PD-AAX-025

RURAL OFF-FARM EMPLOYMENT ASSESSMENT PROJECT (ROFEAP)

IN THAILAND

1979-1982

Report of a Final Project Evaluation
Conducted by:

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BASIC PROJECT IDENTIFICATION DATA

1. Country : Thailand

2. Project Title : Rural Off-Farm Employment Assessment

3. Project Number: 493-0306 Grant

4. Project Dates:

   a. First Project Agreement: 5/31/79
   b. Final Obligation: 5/31/79
   c. Project Activity Completion Date (PACD): 9/30/82

5. Project Funding:

a.	A.I.D. Bilateral Funding (Grant):	$ 500,000
b.	Other Major Donors: DS/RAD	423,320
c.	Host Country Counterpart Funds:	170,000
	TOTAL	$1,093,320

6. Mode of Implementation (specify contractual arrangements and numbers): Centrally Funded Cooperative Agreement with MSU and OSU

7. Project Design (A.I.D. and Contractor): Cliff Barton OSU, MSU

8. Responsible Mission Officials:

   a. Mission Director(s): Cohen, Halligan
   b. Project Officer(s): Gillespie, Wood, Resseguie, Thongkorn

9. Previous Evaluation and Reviews (include title, type, and date): Oshima Review, 9/80

10. Cost of Present Evaluation: (Used PDS fund)

a.	Direct Hire:	$ -0-
b.	Contract: US NAASPA PSC (est.)	11,600
c.	Other: Thai (est.)	3,500
	TOTAL	$15,100

Part I

EXECUTIVE SUMMARY

The Problem: Employment and Income Generation Rural Areas. Thailand's real per capita income growth has increased at about 4% annually over the past two decades. This growth has, however, been unevenly distributed across the population. Industrial policy emphasizing large and capital intensive investment has led to a concentration of manufacturing activities in the Central region. Agricultural policy emphasizing mechanization has favored larger farms. These and other policies have yielded a more uneven distribution of income than might otherwise have been possible, and have constrained growth of labor demand. Although the birthrate has fallen in recent years, the large number of births since 1960 will create a substantial increase in the rural labor force in a near future which, because of continuing mechanisation, will not be able to find acceptable income and employment opportunities in agriculture. The next 10 to 15 years therefore constitute a critical economic and political period in which significant efforts must be made to establish means of absorbing labor in productive activities outside agriculture.

U.S. Assistance. The Rural Off-farm Employment Assessment Project (ROFEAP) was initiated in 1979 to assist the Royal Thai Government (RTG) in identifying interventions which could serve the purpose of increasing the rate of growth of productive non-agricultural employment in rural areas. Although the Project Paper (PP) is unclear onthe matter, the essential purpose of ROFEAP, which terminated in September, 1982, was to generate data and analyses that could enable the RTG, USAID and other donor agencies to design, implement and evaluate policies programs and projects to promote rural small-scale industry. For this purpose the research consisted of three interelated components; a rural non-farm enterprise component, farm level surveys, and an analysis of rural financial markets. U.S. assistance in the project, implemented through Kasetsart University, was slightly less than $ 1 million, drawn from grant funds and DS/RAD centrally funded project funds. The latter were used primarily to support a full-time research advisor and short-term technical assistance from Michigan State University (MSU) and Ohio State University (OSU).

Purpose of the Evaluation. The purpose of the final evaluation was to provide USAID, the RTG and other donors with information that would enable them to determine whether ROFEAP findings offer potential for future project development, either as a discrete project or as a component of other projects (Annex 1). To this end the team was to : (1) determine if project objectives were achieved; (2) identify constraints impeding development of the rural non/off farm sector; and (3) discuss specific interventions related to carrying out activities in this sector. In addition, an implicit purpose of the evaluation was to make recommendations to USAID regarding how projects of the ROFEAP type can be improved in the future. The findings, conclusions and recommendations

presented here are based on discussion of sectoral problems and activities with U.S. and Thai project personnel, RTG officials, USAID staff&consultants,representatives of other donor agencies, and private individuals in Bangkok and Khon Kaen (Annex 2), and a review of documentation produced by the project (Annex 3) and other agencies (Annex 10).

