initiated research projects related to food and nutrition, supervised student participation, and played roles as key training, coordination, and monitoring roles in village level programs. All three of these individuals spent periods of time ranging from 4 to 18 months away from the project. Two were involved in project supported overseas study tours or special training programs in the United States. The third was able to secure an 18-month grant for master's degree study in Australia and spent additional time undertaking field work in Malaysia.

The Asia Foundation's roles were primarily those of liaison between the project staff and the donor. Among the major routine activities its staff performed were project monitoring and reporting, guidance on project spending and on systems for financial reporting, and contacts with the donor for the

^{*/} The arrangement originally proposed by the project director and PSU/Pattani campus officers was to have the Pattani-campus vice-rector serve as interim director with an active Home Economics Department instructor handling day to day project operations. Apparently, concerns over the latter's English language skills worked against such an arrangement.

use of contingency funds. Initially, certain members of the staff appeared to pay particularly close attention to project data collection and evaluation; however, the effort appears not to have been sustained at a similar level after the first project year.

F. PROJECT EVALUATION

The evaluation plan outlined in the proposal called for annual reports prepared jointly by PSU and The Asia Foundation plus socio-economic survey data for measuring achievements or impact in three areas; nutrition, sanitation, and health. The survey data was to be gathered through two baseline efforts. The first was to cover a wide range of basic data in the seven villages selected for "benchmark" purposes and in 2 additional "control" villages. The second was to focus on the relevant village schools. The Letter of Agreement, however, stipulated only the benchmark village survey. (1982 Letter of Agreement:11-12)

In any case, benchmark village surveys were completed in all 7 villages and the data obtained partially tabulated by Asia Foundation staff. A fuller tabulation was prepared in Thai by one of the project supervisors. There were no follow-up village surveys undertaken and the data obtained from the baseline effort was used only for general descriptive purposes in appendices attached to the draft research document concerning improvements in nutritional status in several benchmark villages. ^{*/}

There were no school surveys done in the villages selected for either intensive or less intensive inputs, apparently because this activity was not specifically mentioned in the Letter of Agreement.

^{*/} See, for example, Sumalika Piammongkol and Kanha Karana, "(Report of The Community Nutrition Project (Raajngaan Khroongkaan Phoochaanakaan Chumchon)" typewritten draft. n.d.

Two first year annual reports/evaluations were completed; one done by The Asia Foundation and the other by the then acting project director. Both were clear, comprehensive documents and provided the project with its best documentation. Internal memoranda indicate a second year evaluation/report was not encouraged by The Asia Foundation's head office with the rationale being that "evaluation" could not be kept separate from "inspection" and that the effort would distract from project activities and therefore goals. There also appears to have been some misunderstanding surrounding the final evaluation. For example, the project director indicates that only partial follow-up to the initial benchmark survey was undertaken by project staff due to time constraints. ^{*/} She also assumed The Asia Foundation, being responsible for the final evaluation, would undertake it.

Finally, distinction between "intensive" and "nonintensive" villages became largely irrelevant as the project progressed for reasons which were again unclear. Few activities or projects were conducted in the nonintensive villages. In three of these sites only one project was organized; in the other, only two. Moreover, project seed money was used in support of just one project in these villages. Finally, FNRDC-supported activities were conducted in a total of 11 villages not included among the original intensive or nonintensive benchmark sites. The project director explained the efforts in these latter villages were undertaken to promote various long-term project objectives. ^{**/}

^{*/} The center director explained that, "since the end of the project period, project staff have been compelled to accept all requests for training in order to keep the Center going and retain as many of the well trained project hire staff as possible. They have not had time, therefore, to undertake the further collection and analysis of data."

^{**/} Here, specific mention was made of the objectives related to cooperation with local development efforts, encouraging self-help, bridging the gap between the socially advantaged and disadvantaged, promoting the center model, and stressing government/nongovernment institutional cooperation.

CHAPTER III

PROJECT OUTCOMES

A. INTRODUCTION

The focus of this presentation is on the outcomes of the 3-year FNRDC project vis-a-vis its "immediate objectives" and post "project expectations". Discussion will also be directed to progress made with respect to the project's eight "long-range objectives."

B. IMMEDIATE OBJECTIVES

1. "Relocate and enlarge the scope and dimension of the FNC by combining it with the FTE and Youth Training Program into a more cohesive/coordinated effort operating from a regional center..."

Despite some early delays and the inability of the Ministry of Interior's Office of Accelerated Rural Development to deliver on certain promises of support, the project was able to establish the new physical facilities originally planned plus several additions (e.g., additional dormitory space and a roadside exhibition/sales center) within the allocated budget. By August 1985 then, the new Food, Nutrition and Rural Development Center consisted of the following elements:

- A laboratory sufficiently equipped to assess certain nutritional values (e.g., protein) in local foods, to determine the nature and extent of chemical additives in prepared foods available in the region and to undertake research and development efforts related to village food industries and the uses of agricultural wastes;
- A small to medium scale food processing plant which is used for training and to process agricultural products from the center's demonstration plots and neighboring villages;
- A demonstration field station related to small scale family agricultural and animal husbandry activities;

- A rice mill that retains more nutrients than those more commonly used and is available for use by villagers in the locality;
- Dormitory space for approximately 70 to 80 individuals (trainees and staff);
- A lecture hall and two smaller rooms for seminars and small group discussions;
- A multi-purpose workshop (wood/electricity);
- Two exhibit and sales centers, one in the foyer of the main building and the other next to the entrance to the center on the Songkhla-Pattani highway;
- Office space for administrative staff;
- Three water storage tanks with pumps; and
- A chicken coop, mushroom shed, duck hut and yard, and storage facilities.

The total value of these facilities, for insurance purposes, is estimated today at almost 5 million baht. The actual grant budget directed to construction and procurement was only 1.9 million baht. This achievement was due in large measure to the individual who served as acting director for most of the project period. His ability to mobilize local skilled and unskilled labor at low or no cost and to resolve numerous critical issues in relatively short order was impressive.

The basic approach he followed here was to use skilled construction personnel from local polytechnical and technical schools to train volunteers, primarily village labor, in basic construction skills while, at the same time, undertaking the construction of the center. More specifically, the steps pursued were as follows. Shortly after the acting director returned from his study tour (i.e., November, 1982) he organized a 3 week training for 30 local villagers. Those who showed the greatest aptitude for the work and leadership skills were selected to form a foreman's team.

Beginning the following March four 15-day training/construction sessions were held in which 390 individuals from 13 villages were trained and worked on center construction under the guidance of these foremen and staff from the Songkhla Polytechnical School.

The achievement here, impressive under even favorable circumstances, becomes more remarkable when one considers that many of the basic support services (e.g., electricity, fill and grading, etc.) that other agencies agreed to provide either were seriously delayed or never materialized. In any case, the "relocation" element of the first objective was fully achieved.

The extent to which the center's scope and dimensions were enlarged "... by combining (its resources and services) with those of the FTE and Youth Development projects into a more cohesive/coordinated effort operating from a regional center ..." is less clear. This reviewer's impression is that the work the new center has undertaken over the last several years has provided in certain respects a basis so that it can, if properly staffed and otherwise supported, become more of a rural development unit (as opposed to a food and nutrition unit) than it was in the past. However, while in its field and training activities it has taken on a variety of rural development content concerns (e.g., agriculture, sanitation, income generation, etc.),[✓] the center has not to this point directed much systematic attention on research and development related to rural development strategies and approaches. While center leadership has developed or expanded certain strategies for the use of paraprofessional personnel and elaborated on a variety of training approaches, it has not systematically evaluated these efforts to any significant degree and has only intuitive bases for pointing to comparative strengths and weaknesses among them. Perhaps this is expecting too much in such a short time and, in any case, the center director appears

1, 43

prepared to give such matters a higher priority in the immediate future if the resources required to do so are secured.

A second more serious and perhaps, less easily dismissed, concern here is that to date participation in FNRDC programming, particularly in the last two to two and one-half years has been limited primarily to teaching and nonteaching staff of the Home Economics Department and the Office of Extension and Continuing Education. Moreover, it appears that under current constraints it may be difficult to maintain even the limited participation that was achieved in the past. For example, the director currently devotes a significant percentage of her time to routine FNRDC operations as well as the search for additional work and funding. Her involvement in routine operations is necessary because the FNRDC has, since the end of the project period, lacked the funding to retain sufficient numbers of permanent full time staff. She is able to undertake this work as well as the critical program development efforts because her responsibilities as the chairperson of the Home Economics Department and the FNC in Pattani are performed by individuals who in the past contributed much time to FNRDC activities. Given these additional department responsibilities, these latter individuals have little current involvement in the FNRDC.

The center's policy and advisory committee consists of representatives from other faculties and departments. While this committee has met periodically to review center plans and progress, there is no evidence, nor has anyone mentioned, that individuals from other faculties have been involved in any field or research and development activities. At a recent meeting of representatives of this committee which I attended, the issue was discussed with admirable frankness and center leadership as well as faculty representatives indicated a desire to break free of past patterns.

The center leadership has already taken some positive steps in this direction.

Returning to additional positive accomplishments, it is evident that the Youth Development program has been well-integrated into the center's operations and seems to have benefitted by virtue of the fact that its offerings now include sessions related to food and nutrition, particularly home vegetable gardening and small-scale food industries.

The situation with respect to the FTE program is somewhat more complex. It appears that this program has over the past years been carried out by two distinct groups emphasizing two different basic approaches. One element, managed by the Faculty of Education, concentrates on several village schools in Pattani Province and follows a more classical lab site approach with intensive research and documentation. The other, managed by the Office of Extension and Continuing Education, covers all 52 primary schools in Chana District, Songkhla and, working closely with the district primary school commission office, follows a model with clear "extension service"-type characteristics. Just how much sharing or cross-fertilization there has been beyond that through formal seminars and the like is difficult to determine. In fact, at times the two groups appear to have been antagonistic, one suggesting the other was not paying sufficient attention to the "academic excellence" concerns of sound research and documentation while the latter was critical of the former's overemphasis on planning and research and limited provision of community outreach services. The present situation appears less contentious, however, with the change brought about partly by the positive results which a relatively recent evaluation effort by the Faculty of Education found in

*/
the program in Chana District.

In any case given that the director of the Office of Extension and Continuing Education served for several years as acting director of the FNRDC project, the FNRDC resources and services have been brought more fully to bear on the FTE program in Chana District than in Pattani. In fact, despite limited documentation it is evident that the FNRDC has played an important role in promoting school lunch programs in the district (as well as elsewhere) and in training school personnel to carry them out. Moreover, in a number of schools the FNRDC has provided funding support to get the program underway and offered advice, funds, and/or basic equipment for school and community vegetable gardens and even rice plots to provide low cost nutritional foods for it.

That FNRDC inputs to this program are valued is evident from the following facts. First, the center director, at the urging of the Songkhla Provincial Primary School Commission director, as well as others, has been nominated as a national resource person to the National Primary School Commission on the school lunch program. Second, the initiative for involving the FNRDC has for the past several years been taken by primary school officials at the school group, **/ district, and provincial levels.

*/ This discussion is pertinent for the following reason. The capacity of the FNRDC in the next several years to undertake much of its research and development work will depend to a large extent on its ability to utilize graduate students in the Community Development Education program scheduled to begin in June, 1986. Strong mutually-supportive relationships between the FNRDC and the Faculty of Education, the faculty responsible for the graduate program, will be necessary if these students are going to be able to be involved in a significant way.

**/ Primary schools in Thailand are organized into groups for the purpose of pooling human and material resources to upgrade administrative practices and improve program quality.

In addition to the school lunch program, the FNRDC has been working with school groups and the Chana Primary School Commission Office to improve the "Work Orientation" and "Life Experiences" components of the curriculum.^{*/} With respect to the former, efforts have been made to improve existing lesson units on vegetable gardening and animal husbandry or to create new ones. Efforts have also been made to develop or expand on "Life Experience" curriculum units dealing with matters of nutrition and chemical additives in foods.

While most of the FNRDC's efforts in this area have been directed to the primary schools in Chana and other neighboring districts, it has also supported efforts in Songkhla Province as a whole and responded to requests from the Pattani FTE program for services in support of school lunch programs and other food and nutrition related activities.

Several points can be made in summarizing the outcomes related to the project's first immediate objective. First, there have been several impressive accomplishments, i.e., those related to center construction (cost/value) and center support for the FTE program in Chana District, particularly with respect to the school lunch program. Second, while the participation in center activities by PSU faculty members was generally limited to the staff of the Home Economics Department and the Office of Extension and Continuing Education, the issue has been raised in a forthright manner. Equally important, several actions have already been taken to address the issue, and the leadership of the university as well as the various Pattani-based faculties appear committed to taking additional corrective measures. Third, questions pertaining to the center's roles and approaches remain numerous and in need of

^{*/} The 1977 primary school curriculum allows for local adaptations to the national curriculum in these areas.

further analysis, elaboration, and consensus. I suggest part, only part, of the difficulty here may be due to the fact that the center director was overseas for the major part of the project period. She articulates the various options and tradeoffs more effectively than most others involved in the project.

2. "... engage in research and experimentation, demonstration, training, production, and marketing of local products..."

Project staff have undertaken a substantial amount of research and experimentation in the food and nutrition areas. To date results that are felt to offer the most immediate value are the following:

- Integrated vegetable gardening -- The cultivation of local plants and crops in combinations that allow for the maximum use of small space as well as, it appears, certain symbiotic benefits to the various crops. Among the successful combinations identified are soybean, corn, and banana; taro, corn, sugarcane, and banana; taro, corn, and papaya; cucumber, corn and banana; cucumber and string beans; cucumber, sugarcane, and papaya; groundnuts and corn; leaks and corn; pineapple, roselles, sugarcane, banana, and coconut; tomato and corn; sweet potatoes and roselles; and sweet potatoes and corn.
- Vegetable gardening along fences around the home -- Local high protein crawlers as well as certain of the above combinations and squash were used often in combination with medicinal plants and herbs.
- Roselle cultivation -- Experiments carried out with the cultivation of this bush made cultivation possible year round resulting in 2 crops per annum as opposed to the normal one. The quality of the crop, however, declined and further experimentation is underway to determine if this difficulty can be alleviated.
- Bee and Frog Raising -- Experimentation here indicates that bees will thrive on many of the small perennial, decorative plants and flowers that proliferate in the region.

The lessons learned from experimentation regarding integrated vegetable gardening and gardening along fences were successfully transferred to

a large number of village homes in the three villages earmarked for intensive interventions. They were also valuable in efforts to assist schools in developing gardens to provide a portion of the food served in their lunch programs.

Efforts to introduce roselle cultivation to village groups met with uneven success as, at present, the only buyer interested in the volume needed for a grower to realize a profit is the center itself. Several other local and overseas businessmen (e.g., Germany) have expressed an interest in purchasing dried petals, but to date nothing substantive has materialized for reasons which include inadequate follow-up, a lack of suitable drying cabinets for use during the rainy season and, conversely, incomplete development to insure large crops during dry season, and low unit price offerings. Within Thailand itself certain roselle products (e.g., syrup for cold drinks, etc.) have been around for some time, but have never reached the popularity needed for sustaining major production levels. However, more recently, there is a revived interest by people ^{*} who attribute medicinal properties to teas and other products made from the petals and point to its use for such purposes in traditional Chinese medicine. The center director indicates that a number of studies are underway in Thailand and elsewhere that are designed to explore the value of roselle more systematically.

In the area of processing foods from local plants, several experiments may offer potential for at least small scale food industries in the future.

^{*}/ According to a Thai purchasing agent for a German group there are apparently a number of factories in Germany that provide roselle tea free to their employees in the belief that it helps to reduce incidences of colds and other minor ailments. Discussions with the Germans interested in importing roselles from southern Thailand have not progressed beyond the exploratory stage as apparently the per unit price they have been mentioning is too low to be profitable for a small or even medium scale operation without access to venture capital.

These include, inter alia, a type of chip and other sweets made from squash and soybeans, sweet-sour-salty roselle petals, a variety of herbal teas, soybean coffee, a variety of fruit vinegars and wines, etc. To date, however, efforts to promote such activities have met with little general success, although some individual village women have made some money preparing and selling certain products to the children in their community and at local schools.

The center leadership feels that their greatest need in this area is at least one full time staff person skilled and experienced in marketing. The center director also feels that further equipment is needed for the center's laboratory. She places priority on food processing equipment (e.g., large drying cabinets, efficient slicers, etc.) and on equipment required to determine the vitamin content of various local edible plants. Given the costs involved and the center's present and projected financial status, it may be some time before these needs can be met.

Center reports indicate that training was conducted for more than 3 times the number of people originally projected.^{*/} Comparisons among participant type are provided in the table below.

^{*/} See Appendix 4 for a comparison between expected and actual beneficiaries.

TABLE A: A COMPARISON OF EXPECTED AND ACTUAL BENEFICIARIES OF TRAINING PROGRAMS BY TYPE

TYPE	BENEFICIARIES	
	% EXPECTED (n=9152)	% ACTUAL (n=39645)
Trainers or Trainers of Trainers	21	14
Direct Users/local "motivators"	75	67
Program Administrators	4	6
Others (Businessmen, university students, alumni, etc.)	0	13

There is at least one point revealed in the above table that deserves mention here. In both original projections and actual outcomes heavy emphasis was given to the training of "direct users" and local "motivators," e.g., villagers, school children, primary school administrators and lunch supervisors, village and religious leaders, etc. This emphasis reflects the FNRDC's "extension service" orientation^{*/} and is relevant to the discussion on this point below. (See pp. 46-47)

The programs offered varied from 1/2 day briefings to more extensive sessions lasting several weeks to a month. The content addressed was equally diverse, ranging from specialized training related to the organization and conduct of school lunch programs or income generating activities (e.g., beekeeping) to broad programs designed, for example, to make administrators

^{*/} If the center was to have a strong R&D orientation I would expect a more significant portion of the training being directed to trainers of trainers or even trainers.

"more aware of the importance of food and nutrition...(and)...promote food, nutrition, and rural development concepts and activities in their institutions."^{*/}

A clear strength in the center's approach to training, one which applies as well to the design of its various programs, is flexibility. The FNRDC does not only offer programs in which content coverage and time are fixed in great detail. Rather, it is also prepared to conduct training on a number of food, nutrition, and related topics and willing to adjust content emphasis and program length in response to participant backgrounds, needs/interests, availability, and, when applicable, budget.

The center director also feels that the techniques utilized in training represent another project strong point. She indicates that the techniques stressed were the use of slides and occasionally video, demonstrations and exhibits, field trips, and practical work. She did not believe it was always practical to use other, more open ended adult education methods which her own ^{**/} and a large body of other research indicate to be highly effective for the following reasons. First, preparation for the use of such methods is too costly in terms of time, materials, and training for trainers. Second, participants in FNRDC programs are usually there because they want to learn to do or make something and, therefore, lack the patience to participate enthusiastically in activities not directly related to these purposes.

^{*/} For a more detailed description of some of these programs, see Appendix 5.

^{**/} See Wattana Pratoomsindh, "Instructional Strategies for Teaching Food and Nutrition to Adults in Thailand," Phd Dissertation, University of Missouri, July, 1984. 179 p.

Third, most of the center training programs are too short to afford the time required for such activities.

While these arguments are certainly legitimate ^{*/}, particularly given other burdens confronting center staff during the 3-year project period, I do not think they can justify over the longer run neglect of research and development efforts to improve on center training programs by introducing simulations, case studies, and other more open-ended techniques. The center only has to look as far as Indonesia (e.g., the work done by YIS and the American Home Economics Association with other Indonesian NGOs) to be exposed to examples of such techniques being used with high success in short term training programs in food and nutrition areas. In any case these techniques will become particularly important to the extent that the FNRDC concentrates its training efforts on trainers or trainers of trainers and paraprofessional home extension field workers.