Findings. Under the assumption that the basic purpose of the project was to generate data and analyses which can be useful in design, implementation and evaluation of policies, programs and projects, ROFEAP has been only partially successful in achieving its objective. The rural enterprise component provides a comprehensive inventory of the number, types and general employment characteristics of enterprises to be found in selected areas; and contains a wealth of information about the economic and technical characteristics of 14 different types of existing enterprise. The inventory suggests that the extent of rural non-agricultural enterprise has been underestimated, and the information on the 14 enterprise types can be very useful to individuals interested in these particular industries. This data, however, has only limited utility for policy,program or project development. The farm-level surveys, although limited by non-generalizeability outside the areas surveyed, provide an enormous resource of highly detailed information about the week to week pattern of farm household income generation throughout the year. Besides underscoring the importance of household manufacturing and work away from the farm as a means of increasing rural income directly, and indirectly through capitalization of agricultural activity from funds generated in non-agricultural activities, the data base can be used for a great variety of design and assessment purposes. The data can be used to examine farm credit schemes, seasonal opportunity costs of labor, the interaction of agriculture and non-agriculture, "cottage" industry promotion, labor absorption in new cropping patterns, etc. This component has provided useful information that has probably never been seen in Thailand before. The rural financial markets component provides some useful information on the characteristics of formal institutional lenders in rural areas. It nevertheless failed to meet most of the objectives specified for it in the Project Paper.

Project Design and Policy Implications. ROFEAP did not achieve all of its objectives for a variety of seasons. One was that the project was designed without a clear vision of the kinds of uses to which research outputs would be put. As a result several of the component objectives, methodologies and data requirements were organized to answer questions which are largely irrelevant in a policy or program framework. Staffing and implementation plans built arround the design were, by extension, also inappropriate. Research staff, mostly composed of graduate students and academic advisors, were insufficiently experienced in the operational complexity of policy, program and project work. During implementation they could not define the appropriate questions. These design weaknesses mostly affected the rural enterprise component and its relationship to farm level analysis. A second reason was that USAID was not effective in reorienting the project during implementation because, to some extent,

the mission was not particularly interested in the project or its objectives. One result was that the project's consultant budget was not used effectively to compensate for the lack of experience and narrow technical backgrounds of research staff. A third season was methodological "overkill". The disciplinary orientation and concommitant hypothesis-testing approach used by research staff demanded a great deal of accurate quantitative data. Massive levels of effort were invested in monthly, weekly and special questionnaires. While this approach yielded the wealth of farm level data noted above, it also resulted in a shift of resources away from the rural financial markets component, and in a decidedly numerical bias in the research. Qualitative analysis was minimized by the necessity of having researchers preoccupied with survey administration. As a consequence interpretation of the numbers has, to date, been very weak.

There are two basic implications for future projects of this type which follow from the foregoing. The most important is that design be set in a policy, program and project-oriented framework. In such a framework disciplinary research should be combined with professional research objectives, and a design should specify at the very outset that staff and consultants have experience and training in the following areas: agricultural economics, industrial economics, regional economics, policy analysis, finance, industrial operations analysis, institutional analysis and program design. The second implication is that AID monitor such projects carefully and with vigor in order to assure that project outcomes satisfy USAID and host government agendas rather than only researcher agendas. This will assure less wastage of U.S. assistance resources.

Recommendations: Notwithstanding ROFEAP's shortcomings, the information that it has generated, in combination with conclusions from other sources, indicate that there may be considerable potential for expansion of income and employment through promotion of rural industry. This industry includes "free-standing" enterprises located in major rural centers and also household enterprises located in farms and villages, as well as in towns. In terms of future project development, the evaluation team recommends that : (1) a non-farm enterprise component be integrated into the Northeast Rainfed Agricultural Development (NERAD) project; (2) a similar component be integrated into the institutional strengthening aspects of the proposed Rainfed Agriculture Intensification (RAI) project; (3) a rural industry promotion component be integrated into the Private Sector in Development (PSD) project in collaboration with the Industrial Finance Corporation of Thailand (IFCT); (4) a training and institutional strengthening project be developed for improving the effectiveness of Community Development Department agents and Industrial Service Institute personel in promoting non-farm enterprise in villages; and (5) supporting a NESDB survey of economic and enterprise potential in the Northeast region. In addition, the team strongly urges the mission to fund a 3-4 man-month level of effort which can syntheisze the ROFEAP data and findings into a book that can be widely distributed and easily understood by a broad professional audience in Thailand. ROFEAP workshops, conferences and papers have not adequately diffused knowledge about the information gathered to potential users (see Annex 5).