Outside observers have questioned the value of the center's 1/2 to 2-day training programs. While experiences elsewhere generally support such concerns, there are several counterpoints that can be offered in an effort to preclude a conclusion drawn too hastily. First, the 1/2 day and, most often, one-day sessions are essentially briefings intended primarily to arouse awareness and interest. On two prior occasions I had the opportunity to participate in the 1/2 day briefing sessions at the center with participants in international workshops held in southern Thailand under the sponsorship

^{*/} It should be pointed out that it was not possible within the scope of this evaluation for me to observe or assess any FNRDC training programs in a systematic fashion. While the center director can point to numerous instances in training programs where such methods or techniques are indeed used, my sense from talking with trainers is that their use is limited and perceived to have minimal value.

of UNESCO and the Asian-South Pacific Bureau of Adult Education (ASPBAE). In both cases participants in these workshops rated their visit to the FNRDC as among the top 5 workshop activities. Personally, I found the briefings to provide not only a clear overview of key food and nutrition issues and the FNRDC's programs and capabilities, but also some hard information which could be utilized immediately.

The second point is perhaps more significant. In structured group discussions conducted as part of this evaluation the 5 FNRDC project-hire trainers still working at the center were unanimous in their opinion that the short training programs were among the center's most effective activities. They explained the effectiveness of such programs in the following terms. First, these programs were often organized in response to the initiative of a particular group of villagers or administrators. Second, the energy level of the participants remained high throughout the program. And third, follow-up activities, i.e., visits to participant villagers or additional training sessions, were normally undertaken if requested by the participants.

The center director offered some additional arguments in support of these programs. She emphasized low cost and the opportunity to reach large numbers of people. She also expressed the view that the participants were able to use what they had learned both in their daily lives and to increase their income.

Staff training targets were, in quantitative terms, met almost 5-fold. (12 projected/54 actual). Four people received advanced training overseas i.e., the FNRDC director, Phd in Home Economics Education; one instructor in the Home Economics Department, M.S. in Nutrition plus participation in a regional conference ^{*/}; one staff person in the Office of Extension and

^{*/} The project encouraged but did not fund this degree training but did support her field work in Malaysia and attendance at the conference in Indonesia.

Continuing Education, Phd in Adult Education; and one instructor in the Home Economics Department, special training. A fifth person, the director of the Office of Extension and Continuing Education and assistant FNRDC director, participated in a study tour in the United States. All have returned to PSU except the individual studying adult education who is expected back before the end of calendar year 1986.

Four others were involved in local training programs leading to an associate degree in community development from Songkhla Teachers College. These individuals were a technician in the Home Economics Department, an FNRDC staff member, and two members of the Office of Extension and Continuing Education (OECE).

The remainder were involved in short term study tours or special training programs in Bangkok and other parts of southern Thailand.

There are several points worth raising about this staff training. First, with respect to the overseas training, all the participating individuals except the one who earned a master's degree studied at the same institution. While there were certain benefits to this with respect to cost and interpersonal and institutional linkages, there can also be drawbacks to such an arrangement. My experience in and knowledge of World Bank supported projects involving significant overseas training in the fields of adult/non-formal education and community education, for example, indicate that overseas institutions often take rather divergent approaches to these fields, emphasize various sub-fields, and have varying strengths. Sending staff to several institutions, then, can have certain advantages.

*/ Cost was apparently the critical factor here as project funds were insufficient to support fully the desired overseas staff training and only special arrangements with the host institution and support from PSU made all the training possible.

A more important point is the extent to which these staff people, particularly those who have teaching or administrative responsibilities in other university units, will be able to direct time and energy to FNRDC center activities.

Accomplishments pertaining to this second immediate objective can be summarized as follows. First, the FNRDC has made a solid start in research, demonstration, and experimentation work related to food production and processing. Likewise it has uncovered some unique ways of processing local food products and successfully adapted previously known processing techniques to local foods. While several important local and perhaps overseas contacts have been made for the purchase of dried roselle petals, to date no specific marketing arrangements have been made or are actively being pursued.

Second, with respect to training, the numbers are impressive, both in themselves and when compared with original expectations. While it is difficult to gauge the relative strengths and weaknesses of the various programs, the frequent requests from organizations like the National Primary School Commission and the Administrative Center for the 5 Southern Border Provinces are indicators of the center's reputation and the general effectiveness of the training programs it offers. However, given what is known about adult/nonformal education training techniques it is not unreasonable to expect that some systematic research and development efforts will be undertaken in this area. The issue is one which center leadership, particularly the center director, and their colleagues in other parts of the university together with specialists from the Southern Regional NFE Center 20 kilometers down the road can easily resolve.

C. POST-PROJECT EXPECTATIONS

1. "...An established center supported by university budget exists and continues to provide data for extension services."

On December 26, 1985 the Cabinet officially approved PSU's Office of Extension and Continuing Education. Official approval will now be sought for the FNRDC as one of this Office's six sub-units.^{*/} The director of the Office of Extension reveals that he was told by University Affairs officials that FNRDC approval could take another 1 to 2 years.

Although the process has been slow, it appears to be irreversible. In the interim, the center faces some difficult times, but not without considerable support from university administrators and the Office of Extension and Continuing Education. This support currently takes the following concrete form. First, the university has approved a plan to assign six full-time non-teaching academic positions within the Office of Extension and Continuing Education to the center. The director of the OECE expects that these 6 positions will be fully approved and funded within 3 years, but the FNRDC director does not appear to be as optimistic.. It was hoped that the university would be able to fund one position this year, but the freeze put on the ceiling for university personnel for the current fiscal year has prevented that. Second, the Office of Extension and Continuing Education (OECE) has provided the center with a budget of 330,000 baht for program operations. This budget can be used for materials, fees for resource people, travel and per diem, and certain maintenance costs. It cannot, however, be used to pay salaries. The OECE has agreed to share with the FNRDC 2 non-teaching academic staff, a maintenance man, a driver and the use of one pickup truck. Finally, it has directed a 100,000 baht project related to cooperative

^{*/} See Appendix 6 for the organizational chart of this Office.

cattle-raising and vocational training for Muslim "pondok" schools to one of the project's intensive benchmark villages (Ban Liab). Finally, the vice-rector's office has loaned the center one nonteaching academic staff on a fulltime basis.

Despite this support, the center finds itself with a serious shortfall. For example, project hire technicians/trainers and personnel required to maintain the demonstration plots and center facilities have been reduced to a bare minimum and funds for their salaries must be drawn monthly from sources that are unstable at best, e.g., indirect fees charged organizations for training, profits on the sales of center products, ^{*/} etc. Efforts to secure funds for the salaries of these individuals appears to consume a significant portion of the FNRDC's energy and concerns. Moreover, since salaries are irregular, future employment at the center uncertain, and opportunities for research and experimentation and field visits limited, it would not be surprising if the more dynamic staff eventually sought and accepted other employment opportunities.

Overall, my assessment is that the situation is serious. At a point in time when center leadership and staff should be engaged in a systematic review of past efforts and to devise ways to weed out weaknesses and build on strengths, they find themselves devoting an inordinant portion of their time to securing short term financial support. It would be unusual if eventually the center does not seek and accept any work or project that can be related to their food and nutrition skills in an effort to generate needed revenues at least to continue to retain a minimum core staff. While such tactics may result in enough pallatives to sustain some momentum over the short term, they may lead to habits that will make it even more difficult

^{*/} At present monthly profits on sales amount to only several thousand baht.

in the future to undertake the necessary review, consolidation, and program improvement efforts required if the center is to continue its development as an efficient, high quality operation.

In sum, while there is little danger that the center will cease operations entirely, there is a real likelihood that the momentum that has been established will be all but lost, that the trained and experienced staff will leave, and that the center's positive reputation will be tarnished. It is also likely that the febrile mode of operations the FNRDC is being forced to pursue will leave the center director and the director of the OECE with insufficient time to bring their considerable energy and complementary skills to bear upon program revision, refinement, and development. It will certainly not encourage them, given their existing preoccupation with large scale action, to pay attention to the details required for a successful research and development operation.

Finally, with respect to the long run, it is difficult to see how 6 full time staff, responsible for both the FNRDC at Chana and the campus-based unit in Pattani, will be able to serve as much more than a minimum core staff. Whether or not graduate students in the community development education program to be initiated this June, staff of the OECE, and professors from relevant faculties will be able to fill the expected gaps will depend not only on the commitment of university administrators and faculty deans, but also on mutually developed plans which include some clear system of incentives. There seems little likelihood, moreover, that the center will be able to achieve the kind of self-contained operation the director envisions, unless it is able to make the marketing breakthroughs required to earn significant profits on one or several of its processed food products.

The second part of this first "post-project expectation" may suggest a point of departure for review, consolidation, and program planning during the immediate future. The key phrase here is "data for extension services." It is clear that during the project period the FNRDC was concerned not only with generating data for extensive services, but also with providing those extension service. In fact, it is not clear whether or not the FNRDC leadership, and perhaps others associated with the project, view the center more as an extension service unit modelled on those of the US land grant institutions than a R&D unit, providing regular government extension agencies and private organizations with data, models, training, and other services developed and/or tested on the basis of limited field operations in "lab" sites.

In any case it seems appropriate under present circumstances and those projected for the near future to consider the desirability of concentrating limited resources on specific research and development activities which have as their goal the provision of data to regular extension services. This point will be discussed in greater detail under the recommendations heading of the following section of this report.

2. "...observable, but probably unmeasurable improvement in income and outlook will be occurring among the inhabitants of the southern region..."

My comments and analysis here are limited by a wide range of constraints. First, while the use of observable indicators of "improvement in income" is a creditable approach to determining impact, it usually requires intensive anthropological and economic pre-project studies that were not undertaken in this project.^{*/} Second, I have little sense of the project's impact on the southern

^{*/} See, for example, reports of evaluation work undertaken in Peru and elsewhere in South America by Development Alternatives, Inc. and the work done by Fluret and Fluret.

region as a whole in any of its service areas. Therefore, with respect to this latter point, I am only able to make two comments. The first is that government officials from at least 5 southern provinces have attended FNRDC briefings designed to create an awareness of and interest in food and nutrition issues and to encourage attention to these matters in other programs. It is also reasonable to expect that the FNRDC, given its successful support of school lunch programs in Songkhla and several other provinces, and the regional leadership role of the director of the Songkhla Primary School Commission, will be asked to contribute its expertise to additional southern provinces in the near future. ^{*/}

Given these and other constraints, then, I have chosen to look at income, outlook and other impact dimensions by focusing on the three project villages selected for intensive inputs. The table below presents a brief comparison of projects and use of project "seed money" in these villages. ^{**/}

TABLE B: PROJECTS CARRIED OUT AND SEED MONEY ALLOCATED "INTENSIVE" VILLAGES

Village	* Projects (Total)	* Income Generating Projects	Amount Seed Money Allocated
Jarang	15	5	36700
Namdam	11	4	35500
Ban Liab	10	4	56000
Total ^{***/}	36	13	128200

^{*/} The center has already provided training in this area for school administrators and teachers from Surathani Province.