PART II

EVALUATION CONCLUSIONS AND RECOMMENDATIONS

A. Project Purpose: Conclusions and Recommendations

The purpose of the project, according to the Project Paper (PP) of February 16th, 1979, is to identify and develop appropriate projects and policies that could assist in the expansion of non-farm employment and income opportunities in rural areas and market towns. If this was really the basic objective of the project, then the evaluation team can conclude without hesitation that ROFEAP has not yet achieved its purpose. To date the study has expended in excess of $U.S. 1 million, and has thus far identified only one potential project, a "Regional Industrial Development and Promotion Program", which to some extent has been an ongoing RTG activity for several years (e.g. operations of the Industrial Finance Corporation of Thailand, the Dept. of Industrial Promotion, the Industrial Services Institite, etc.).

On the other hand, the PP also specified that the criterion for assessing the achievement of project purpose will be policy and project formulations by the RTG, USAID and other donor agencies that incorporate or are derived from data and analyses provided by ROFEAP. This implies that perhaps the actual prupose of the project was to generate data, and that projects and policy identification was not ROFEAP's responsibility. If this is indeed the case, the evaluation team can conclude with ease either that the project has been an outstanding success because it has generated a great deal of potentially useful information, or that the project has failed because others have not formulated policies and programs on the basis of the data, or that no assessment is possible at this time because RTG, USAID and other donor agencies have for the most part not had the opportunity to review ROFEAP's outputs.

In fact, except for the opening sentence of the paragraph describing the purpose of the project (p.11), and the second to last sentence under the heading of "Other Project Components" (p.27), the entire ROFEAP design containing descriptions of primary project components (including component objectives, issues to be studied, resarch methodologies, and data requirements), the financial plan, the implementation plan, the research and staffing plan, the terms of reference, and the list of proposed studies is clearly and directly oriented to generating data for a variety of potential purposes. Without a major overhaul to the description of project components and to the various plans included in the PP, adherence to the guidelines in the paper could not have been expected to identity or develop policy, program or project interventions.

The evaluation team is therefore obliged to arrive at the contradictory conclusion that the project achieved its major outputs (studies and two major conferences), that for the most part it attempted and succeeded in achieving the several objectives specified for its primary components (discussed below), and that by successfully meeting these requirements failed to achieve its explicit prupose.

> Recommendation: All projects, but particularly projects which are to be made subject to a final evaluation should be designed in a way which is logically consistent. Evaluation teams should not have to arrive at contradictory conclusions of the kind noted above. More importantly, however, project staff, USAID officers

and RTG officials should not have to engage in continual discussions, as was the case during implementation of ROFEAP, concerning the "real" objectives of a project. It is difficult to work productively or to plan future activities if uncertainty exists regarding the final purpose of any current effort. Attention to the logic of a PP is also important during design because once staffing arrangements are contractually agreed upon, a project is largely committed to stay within the bounds of the expertise provided to it. There is less scope for major changes in design because project staff may not be appropriately qualified to address completely different objectives and purposes. Responsibility for assuring that project designs are logical and consistent rests with USAID, in Thailand and in Washington. In future projects of this type, or indeed for any kind of project, responsible USAID Project Officers should pay close attention to consistency in project design documents.

B. Project Outputs: Conclusion and Recommendations

Project outputs were to include studies and analyses which would enable the RTG, USAID and other donor agencies to design, implement and evaluate policies and projects; and two conferences and several workshops to discuss rural industry development. ROFEAP has produced a large array of studies (Annex 3), and has held well-attended conferences and workshops with participants drawn from a wide spectrum of university, RTG and donor agencies, including a large number of senior officials. A major constraint on the effectiveness of the studies and conferences has been ROFEAP's inability to generate outputs which reflect the policy, program and project interests of its intended audience. Participants complained to the evaluation team that much of the work was "too academic" and that it did not seem to be leading anywhere "tangible". At the same time many of the participants noted that since the first conference they had received no subsequent reports from ROFEAP (even though the proceedings of the conference have indeed been widely distributed).