^{**/} For further details on projects, project sites, and use of seed money see Appendix 7.

^{***/} Compared with overall project totals these figures represent 58, 38, and 58 percent respectively.

The picture with respect to income in these villages is mixed. It is clear that some villages have realized periodic, if not sustained, income increases from FNRDC-support projects. For example, one village headman in a nonbenchmark village reported participant income increases from 5 to 20% from vegetable gardening and the cultivation of fruits with short growing seasons (e.g., watermelons and roselle). (Final Report:6)

In benchmark villages where the center made intensive inputs, I observed home vegetable gardens and gardens around fences where I was told none previously existed. Villagers indicated that they now ate more vegetables than before and no longer had to buy vegetable to the extent they had in the past. Several mentioned they had sold some vegetables in the market at one point, but none I talked with were currently doing so or mentioned anyone who was. A possible explanation is that most vegetables are difficult to grow in the rainy season because of the excessive amounts of water. I did not see, however, the use of techniques such as raised plots to counter the situation. Access to markets also becomes more difficult during the rains as the road conditions deteriorate. ^{*/}

In Jarang I was told of the furniture making project that earned participants extra income, but during the time of my visit that activity had already been suspended for some time, as questions had arisen concerning the legality of felling trees and the use of power saws and the need for additional tools. In this same village I did see a significant incidence of new construction

^{*/} In fact only the condition of the road to Namdam was seriously affected by the rain. Even here, however, the road was generally in a lot better shape than roads I have encountered elsewhere in the rural south. Project staff explained that this road was in very poor shape before the project began and they credit the fact that the FNRDC became active in the village with providing the responsible government agencies to undertake improvement. Normally, however, plans for such improvement are approved one or more years before actual budget is allocated for them.

(e.g., homes being expanded and refurbished, etc.), but was told by villagers that the money for this came from seasonal agricultural labor in Malaysia. Here too, I learned of losses incurred in the project assisted fish-farming effort.

In Ban Liab I learned of losses in project-supported white sesame cultivation and goat raising. There was, nonetheless, enthusiasm for the new cattle-raising cooperative and a careful analysis of the goat-raising effort in an attempt to identify mistakes that would not be repeated. There were also positive comments here regarding vegetable gardening and indications that they provided either extra-income or savings in family living costs during certain seasons.

I heard, too, of cases in several of these villages where certain homemakers had applied the knowledge they had gained through FNRDC training programs and were or had been making nutritious desserts and snacks for sale to children. But, none of those I met were currently doing so on a regular basis. In Jarang, villagers and project staff mentioned one woman who was continuing the effort and the project director claims another in Namdam is likewise still ^{*/}active.

Overall then, with respect to improved incomes in the three intensive villages the following points can be made. First, vegetable gardening can provide a clear if periodic source of extra income or family savings. Second, in none of these villages, aside from the two women making and selling sweets, was there any significant individual or group income-generating activities ongoing at the time of my visit. More importantly, only in Ban Liab (the

^{*/} It was suggested at the fourth and final review of this report that some follow-up study on income had been done in this village. I did not have the opportunity to pursue the lead.

cattle-raising cooperative with an additional 100,000 baht infusion of funding and support services) and less clearly Jarang (furniture) were there any plans or hopes for the immediate future.^{*/}

With respect to outlook -- which I assume here relates to matters such as receptivity to modern nutritional, sanitary, etc., practices and attitudes such as self-reliance, a commitment to development, etc. -- the overall picture is more positive. In both Ban Liab and Jarang it was apparent in discussions with village development committee members and other villagers that people were pleased with the improvements that they had made to date (e.g., latrines, pre-school centers, vegetable gardening, school lunch programs). They were also interested in further developing their communities, and confident in their ability to do so. In both villages the groups credited the FNRDC activities for contributing to these attitudes. Enthusiasm in Ban Liab is clearest, no doubt because villagers have agreed to a direction suggested by university personnel associated with the FNRDC and are assured of continued university and, to a certain degree, FNRDC involvement and support.

In Jarang, an improved outlook is best reflected by the following statement made by a villager during a group meeting.

"Our initial reaction to the school lunch program was that it was good... that it was the school's responsibility. Now I think most of us see it as our responsibility, too, not just the school's."

There is enthusiasm in Jarang for continued development efforts as well, even though no clear plans currently exist. This village benefits from the support of a committed community development agent, who worked closely with

^{*/} There was talk in Jarang of reviving the furniture-making group and of requesting center support for making vinegar from a type of sugar palm. The latter activity is apparently not technically feasible.

the FNRDC on all projects in the village, and the continued interest and enthusiasm of the instructor in the Home Economics Department who supervised FNRDC activities there. The FNRDC or the Office of Extension and Continuing Education could assist villager efforts significantly with a low investment of time and money simply by providing the village development committee with some stimulus to meet periodically over the course of several months to work out some definite plans for action.

In Namdam the situation is more uncertain and the long term impact more difficult to assess. While the villagers themselves accomplished much, particularly in the last year of the project when a project-hire staff person worked almost full time in the community, the village headman has apparently lost the trust and respect of many community residents. Disappointingly, the development committee does not appear to be sufficiently active or strong to offset his shortcomings.

There are at least three other areas where the project has had an observable impact in all or several of the benchmark villages: sanitation, nutrition, and pre-schooling. In Namdam the FNRDC supported a village effort (which also attracted UNICEF contributions) to develop and improve their pre-school center. FNRDC staff and several villagers attributed the success the village's pre-school program had in a district-wide competition to FNRDC inputs. Unfortunately, this center was not operative at the time of my visit, as the attendant had resigned and the village headman had not yet found a replacement. In Jarang the FNRDC worked closely with the village development committee and the tambon community development agent to improve the preschool center in that village.

In both Jarang and Namdam the center assisted with the construction of latrines and rainwater catchment tanks. The former effort was generally more

successful as all the homes originally without latrines in Jarang now have them. In Namdam now all but about 20% of the homes have latrines.

Finally, in Namdam project, sponsored research in draft form indicates that the incidence of level 3 malnutrition among children has been eliminated.

In sum, in the three "intensive" villages it is difficult on the basis of data currently available or accessible to conclude that FNRDC-supported efforts brought about lasting or even significant short term improvements in income. In two of the villages at least there is observable evidence of improvements in sanitation and pre-schooling. In one there is hard data available to support claims for better nutrition. Finally, it also seems reasonable to conclude, however, that in two of the villages the commitment to development and the confidence to do so (self-reliance) has increased at least in part due to the successes achieved in FNRDC-assisted activities and, perhaps too, the lessons learned through failure. The only hope for the third village appears to be that enough villagers have realized the need for a leadership change and that they will rally around another individual or group in the next election and replace the current village headman.

D. LONG RANGE OBJECTIVES

1. "...base for the proposed university research institute..."

PSU has established a Research and Development Institute on its Hatyai Campus. Since this institute is still involved in securing appropriate staffing and funding, there has been no collaboration between the two units to date. A number of university people feel the FNRDC is probably better off within the OECE as in the government's budgetary scheme an "institute" does not normally receive as much of a program operations budget as an "office".

2. "Train technical manpower to meet priority development needs of the region."

To date several preliminary actions have been taken with respect to this objective. First, as indicated above on several occasions, government administrators from a number of southern provinces have attended programs designed to stimulate them to include food and nutrition activities in their agencies extension efforts. Second, the FNRDC has conducted training programs for 84 home economics extension workers of the Ministry of Agriculture and Cooperatives. Third, all PSU students majoring in home economics in the special two year, post-technical college program leading to a bachelor's degree have all their practicums in FNRDC field activities, research efforts, exhibitions, or training programs and, thereby, had the opportunity to experience the challenge of applying classroom learning to rural development practice.

3. "Support the establishment and undertakings of a rural youth development center at the same site."

This long term objective has for all intents and purposes already been achieved. The Youth Development Center has been fully integrated into the FNRDC and youth development training programs funded by the ARD, the Administrative Center for the 5 Southern Provinces, and the Joint Civilian/Police/Military Command. Activities are conducted at the center on a regular basis and use center personnel and facilities as appropriate. In the longer run, if the center directs more energies to developing more effective training approaches, it will be in a position to improve these training programs to a considerable degree.

4. "Provide a base for local institutional cooperation in areas of development among surrounding schools, temples, mosques, and village organizations."

The FNRDC has already conducted a number of programs in Chana District, Songkhla and in Jarang subdistrict in Pattani that respond to this objective. The most notable example is a program for tambon (subdistrict) leaders focusing on planning, education, health, economics, and agriculture.

5. "Encourage through all endeavours the self-help concept."

Generally speaking, the FNRDC seems committed to the concept of self-help. The project director reports that in many villages the village development committees or various village groups took active leadership roles in and responsibilities for project activities. The best example of this was in Jarang, an "intensive" benchmark village, where, she indicated, the village groups made their own decisions and did much to solve their own problems.

My impressions, based on limited visits and observations, are not so positive. Most village groups I met appeared not to have a clear idea of what they would do or like to do next, but rather were waiting for project staff to take the initiative. Most of the staff I observed were quick to accept such roles; they were more ready to propose standard solutions to problems than to facilitate discussion in order to draw out solutions workable in the particular context of that community. Perhaps the clearest example of the important roles given outsiders is that found in the recently initiated cattle-raising project. While not an FNRDC project per se, this project involves similar leadership and work style and may be representative of a more generally prevailing attitude. In this particular project university personnel serve as members of one of the village group's committees (finance), a "consultant"

because the "villagers need advice regarding financial management."