Recommendation: Whatever shortcomings certain components of ROFEAP may have, the work as a whole can be extremely useful for a wide variety of purposes in various RTG agencies, and for donor activities (Annex 4). For this output to be put to constructive use, however, many more RTG and donor agencies must be made aware of what ROFEAP has produced, and what its staff at Kasetsart can continue to produce from existing data, or can do to generate new data. To this end the evaluation team strongly recommends that USAID provide a small amount of additional funding for preparation and publication of a synthesis report of ROFEAP addressed to a wide professional audience (Annex 5). This may yield increased demand for ROFEAP services and, if it does, will effectively serve to institutionalize the capability of ROFEAP staff at Kasetsart through the market mechanism. In general, the team recommends that in the design of future projects explicit allowances be incorporated for a final (non-academic) report written for, and in terms comprehensible to, professional audiences.

C. Project Inputs: Conclusions and Recommendations

Project inputs by the RTG were to have included establishment of a Project Advisory Committee, administration of the project through DTEC, and implementation by Kasetsart University. The evaluation team has noted that by and large these inputs were provided. The Committee was not called upon to advise on RTG policy interests as much as one might have expected in a policy-oriented research undertaking; but of course ROFEAP did not have this orientation. A more serious problem was DTEC's ceiling on honoraria paid to university professors by the project. These honoraria could not compete with those offered by other donor-assisted projects organized to circumvent DTEC. As a result ROFEAP had difficulty recruiting and retaining qualified local staff and consultants from the academic community.

USAID's inputs were to include project monitoring, evaluation, identification of support services for the project, and funding of advisors from MSU and OSU. The way in which USAID organized these inputs largely prevented ROFEAP from moving towards its explicit purpose during implementation. Monitors of the project did not press hard enough for major revisions to the project design. Evaluation recommendations in October 1980 were not followed up closely. The fact that many or most of the U.S. consultants brought into the project for short periods advised on thesis and dissertation matters rather than on project purposes did not seem to warrant concern by USAID officers. The inexperience of U.S. and Thai students, key elements in the research process, and the absence of professional guidance (as opposed to academic guidance) to steer them along does not from the evidence collected,seem to have been a major issue. In effect, ROFEAP did not deliver policies, programs or projects after it began because USAID did not do enough to make such an outcome possible. Individuals have suggested to the evaluation team that this happened because the mission was not particularly interested in the project.

> Recommendation: What USAID does during implementation of a project has an important effect on the final outcome, no matter how illogical an original design might be. In future projects that do indeed retain USAID interest, and which do not seem headed in appropriate directions, no effort need be spared to force a reorientation. A return to the starting point in mid-stream can often be more productive in terms of project results than continuing to work on the basis of what has been done up to that point.

D. Project Scope of Work: Conclusions and Recommendations

The basic scope of work of the project consists of achievement of 12 explicit objectives spread across three primary project components: rural non-farm enterprise, farm level surveys, and rural financial markets. Each of these component objectives is treated separately in the following.

1. Rural Non-farm Enterprise Component: Conclusions and Recommendations

a. Determination of the Nature, Extent and Composition of the Non-Farm Sector in Rural Areas of Thailand. The Phase I survey comprehensively

enumerated the enterprises which exist in the municipal areas of four provinces: Chiang Mai, Khon Kaen, Roi Et and Suphan Buri. The data generated includes the number of establishments in each economic subsector, characteristics of employment, distribution of firm sizes, physical characteristics of establishments, and a general overview of the composition of each subsector. Similarly, the survey enumerated the major non-farm (i.e. non-agricultural) enterprises of 10,600 households in 74 villages. In both cases survey results suggest that data generated by the Ministry of Industry and the National Statistical Office tend to underestimate the number of non-farm enterprises in rural areas, and to misrepresent their nature and composition. Unfortunately, in most cases, the selection of towns and villages to be included in the enumeration was done in a way which prevents consistent comparision between project data and existing RTG data sources. Conclusions regarding systematic bias in current RTG data sources cannot be drawn. Suggestions for improving standard RTG data gathering methods are therefore constrained. More important, however, the data cannot be generalized to a point where the degree of probable error in national statistics, at least in the general areas covered by the survey, can be estimated. As a result, the implications for current RTG and donor policies and programs based on highly inaccurate data bases cannot be explored.

> Recommendation: The ROFEAP method of enumerating non-farm enterprise in villages and towns is very useful and can be very informative about characteristics of the rural economy. In a policy framework, however, enumerations of this type should extend beyond the narrow purpose of setting a stage for subsequent detailed surveys. The process should be designed in a manner that informs policy, program and project desingers about the accuracy and comprehensiveness of their current data bases, that can explore the kinds of changes necessary to improve the data bases, and that can shed light on the assumptions underlying current policy. This approach can maximize the immediate utility of research, even if such research is preliminary and general.

b. Identify Types of Non-Farm Enterprises which are Labor-Intensive Economically Viable and offer the Greatest Growth Potential: The Phase II survey drew a sample of 147 firms from the Phase I town enumeration, and added a number of others from the Phase II village survey. In all the project studied 14 types of enterprises in great detail: ready made garments, silk weaving, cotton weaving, bamboo products, reed mats, metal hand tools, bean curds, noodles, fruit and vegetable pickling, cement products, bricks, pottery, furniture, and wood carving. The study conclusions are that garments and silk-weaving offer greatest potential in the areas surveyed. This result is unsatisfactory in view of the great effort expended by project staff in trying to meet the objective. One reason for the shortcoming was that the research methodology was inappropriate. Sampling of firms from the Phase I survey limited the scope of analysis to enterprises which already exist in the areas and, given the need to draw samples from relatively large enterprise populations for statistical purposes, limited the analyses to types of enterprises which were well-represented already. This approach essentially pre-empted analysis of potential enterprises which are few in number or

which do not yet exist in the rural areas. In effect, the work was excessively influenced by a statistical necessity rather than by as more appropriate regional/industrial/agro-industrial development framework (Annex 6). This project design weakness was identified during the Annual Review in October, 1980. At that time participants in ROFEAP judged themselves too far along in the work to make substantial changes. The project did nevertheless attempt to secure additional help through use of the consultant budget. Unfortunately, Thai university faculty were not responsive to the relatively low honoraria offered by the project (as a result of RTG policy governing payments to civil servants), and U.S. consultants actually retained did not prove helpful.

Recommendations: In future projects of this type it will be more useful and relevant to design research methods and to identify issues in a framework of regional/industrial/agro-industrial development (Annex 7). Such a framework encourages a comparison of what is with what can be interms of resources, comparative advantage, inter-sectoral linkages, etc. The vision of the future within this framework is also amenable to policy, program and project identification. If future projects are designed this way, the staffing plan will of necessity include researchers with appropriate backgrounds; and there would be less need to use consultant budgets for assistance in completion of major project objectives.

c. Identify Constraints on the Expansion of Those Enterprises as a Means of Selecting a Focal Point for the Promotion of Policy. For the 14 types of enterprises noted above the study provides highly detailed information on: price and availability of raw material inputs; labor requirements; wages and seasonality of labor supply and demand; production processes and technologies; volumes of sales; values of sales; marketing systems; characteristics of entrepreneurs; cash flow and financial requirements; etc. This data base provides a rich resource of information about the variety of constraints and opportunities facing the enterprise types in question. Notwithstanding the effort involved, and largely for the reasons cited in the preceding section, the study has not clearly identified the particular constraints on expansion of rural enterprise.