6. "Help bridge the gap between the socially-advantaged and disadvantaged elements of southern Thai society."

In discussions with the center director and the director of the Office of Extension and Continuing Education concerning the FNRDC's rural outreach strategy the strongest common themes are to move quickly to field action, to spread center resources and services out as widely as possible, and "promote (support) schools and communities that can become good examples for replication." The second theme is particularly influential with respect to training programs (short in duration, with as many participants as possible) and the distribution of seed money or materials (small amounts to a large number of sites). As the center director allegorically suggests:

"It is like casting small seeds in many types of soil. Some grow beautifully providing a bountiful crop. Others do well, but less so. Still others produce marginal results and, finally, others die without producing anything."

If my understanding is accurate, the approach might be described as one which "bets on the enthusiastic, the capable." One that counts on finding the communities which need little nurturing, only the opportunity. At this level -- in project terms, the subdistrict, the school service area, or the village -- it would appear that areas which lacked previous opportunities for learning or for securing some other form of external support but possessed all or most all other essential ingredients would benefit as well as those socially advantaged areas. Areas which lacked more than opportunity would most likely not. This strategy gives us no clue as to whether socially disadvantaged individuals or families within the areas most likely to benefit would benefit to the same degree or more as their socially advantaged neighbors.

The data needed to make such determinations within the communities and schools where the project has been active does not exist or, if it does, was not available to this reviewer.

7. "Promote the center as a model for replication elsewhere in Thailand."

The FNRDC director has taken several steps to promote the center model for replication elsewhere in Thailand. Foremost among these have been the production of a video presentation on the center and its activities and lectures given at national meetings among university administrators and faculty. The center has also developed a special program for briefing visiting university personnel which includes the promotion of the center model as one of its objectives. In the long run, however, center successes, particularly those related to national activities such as the school lunch program, will undoubtedly have the strongest promotional impact.

It is also worth mentioning here that the FNRDC and the Office of Extension and Continuing Education have recently submitted a small proposal to the Canadian Embassy seeking support for the initial steps for creating an ASEAN-wide network of institutions and organizations working in the food and nutrition area.

8. "Stress the advantages of government and nongovernment institutional cooperation in maximizing the use of human and other resources available locally."

Intergovernmental cooperation and collaboration has been one of the FNRDC's strengths. In the course of the project period it established or solidified relationships with a number of important local and regional organizations. These include, inter alia:

- The Administrative Center for the 5 Southern Border Provinces;

- The Office of Accelerated Rural Development, Ministry of Interior and its provincial offices in Pattani and Songkhla;
- The National Primary School Commission and the Provincial Commissions of Pattani, Songkhla, Surathani, and Yala;
- The Southern Regional Nonformal Education Center;
- The Ministry of Public Health, particularly its Pattani office;
- The Border Patrol Police;
- The Joint Civilian/Military/Police Command; and, more recently,
- The Science and Technology Institute of the Ministry of Education.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

1. INTRODUCTION

The final section of this evaluation report focuses on two matters. First, it presents a brief overview of the FNRDC's progress to date. Second, it raises a series of specific issues that require the attention of not only the center staff and the university, but also the other original project collaborators. With regard to these latter issues it also recommends some steps or actions that could be taken by the parties involved to build on the FNRDC's achievements and to enhance the considerable potential it has demonstrated to date. These recommendations should be considered as illustrative only. More appropriate or feasible steps and actions would require a period of concentrated attention by center, university, and Asia Foundation personnel.

2. CONCLUSIONS AND LESSONS

Before drawing any conclusions about this project it is necessary to look specifically at its evolution and context. The project's key designers and subsequent implementors initially conceived a 5-year effort involving more than twice the budget eventually allocated. When confronted with the donor's shorter funding cycle and lower per project budget ceilings, these individuals decided to retain the original project elements -- build, buy, develop staff, R&D, operate, and institutionalize -- and compress the entire effort into the 3-year timeframe fixed by the donor's funding cycle. There have been numerous examples of difficulties with projects in Thailand (and, I suspect, elsewhere) designed to pursue this range of diverse elements simultaneously or without

carefully considered phasing.^{*/} This project provides further evidence with which to question the wisdom of such designs. Moreover, the design here was further complicated by the need to "institutionalize" within the same limited time period.^{**/}

The reduction in overall funding support appears to have had minimal negative consequences in the short run as much of the difference was overcome either by the ability of the project's longest serving acting director to mobilize community labor and other inputs for construction or by foregoing the purchase of lab equipment that the center has, for the present, been able to do without. But, there are two obvious long term imponderables. First is the question of whether or not the center will ever be able to secure the necessary budget from regular government or external sources for the purchase of the expensive equipment needed if it is to become fully functional. The second concerns the price the center leadership will have to pay for their success in securing no or low cost external inputs to the FNRDC's completion. Such cost is inevitable in the Thai cultural context where reciprocity is such a powerful force.

^{*/} World Bank projects are good examples, as are certain activities that have been funded by Australia and Germany through bilateral arrangement. In these projects situations such as the following arise too frequently. Construction/procurement matters tend to form the major workload for Thai staff with good English skills, regardless of their original responsibilities. The staff responsible for the critical initial R&D efforts are often shipped away for training and other forms of development. Many of the most successful program implementors are also often drawn away during important start-up periods. Programs are developed more with an eye to fully utilize equipment whose purchase is in the pipeline than to the needs of intended beneficiaries.

^{**/} Given the fact this project was a follow-on to a previous effort, it could be argued that the timeframe for institutionalization was 6, not 3 years. There is very little evidence that much more than agreements in principle at the university level were accomplished in this area prior to the start-up of the project under review here.

Finally, the departure of both the project director (for long-term overseas study) and assistant director (for a 3-plus month overseas study tour) shortly after the signing of the subgrant was also problematic.^{*/} The reasons for this were several. First, the highly qualified individual selected to act as project director and the director evidently did not have sufficient opportunity to share ideas and achieve sufficient consensus to enable the former to feel comfortable enough in her position to provide the project with active leadership in its first four months.^{**/} Second, when the assistant director returned from his study tour and took over project leadership, he was required to devote the greatest part of his time and energies to matters related to construction, interagency cooperation, and project actions. He was unable, therefore, to devote much attention to the development or guidance of matters related to R&D and basic data systems or to the details and refinements of operational strategies.

The above discussion leads to two points of summary. First, the project was clearly ambitious and, despite its undeniable successes, there are now costs to be paid for this ambitiousness. Second, as it would be difficult to accept the view that the university group initiating the project were alone aware of its ambitious nature, it would also be difficult to argue that they and the university alone are responsible for dealing with the costs that now have come due.

With the above discussion as background and context, conclusions about

^{*/} It should be noted that the collaborating agencies were unaware of the director's plans for long-term overseas study until shortly before the subgrant was to be signed. There is no evidence, however, that this caused any strains in the relationships between the groups.

^{**/} See, for example, the draft of the First Progress Report prepared by the acting director.

the project can now be made more fairly. The FNRDC project achieved considerable success in a number of different areas. Most notable are construction and procurement, staff development (particularly with respect to the staff of the Home Economics Department), and inhouse training services. There have also been some clear examples of initial successes with regard to experimentation in food production and processing and coordination with a variety of external government agencies. Moreover, in terms of its field activities, the center has had an obvious impact on the Primary School Commission's school lunch program, particularly in Songkhla and several other southern provinces, and it is apparent that they will continue to be asked to assist the program elsewhere in the southern region. Finally, the FNRDC appears to be moving steadily, if slowly, to integration into the university's formal organizational framework.

There have also been some weaknesses. In the first place, while a significant amount of training and direct support of field activities has taken place, the lessons that have been learned from these experiences have not been discussed, analyzed, or documented to the extent that they can be drawn upon by other individuals or organizations involved in similar or related efforts.^{*/} Moreover, I found it difficult to determine the extent to which basic program and evaluation data had been collected, maintained, or analyzed and the nature and organization of the data to which I did have access indicates a need for greater attention to these matters in the future.^{**/}

^{*/} The project director can list a number of lessons that have been learned in these areas from project experiences. Other staff people, however, were not so articulate in this respect.

^{**/} Some evaluation research has been initiated (e.g., with respect to nutrition among children) but in its current draft form it does not attempt to relate any particular project activities to improved nutritional status.

These shortcomings were perhaps due to the demands related to construction, procurement, and community outreach services placed on key project personnel. I also developed impressions regarding causes that might merit some consideration by center and university personnel. First, while the university faculty most closely involved in the project appeared knowledgeable in research and evaluation methods, they appeared to lack the experience or confidence in applying this knowledge to projects of this nature and might well have benefitted from technical assistance in this area. Second, the fact that the intensive/nonintensive design was so quickly abandoned may indicate that project leadership had little commitment to or patience with research and development concerns in general and project evaluation in particular. I suspect that such an attitude would not have prevailed and the general situation regarding these matters would be somewhat different if the original project director had not been away for much of the project period.

A second related point is that the center's overall outreach strategy at times appears uncertain (or, at least, not clearly or consistently articulated), raising questions as to how well or how broadly it is understood by individuals associated with the center as well as others in the Office of Extension and relevant university faculties. The issues here are as follows. Is the FNRDC an R&D center with village "lab sites" responsible for generating information, data, and models to be used by extension services and for training the trainers of such service units, or is it both an R&D center and an extension service operating a broad and continuous range of inhouse and field programs?

A third matter concerns interfaculty involvement in FNRDC programming. Other than participating in some early activities (e.g., site selection), or serving as members of the project advisory committee, individuals from

departments or faculties other than Home Economics, the OECE, and, to a lesser degree, agricultural education, had little involvement in the project. The issue to be considered, then, is whether the FNRDC is to be viewed primarily as a community outreach activity of the Home Economics Department (which has recently been transferred from the Faculty of Education to the new Faculty of Science and Technology) and the Office of Extension or is it to involve a greater degree of interfaculty, interdepartmental participation and even sense of shared ownership. If broader involvement is the goal, will rural development oriented Hatyai-based departments be included as well?^{*/}

Finally, there is also a serious question of whether or not funding from the university and other sources over the next several years will be sufficient enough to enable the center to retain even the minimum fulltime staff required to maintain, let alone build on, previous levels of momentum and to preserve the positive reputation it has earned. The current outlook here is not encouraging. My major concern here is not that the center will cease operations, but rather that, confronted with the continued need to identify and secure even minimal funding, it will have to pursue a style of operations that is likely to reinforce past weaknesses, e.g., the relative neglect of R&D related matters, etc.

In sum, given the project's ambitiousness and the numerous constraints with which it had to cope, all groups involved should be highly satisfied with project achievements to date and with the potential the center has demonstrated. The challenge facing these groups, particularly the external agencies involved but also PSU, is to neither withdraw support prematurely nor to provide additional support without jointly developed plans to deal with the hard issues

^{*/} There was some collaboration with the Faculty of Medicine in the early part of the project.

and weaknesses that emerged during the project period.

3. RECOMMENDATION AND FUTURE STEPS

There is a pressing need for center staff and university leadership to review the FNRDC's current status and future prospects in order to develop a clear direction or, perhaps, several alternative directions for its programming in the immediate future. Whatever choices are made, I would argue that consolidation, at least for the immediate future, should be a major determinant. It is also necessary for The Asia Foundation and USAID, both of whom accepted at least implicitly the ambitiousness of the project, to consider whether their obligations as project collaborators have been satisfactorily fulfilled.

University and FNRDC decisions should be guided by consideration of at least two fundamental issues or sets of issues. The first relates to the center concept. Is the center to be an R&D or an R&D and extension service (operational) institution? How narrowly or broadly is "food, nutrition, and rural development" to be defined or, more precisely, to what extent are its activities to be interfaculty or interdepartmental? Assuming the FNRDC will be approved by the State Universities Bureau and Cabinet as part of PSU's Office of Extension and Continuing Education within the next year or so, how long will it be before the university is able to fund the 6 positions allocated for the center? Moreover, what level of activities can be sustained by this limited number of full time staff (which will be responsible for both the Chana and oncampus Pattani centers)? What arrangements can be made to secure additional inputs on a regular, continuous basis from OECE staff, instructors and professors from the Home Economics Department and other relevant departments/faculties, and graduate students in the soon to be initiated masters

degree program in Community Development Education?

Once some broad agreement is reached on these issues there are a range of actions the center might pursue over the next several years in preparation for fuller operations. The suggestions here should be considered illustrative. They do, however, reflect my view of priority, feasibility, and potential cost/effectiveness.

- 1) Strengthen existing data systems.
- 2) Prepare existing data into forms suitable for use by government extension services and nongovernmental groups providing food and nutrition oriented development services.

Examples:

- a. Information on food additives to the Office of Accelerated Rural Development for distribution to the village cooperative stores they help to support in the southern region and to the Southern Regional NFE Center and provincial NFE centers throughout the south for inclusion in their well newspapers and other village level reading materials.
 - b. A checklist of observable, unobtrusive measures of nutrition deficiencies so that schoolteachers, village medics and other village level development workers can get a quick reading of the nutritional status of villages in which they are working. Working with the NFE Department this checklist could also be adapted to suit villagers with marginal literacy skills and distributed in poster form to village reading centers nationwide.
 - c. Preparation of a second sourcebook similar to the one completed at the end of the first Operations Program grant.
- 3) Fund Raising
 - a. Direct appeals to the general public and private enterprises in the Hatyai, Pattani, Songkhla areas.
 - b. Efforts to produce and market proven and potentially popular products developed to date. Assistance from the private sector in analysis and planning could be sought here (as an alternative to cash contributions).

- 4) Emphasize the training of trainers with priority given to programs in support of the National Primary School Commission's school lunch program. A nominal direct or indirect fee might be charged for this service.
- 5) Plan for the regular use of faculty members from the Home Economics Department and elsewhere and secure university approval for incentives (e.g., reduced teaching load) to insure desired participation.
- 6) Plan for the use of Community Development Education graduate students on a regular basis and secure Faculty of Education/university approvals.
- 7) Working with graduate students and faculty members develop/further test existing data and prepare it in a form that will be useful for regular development extension services and/or schools.

Example:

Expand and write up data on integrated vegetable gardening (adapting, perhaps, the style/approach of such publications as "Carrots Love Tomatoes") and prepare simple handbooks for distribution to village agricultural meeting pavillions, reading centers, school libraries, etc. Lesson units for the primary school "work orientation" curriculum could also be prepared in collaboration with provincial or regional primary school supervisors.

- 8) Again, relying largely on graduate students, maintain a "lab site" village (probably Ban Liab) for R&D purposes.

The external collaborators' decisions are less complicated. The major immediate need facing the center is funding for approximately US\$20,000 to maintain the young core staff over the next year or so. ^{*/} I do not know of any USAID mechanisms that would enable that organization to provide such

^{*/} With funding for this need secured, additional monies that might be needed for activities like those suggested above would be easier to obtain. For example, for activities that would or could involve collaboration with the Ministry of Education's NFE Department or adult/community educators at PSU's Faculty of Education a funding source that can distribute small sums of money quickly is the Asian South Pacific Bureau of Adult Education. Longer term, more costly activities might have an appeal to the German Adult Education Association (DVV) or their Dutch counterparts (VWV).

small monies in a relatively short period of time. The organization may, however, be able to recommend funding sources and extend its influence in support of funding.

The Asia Foundation must decide whether or not it can commit some of its own funding to this effort despite the fact it does not currently fit with organizational priorities and/or direct some staff time to the work required to secure such funding from other sources.

I would strongly recommend additional funding support for the center, but would urge that it be tied to a series of center outputs and be provided in amounts that grow smaller over time. For example, additional funding providing full time support for core staff people might be made once the center and university have made their decisions on the issues such as those raised above. Funding at this level might be committed for a set period, e.g., 6 months. At the end of month 5 the funder and center would review progress made with regard to a specific series of tasks proposed initially by the center. (For example, the center might propose tasks like items 1), 2)a, 3) a., 5) and 6) above.) After this review funding could continue, perhaps on a reduced level, and be tied to another set of concrete tasks proposed by the center. If the review was not positive, the decisions to be made would be more difficult.

In addition to direct funding for core staff the center might require some technical assistance from The Asia Foundation with respect to proposal development, management information systems, nonformal education training techniques and materials development, etc. Whether or not Foundation staff would make these inputs personally or arrange cost support for local consultants, is a matter that would have to be decided on a case by case basis.

In conclusion I view the first step as being the key to the process suggested above. If responsible university administrators, faculty and OECE representatives, and FNRDC staff work collaboratively to resolve issue such as

those raised at the outset of this section and to plan appropriate follow-up action, the effort should prove successful. For the desired collaboration to take place it will probably be necessary for the individuals who worked so hard to see the center become a reality to share influence over its directions, programming, and activities with a larger team of faculty leaders.

Careful thought should, therefore, be given to the mechanics of these deliberations. Perhaps something like bi-weekly meetings for several weeks proceeded by a weekend retreat to set agenda and assign tasks to groups or individuals and followed by a similar get away to make final decisions, a week for report writing (in Thai) and a 1/2 day seminar to review the report would be most productive.

A P P E N D I C E S

APPENDIX I - RELATIONSHIPS AMONG THE FNC, THE FTE, THE RURAL YOUTH PROGRAM AND THE FNRDC

DATE/YEAR	FUNCTIONAL TEACHER EDUCATION PROGRAM	FOOD NUTRITION CENTER	RURAL YOUTH DEVELOPMENT
1976		August - Asia Foundation support thru OPG begins; center established on campus at Pattani	
1977			Rural Youth Training Ct. established at Pattani campus (King's Projects support) 1 4 mo. course for youth leaders in agric., mechanics, food, electricity.
1978			Become General Youth Training Center - train youth from various areas in border provinces; 2 weeks to 1 month; also short courses
1979	Phase I - ideas to programs - increase faculty expertise	July - 1st OPG ends	
1980	- dev better coop among institutions - train school personnel in extension admin & supervision	Asia Foundation grants for food & nutrition sourcebook continued extension services of FNC	1980 - Center established at Chana District w/ARD assistance; youth leader development; 2 mos. youth from 3 border provinces.
1981	- formalize w/in PSU organizational structure - working relations w/ UMiss/ Columbia - train PSU staff in home econ. - strategy for including grad program in CD in 5yr plan - est close relations w/FNC	November: DTEC/AID evaluation	
1982	Phase 2 - design/test CD training model to facilitate closer cooperation between school personnel and village leaders - write resource manual for use by local village school personnel, univ faculty, & village leaders	March: Asia Foundation signs OPG w/AID for FNRDC Project May: Asia Foundation and PSU sign agreement June: Director leaves for US study Project Implementation begins Director Office of Ext leaves for US study tour	2 week courses in basic construction started

APPENDIX 1 - RELATIONSHIPS AMONG THE FNC, THE FTE, THE RURAL YOUTH PROGRAM AND THE FNRDC

DATE/YEAR	FUNCTIONAL TEACHER EDUCATION PROGRAM	>>> FOOD NUTRITION AND RURAL DEVELOPMENT CENTER <<<	RURAL YOUTH DEVELOPMENT
			<<<< Merged with FNRDC
		Sept: Activities begin in benchmark villages	
		Oct: Director extension returns and assumes position of acting project director	
		Nov: Construction of Center begins	
		<<<< Provides some extension support services in both Pattani and Chana/Songkhla	
1983	June: Graduate program in community development education scheduled to begin (plan)		
1984	Institutionalize FTE Expand to all 14 provinces (plan/not undertaken)	July - Project director returns with doctoral degree	
1985		July: All FNRDC construction completed	
1986	January: Last UMissouri/ Fulbright fellow to arrive for 6 month stay (Com Dev. field specialist)	January - Expect PSU Office of Extension and Continuing Education to be officially approved by State Universities Bureau; will be temporary organizational home for FNRDC; FNRDC will be submitted as official part of this Office subsequently. Expect approval in 1-2 yrs.	
	June: Graduate program in Community Development Education to begin		