Recommendation: The complexity of industrial analysis should not be underestimated. In future studies of this type explicit provision should be made during design for specialized consultants qualified in specific areas of industrial operations analysis (e.g., textiles, crafts, construction materials, etc.). This could significantly improve research methods for investigating enterprises, and interpretation methods for drawing conclusions from data and interviews (Annex 8).

d. Assess the Impact of Existing and Potential Thai Industrial Policies and Programs on Rural vs. Urban and Large vs. Small Scale Enterprise Development. The study retained a consultant to prepare a paper on policy impact. The paper is short and very general, and does not do justice to the wealth of secondary information available on the

topic. The reason for this shortcoming is in part related to the brevity of the short-term consultant contract, and in part to an underestimate in the ROFEAP design regarding the complexity of policy analysis and the level of effort required to generate specific impact assessments. The study also retained a longer-term consultant to review institutions and current programs having direct and indirect bearings on rural enterprise development. This latter work contains material providing a relatively thorough overview of existing institutions and programs in Thailand. While lacking depth, this work has nevertheless already been used by the World Bank, the UNDP and other donor agencies as a vital input to their studies of rural enterprise. In addition, this work has identified the one potential project produced by ROFEAP: a "Regional Industrial Development and Promotion Project".

Recommendation: A study which has as its purpose the identification and development of policies, programs and projects should make policy and institutional analysis its highest priority. Institutional analysis defines the limits to any program or project idea. It isolates what can be done from what economic research suggests ought to be done. Policy analysis, in a similar fashion, defines over-arching constraints on action. More importantly, such analysis attempts to understand why government policies are what they are. Change in policy requires the identification of its underlying causes. The premise that economic research which provides data and relationships is sufficient to modify policy is most often false. Future studies should be designed with greater attention to these matters, and project staff and/or consultants with expertise in policy and institutional analysis should be clearly identified from the very beginning-particularly in the study design phase (Annex 9).

2. Farm Level Surveys: Conclusions and Recommendations

a. Collect Detailed Primary Data on Numerous Aspects of Farm Enterprises. The Phase I survey collected extensive general information on the farm and non-farm activities of about 10,600 households in 74 villages. The Phase II survey, based on weekly interviews of 478 households in 25 villages in four provinces, has produced massive amounts of information on farm and non-farm income generation activities of rural households. This data is so extensive that years of dedicated effort will not exhaust the analytical potential of the data base. This component is potentially the most useful product of ROFEAP because it can be used to answer a great number of questions which the RTG, USAID and other donor agencies might choose to ask. It's major limitation insofar as policy, program and project development is concerned is that it cannot be generalized beyond the villages actually surveyed. Village selection was based in part on the practicalities of survey management, and in part on the need for comparative analysis between villages. At the same time, the adoption of a weekly survey schedule, meant to maximize respondent recall, severely limited the number of villages and households that could be covered in any one period; and this too contrained the ability of the work to meet generalizability needs.

Recommendation: Farm level surveys of the ROFEAP type are extremely useful. Work of this kind has not been done in Thailand before with the same degree of detail and intra-household comprehensiveness. In a policy, program and project context, however, there is a fundamental need for generalizability to wider areas. In future studies it may be adviseable to restrict the number of questions asked to a few key variables and/or to reduce survey frequencies (e.g. asking for one-week recall every second or third week and interpolating data between the surveys). Such reductions can shift resources to cover a wider area and a larger sample which can approach generalizability. The loss in detail and accuracy of information would not, within limits, compromise policy, program and project implications. As noted above, the limiting factors in countries like Thailand are institutional constraints to action and not, as many believe, insufficient data and detail.

b. Examine the Nature of Farm Sector Demand for Labor and Other Inputs to Assess the Extent of Labor Underemployment, and Determine the Labor Absorptive Capacity of Alternative Cropping Patterns. The data gathered in the Phase II survey provide extensive coverage of the uses of household and hired labor in farming activities, and also the absorptive effect of alternative cropping patterns. Most of these aspects were integrated into seven linear programming models to reflect a typology of farm enterprises found in the 4 provinces surveyed. Experimentation with these models suggest that in all cases household income can be increased through reallocation of available family resources to alternative cropping and to non-farm activities at the same time. However, the study has also found that there are essentially two-types of non-farm enterprise. One, which ROFEAP labels as non-farm enterprise, is the income generating activity of household members on the farm (e.g. craft products). The other, called off-farm activities, cover income generation from the sale of labor services to other farms, to manufacturing and service enterprises in the area or further away, etc. The study suggests that the traditional distinction between farm and non-farm activities is inappropriate, at least for the villages covered. Households appear to design their income-generating patterns around the opportunities and constraints which immediately face them. Depending on the season, the type of farm, the availability of skilled family labor, etc., by and large household labor forces are constantly at work and generating income; and do so in a great variety of ways. The key conclusion that arises from these observations is that in some rural areas the issues of underemployment and labor absorption are in the short-term at least, less important than the challenge of identifying and developing an array of programs and projects which serve the purpose of maximizing the returns to labor in farm, non-farm and off-farm activities simultaneously.