APPENDIX 2 - EXPECTED DIRECT BENEFICIARIES

CATEGORY	NUMBER	BENEFITS EXPECTED
1. Project Staff	12	Incountry/overseas training to increase project planning, implementing, coordinating, & follow-up capabilities
2. Teachers	1200	Trained in administration, parental relations, community problem identification, and skills for involving community leaders in development efforts
3. Community Dev Workers	100	Trained in local food industry public relations, agriculture, and education.
4. Home Economics Extension Workers	300	Trained in human relations to better understand villager potential in the fields of food, nutrition, community development, and economics
5. School Principals & Lunch Supervisors	750	Trained in nutrition and food production
6. Administrators	150	Trained to improve skills in community problem-solving
7. Women's Group Members	290	Trained in ways to combat malnutrition and in income generating activities
8. Administrators & Faculty of Institutions of Higher Education	250	Trained in nutrition, CD, & public relations to stimulate greater involvement of these institutions in rural development
9. Child Care Attendants	100	Food, nutrition, sanitation, hygiene and child welfare
10. Village leaders & Villagers	1700	Trained to increase awareness of and ability to deal with community problems
11. Retired soldiers	300	Trained in agriculture, food and nutrition
12. School children	4000	Learn about food, nutrition, hygiene and sanitation
TOTAL	9152	[Proposal 82:8-10]

APPENDIX 3 - THE USE OF PARAPROFESSIONALS

Shortly after the original project director returned from her doctoral studies overseas she initiated a new rural outreach approach. It consisted of recruiting, training, and supporting young graduates of secondary schools and associate and bachelor's degree programs.

The effort began in October, 1984 and continued until the end of the project period (April, 1985). Fifty of the more than 200 individuals who applied for the program were selected for an intensive 1 month training program. Selection was based primarily, but not exclusively, on applicant's background in food and nutrition or agriculture. The cost of the training was approximately 2,100 baht per person including a 400 baht stipend and a 50 baht travelling allowance. At the end of the training 15 individuals were selected for full time employment at the FNRDC as project-hire personnel. The remaining 35 were given the option of returning to their home district and organizing and training village groups in food, nutrition, and related areas. If they chose this option, they would receive a 400 baht honoraria per training program (up to 2 training programs per month), a 50 baht monthly travel allowance, material support (e.g., seeds, seedlings, etc.) and technical assistance from FNRDC and Home Economic Department staff trainers as necessary.

The 15 individuals selected as full time center staff were given an additional 3 months of apprenticeship training. During this time they were given increased opportunities to play leading roles in both inhouse and field based programs. They were then assigned to work in teams to make weekly follow-up visits to the project "intensive" villages and selected other sites, to serve as technicians in the center's lab, and to conduct training sessions in the center itself as well as in project villages.

Throughout the 6-month period a number of these individuals left the project as they secured more permanent employment elsewhere. At present 5 serve along with 3 university nonteaching staff (one on loan from the vice rector's office and two from the Office of Extension) as the center's core staff. They receive an uncertain monthly salary based on the number of externally funded training programs conducted by the center, monthly profits on sales of center food products and plant seedlings, and kitchen services provided for visiting groups.

The majority of the 35 who were not hired on a full time basis apparently did little extension work or, if they did, did not inform or ask support from the FNRDC. According to the director around 10 were active to some degree. Three, working separately, set up their own small food industry enterprises, Five others were reported to have conducted basic food and nutrition training in several villages. The remaining two, working in tandem in Thuweh and 3 neighboring villages (Ban Khla, Thung Riang, and Sirikhong), Yala Province were the most active.

This team began by organizing two training programs; one on vegetable gardening and home improvements for men and the other on food and nutrition for women. Each program consisted of two full day sessions per month. FNRDC trainers assisted in the programs when specialized inputs were required.

The project director reported that the efforts of these two individuals and the positive response shown by the villagers attracted a number of other government development services to the village. Combined FNRDC and local government agency inputs resulted in the following activities: the formation of a village homemakers' group; training and action in vegetable gardening, food preparation and preservation, nutrition, and home improvements; roselle cultivation and producing food products from roselle berries for sale;

improved food consumption habits; increased awareness of foods with dangerous or potentially dangerous chemical additives; and a village cooperative store.

The director feels that FNRDC inputs through these two paraprofessionals were critical factors in the village's second place finish in the province's "model development village" competition. Finally, she mentioned that a number of neighboring villages asked the FNRDC to conduct a similar program, but the center was unable to respond as it could no longer support the two paraprofessionals once project funding ceased.

APPENDIX 4 -- A COMPARISON OF EXPECTED AND ACTUAL DIRECT BENEFICIARIES

CATEGORY	EXPECTED	ACTUAL
1. Project Staff	12	54
2. Teachers/Instructors	1200	3883
3. Community Dev Workers/Heads	100	50
4. Home Economics Extension Workers	300	84
5. School Principals/Lunch supervisors	750	167
6. Administrators	150	1863
7. Women's Group Members	290	309
8. Administrators & Faculty of Institutions of Higher Education	250	15
9. Child Care Attendants	100	[*]
10. Village leaders & Villagers	1700	4719
11. Retired Soldiers	300	[*]
12. School children	4000	12430
13. University Alumni	[**]	98
14. Rural Youth	[**]	1741
15. University students	[**]	3340
16. Religious leaders (Muslim)	[**]	228
17. Businessmen	[**]	328
18. Foreign experts	[**]	36
TOTALS	9152	29295

Sources and Notes:

1. For expected beneficiaries see the Project Proposal pp. 8-10.
2. For actual beneficiaries see Final Progress Report p. 24

[*] Category not included in Final Progress Report.

[**] Category not included in Project Proposal.

APPENDIX 5

A BRIEF DESCRIPTION OF SELECTED FIELD ACTIVITIES,
TRAINING PROGRAMS, AND OTHER PROJECT ACTIVITIES

1. Field Activities

=====

Activity	Description
Parasite Survey	Survey to determine incidences of intestinal parasites among 2 "intensive" villages (and elsewhere) in collaboration with Pattani Provincial Hospital which led to follow-up toilet demonstration and construction projects in both villages.
Child Care (Preschool)	Assisted efforts in two "intensive" villages to expand/improve existing centers in collaboration with local development agents
Home Improvements	Inventories to determine problems/deficiencies regarding sanitation, water supply, home gardens; instruction in well construction, home vegetable gardens and their management. Three "intensive" benchmark villages.
Income Generation	Furniture, sewing, bamboo crafts, crop rotation, double rice cropping, rubber seedlings, white sesame and roselle cultivation, fish farming, goat raising, vegetable production, food processing. 3 "intensive" benchmark villages and elsewhere.

=====

2. Training

Topics	Participants	Goals
Food, nutrition and rural development	Religious & village leaders and rural youth Administrators	> improve eating habits > avoid dangerous food additives > grow edible plants > able to prepare highly nutritious foods > improve village environment & sanitation > increase awareness of food/nutrition issues > promote better habits/programming in their institutions > develop demonstration gardens and exhibit products made from local foods and waste materials
Food Preservation	Home economics extension workers, teachers, members of homemakers groups	> ability to preserve food both for home use and sale.
School Lunch Program	Education administrators, teachers	> develop & promote sch lunch programs & support activities, > develop food related business activities to support program (soy milk, fruit drinks, fish sauces, nutritious snacks)
Basic Construction	Villagers from the 5 southern border provinces	> develop basic construction skills > able to build village center

3. Production of Learning Materials

1. Slide/tapes

- > Tea from local plants and medicinal herbs
- > Soybean coffee
- > Canning food products
- > Roselle and roselle products
- > Training in Work Education
- > Medicinal Plants
- > "Korla" Boat Model Building
- > Home Improvements at Namdam Village
- > Village Improvements

2. Videos

- > The School Lunch Program
- > Food, nutrition, and rural development

3. Printed Materials

- > Pamphlets
 - Home agriculture
 - Raising small animals including bees
 - Food sanitation
- > Recipes for the School Lunch Program

APPENDIX 6
ORGANIZATIONAL CHART OF THE OFFICE OF EXTENSION
AND CONTINUING EDUCATION [†]

EXTERNAL AGENCIES	SPECIAL COMMITTEES	OFFICE OF EXTENSION	PERMANENT COMMITTEE	FACULTIES	
Dr. Chaanarn					
DEPUTY ACADEMIC AFFAIRS Dr. Kiriboon	DEPUTY HATYAI CAMPUS ---		DEPUTY PLANNING, DEVELOPMENT PROJECTS Dr. Pornsak	DEPUTY FOOD/NUTRITION & RURAL DEVELOP Dr. Wattana	<< << << <<
BUSINESS OFFICE Somchit	EXTENSION & DISSEM. Benjanart	TRAINING & CONTINUING EDUCATION Somboon	COMMUNITY PROGRAMS Dr. Chaanarn	EXT/CONT EDUCATION HATYAI ---	FOOD/NUTRITION & RURAL DEV << Dr. Wattana
BUSINESS Ratiya Sommai	BUSINESS Chuanchen	BUSINESS Prawat W.	BUSINESS Prawat W. Rachada	BUSINESS Prateep W.	BUSINESS Naruson
FINANCE & SUPPLIES Booneb Anong	CONTINUING ED CURRICULUM Benjanart	YOUTH & OCCUP DEVELOPMENT Somboon Prawat W.	PATTANI CT Suwat	PROMOTIONS Somchit	FOOD & NUTRITION ††
ED SERVICES Rongroang Kasee	AQUATIC SCI CURRICULUM Suwat T.	NATURAL RES. ECONOMICS & TECHNOLOGY Chaanarn Prawat W.	CHANA CT Prawat W.	TRAINING & CONTINUING EDUCATION Kiriboon	FOOD INDUSTRY Naruson
PUBLIC REL Anong Rongroang	SEMINARS/SHORT TRAINING Benjanart Suchon	AGRICULTURE & RURAL DEV. Kiriboon Somched	KRABI CT Chaanarn	INFORMATION WORK & OCCUP Prateep W.	HOME GARDENS ††
FINANCIAL DEV Somchit Suchon Prawat W. Naruson Soakiat	EDUCATION PROMOTIONS Suchon	EDUCATION & COMMUNITY DEV Chaanarn Pornsak	CHUMFORN CT Pornsak	MOBILE TRAINING Prateep W.	HOME IMPROVEMENT & SANITATION Dr. Wattana

[†] Currently under review by State Universities Bureau. Approval expected January, 1986.

†† Positions approved but not budgetted for FY 1986.

APPENDIX 7 - MAJOR FIELD ACTIVITIES: PARTICIPANTS, COOPERATING AGENCIES, SITES, AND SEED MONEY

PROJECT TITLE	#PSU PARTICIPANTS			COOPERATING AGENCIES	VILLAGE SITES	#VILLAGE PART.	SEED MONEY
	# FAC.	STUDENT	CT STAFF				
Parasite Survey	1	24	0	Pattani Prov. Hosp.	NAMDAM	68	500
				Provincial Health	JARANG	110	0
Latrine Demonstration & Construction	2	0	2	Tambon Public Health & Ag. Agents	NAMDAM	25	6000
				UNICEF	JARANG	70	5000
Improving Family Nutri.	2	20	4	Tambon Public Health & Comm. Dev. Agents	NAMDAM	30	3000
		5	4	HouseEc Ext. Agents	JARANG	40	3000
			4		BAN LIAB	35	0
	2				Khokkak	30	0
	2	0	0		Thungpoh	35	0
	2			Tamun	40	0	
Child Care (Preschool)	2	20	1	Tambon Health Agent	NAMDAM	30	10000
		5	2	Tambon CD worker	JARANG	25	0
Home Improvement A	4	50	2	Tambon Public Health	NAMDAM	30	1500
	2	5	4	House Ec Ext Worker	JARANG	65	500
Home Improvements - B	2	2	4	Songkhla Teach. Col. Region 9 Sanitation Center	BAN LIAB	30	0
Home Food Production	3	25	4	House Ec Ext Workers	NAMDAM	30	10000
	2	5	2		JARANG	30	10000
	1	2	4		BAN LIAB	30	10000
Home Crafts	2	15	2	---	NAMDAM	25	1000
	1			Industries Promot.	JARANG	30	10000
Exhibition of Local Foods & Crafts	8	75		15 Primary Schools Agr & Public Health	#Pusamilae	500	2500
					#Yaling		
					#Panarae		
					#Nongjik		
Goat Improvement	3	0	0	Southern Goat Proj. & Faculty Natural Resources/PSU	#Payut	12	20000
Fish Farming (White Sea Bass)	3	0	0	Agricult. Ext	JARANG	20	10000
					#Langa		
Crop Rotation (School Proj)	2	0	0	School	#Laasaned	35	5000
Rubber Seedlings (School Project)	2	0	0	School	Nawa	25	5000
School Lunch	3	5	2	School	BAN LIAB	250	10000
				Tambon CD worker	JARANG		10000
					#KAI		10000
SUBTOTALS	46	238	37			1620	140000

PROJECT TITLE	#PSU PARTICIPANTS			COOPERATING AGENCIES	VILLAGE SITES	#VILLAGE PART.(B)	SEED MONEY
	FAC.	STUDENT	CT STAFF				
Double Cropping	1	5	0	Tambon Agricultural agent & District reps	*Nakhoh	27	10000
Vegetable Gardening	1	1	5	Prov & Tambon Ag Officers	JARANG	60	200
	1	2	25		NAMDAM	40	1500
	1	1			BAN LIAB	35	1000
	1				*Sirkong	40	200
Medical services	1	2	0	District Pub Health Office	BAN LIAB	120	10000
Rain Catchment Tanks	1	1		Tambon CD worker	JARANG	2	
	1	1			NAMDAM	30	2000
White Sesame	1	2	0	Ag Ext Office	BAN LIAB	8	5000
Village Train. #1 (school lunch)	1	4	50	Relevant District Officials	ALL BENCHMARK VILLAGES	400	10000
Village Train. #2 (Food Preserv./Nutri)	1	4	50	Relevant District Officials	ALL BENCHMARK VILLAGES	120	2000
Training for Tambon leaders (planning/ed./health/econ. agricult.)	1	5		Relevant provincial officials	JARANG TAMBON	140	0
Improve Rubber Sheeting	1	3		Dist. Ag Officer & Tambon CD worker	Kuanran		40000
Vocational Training	1	0		Chana Dist. Offices	14 tambon	378	0
Dressmaking	1	1	10	Tambon CD officer	JARANG	20	0
	1				Tambon	30	0
Subtotal	1	124	140	35		1448	81900
TOTAL	1	1700	378	720		3068	221900

NOTES:

(A) Major field activities as gathered from progress reports and discussions with project staff. Figures, except for seed money, are estimates.

(B) ALL CAPITALS (E.G., NAMDAM) represents an intensive benchmark village.

Regular type (e.g., Thungpoh) represents a less intensive benchmark village.

*Regular type preceded by an asterisk (e.g., *Yaling) represents a nonbenchmark village.

ALL CAPITALS PRECEDED BY AN ASTERISK (e.g., *YAJI) represents a village in which the

APPENDIX 8

GROUP INTERVIEWS, DISCUSSIONS, VILLAGE VISITS

Project Director and Assistant Director FNRDC, Chana District, Songkhla (background and planning discussion)

Visit to Jarang Village, Pattani; discussions with village development committee, project participants, and Subdistrict Community Development worker.

Discussions with students in Home Economics Department.

Visit to Ban Liab Village, Songkhla; discussions with village development committee and villagers.

Visit FNRDC for discussion with Project Director and Director of Office of Extension and Continuing Education

Group discussion with participating faculty (7 persons) from the Home Economics Department and OECE involved in project; focus on training

Group discussion with same group; focus on research and development

Visit to Namdam Village, Pattani; discussions with village headman, participants in various projects, and project-hire field worker who played key roles in village during last project year.

Visit to Thungpoh Village, Pattani; discussions with village headman and one other member of the village development committee plus tambon community development worker.

Meeting/discussions with Vice-Rector for the Pattani Campus and members of the Project's Policy and Advisory Committee */; focus on future plans.

Discussion with the Dean of the Faculty of Education; focus on FTE/FNRDC relationships.

Visit Ban Rai School in Chana District; discussions with principal and his assistant.

Meeting/Group Discussion with FNRDC trainers (project hire staff); focus on training programs.

*/ In attendance; vice-rector, assistants for planning and development and business affairs, Director of Office of Extension and Continuing Education, project director, Dean of the Faculty of Education, Head of the General Science Department, Vice-Dean for Academic Affairs of the Science and Technology Faculty, and 6 faculty members from the Home Economics Department.

Discussion with FNRDC director and assistant.

Discussion/review of first draft of major chapters of evaluation report with FNRDC director and director of OECE.

Informal discussions with FNRDC project-hire staff.

Discussions with FNRDC director, director OECE, and representative of The Asia Foundation.

Discussion with FNRDC director and assistant to review revised draft of report.

Discussion with FNRDC director and assistant to review new revision of report.

Discussions with FNRDC director to review final revision of report.

APPENDIX 9 -- REFERENCES

- 1982 Asia Foundation, "Prince of Songkhla University - Pattani: A Proposal for Assistance," February 16, 1982 20 PP. (typewritten)
- 1983A _____, "First Year Evaluation of the Project -- Food, Nutrition, and Rural Development Center for Southern Thailand -- for the Period March 15, 1982 to March 15, 1983," 15 P. (typewritten)
- 1982 _____, "Letter of Agreement between the Asia Foundation and the Prince of Songkhla University, P.
- 1983B _____, "Progress Report for the Period March 15, 1983 to September, 1983 6P. (typewritten)
- 1985 _____, "36 Month Progress FNRDC Report for the Period September 16, 1984 to March 16, 1985," 10P. + Appendices (typewritten)
- 1982 Chamnarn Pratoomsindh, A REVIEW OF THE FUNCTIONAL TEACHER EDUCATION PROJECT FOR AGRICULTURAL AND COMMUNITY DEVELOPMENT IN SOUTHERN THAILAND: A COOPERATIVE PROJECT INVOLVING AN EDUCATIONAL EXCHANGE PROGRAM BETWEEN PSU AND THE UNIVERSITY OF MISSOURI. No publisher. 68 P.
- 1983 _____, "First Year Report on the Food, Nutrition, and Rural Development Center for Southern Thailand," 41P. (mimeograph)
- 1981 FNC, "Project Proposal: Submitted to the Asia Foundation," August 31, 1981. 48P. (mimeograph)
- 1984 Food, Nutrition, and Rural Development Center, "Curriculum 2: Village Home Economics Workers (Laksuud 2: Phuu Phey Phrai Khakakaam Nai Muu Baan)" 165P. (mimeograph)
- n.d.(A) Urai Thanaskul and Sumalika Piammongkol, "A Teacher's Manual for the Work and Occupations Curriculum: Trial Edition for Grades 4-6 (Khuu Myy Prakobkaanson Klumkaan Ngan Lae Phyythaan Aachiib)" Home Economics Department, Faculty of Education, PSU 53P. (mimeograph)

- n.d.(B) Sumalika Piammongkol and Kanha Karana, "Report of the Community Nutrition Project (Raajngaan Khroongkaan Phoochaanakaan Chumchon)," n.p. (typewritten)
- 1984 Wattana Pratoomsindh, "Instructional Strategies for Teaching Food and Nutrition to Adults in Thailand," Ph.D. Diss. University of Missouri/Columbia, July 179P.
- 1984 _____, "Progress Report for the Period March 15 - September 15, 1984," 5P. + Appendices.
- 1985A _____, "Progress Report for the Period September 16, 1984 to March, 1985 15P. (typewritten)
- 1985B _____, "Progress Report for the Period March 16 to September 30, 1985," 24P. (typewritten)
- n.d.(C) _____ and Daviras Dhanagom, MORE FOOD AND BETTER NUTRITION FOR THE RURAL POOR: A SOURCEBOOK ON FOOD AND NUTRITION FOR ADMINISTRATORS, PLANNERS, TEACHERS, RESEARCHERS AND EXTENSION WORKERS. Pattani, Thailand: Food and Nutrition Center, Prince of Songkhla University, 114 P.