Recommendations: In future studies covering areas with similar characteristics as those found in Thailand by ROFEAP, and in the framework of program and project identification, it may be adviseable to revise the objective of farm level surveys, from one emphasizing "examination" of pre-determined analytical issues

to one emphasizing "identification" of alternative means of maximizing rural household income from all sources. In this way it may be possible to focus more quickly on factors which are most relevant, and then to move towards identification of possible interventions with regard to those factors. At the same time, future studies should also attempt to place farm level surveys in a regional economic framework that would permit a better integration of rural household analysis with the rural (i.e. town) enterprise analysis discussed earlier. ROFEAP has not linked the two analyses very well, partly because it did not have a framework within which to combine them.

c. Analyze the Relationship Between Farm Size and the Importance of Non-Farm Income Sources to Determine the Potential Distributional Impacts of Non-Farm (i.e. off-farm) Enterprise Expansion. The study has shown that although there is a degree of relationship between farm size and the importance of non-farm income sources (both on and off the farm) in the villages surveyed, this relationship is not as clear-cut as may originally have been envisaged. Other factors, such as type of farm (i.e. irrigated vs. rainfed), labor productivity in craft enterprises on the farm, returns to labor off the farm, household size, etc. are equally important indicators of the importance of non-farm enterprise expansion. This lack of clear relationship may be due to the small sample size and/or the purposive nature of sample selection. Whatever the causes may in fact be, the study does not provide clear-cut answers to the question of distributional impact.

Recommendation: In future studies, and as suggested above, it may be adviseable to avoid imposition of preconceived ideas about factors determining the importance of non-farm income sources to rural households. From a programmatic perspective this implicit hypothesis-testing approach is less useful than an analytical approach which seeks to answer a specific question. One possible question is: Assuming that off-farm employment can be promoted in an area at an average wage-rate of X, what are the factors that shape income distribution consequences? This kind of question obiigates researchers to think through all the potentially relevant factors, including farm size, and then to design sampling procedures and questionnaire formats which will answer the question. The essence of policy-oriented research is asking the right questions and then answering them, and this approach should dictate the form of any future study of this type.

3. Rural Financial Markets

a. Analyze the Sources and Uses of Funds in Farm and Non-Farm Firms. The study examined sources and uses of finance by farm households, and carried out an extensive analysis of how various types of households use the funds on a weekly basis. The data and the relationships which have been documented can be very helpful in design of rural credit schemes, and in the determination of whether or not such schemes are warranted. The study also attempted to glean similar information from a special questionnaire administered to town-based enterprises, but failed to generate much useful information. The reason for this shortcoming is that private enterprises in towns are reluctant to reveal details about their financial affairs to

strangers. Although ROFEAP staff tried to cultivate close relationships with the respondents over several months preceding administration of the questionnaire, the reluctance of the entrepreneurs persisted, and the utility of the information gathered is in doubt.

Recommendation: The non-responsiveness of entrepreneurs subject to government regulation with regard to their commercial affairs is widely recognized. For this reason information concerning finance is collected by indirect means: from bankers, enterprise associations, key informants, etc. Such sources of information can provide very valuable insights. However, considerable expertise and experience is required in knowing what questions to ask, in identifying people to ask, and in interpreting the answers. In future studies where progress is compromised by non-cooperation, consultant funds in a project budget should be used to retain one or more individuals who are qualified in unobtrusive methods of researching and analyzing enterprise finance questions.

b. Assess the Impact of Recent Increases in Formal Agricultural Credit on Agricultural Output, Input Use, Demand for Informal Credit, etc. The study did not address this component objective. In the original project design the issue of financial markets was to have been addressed under the USAID technical co-operation agreement with Ohio State University (OSU). During implementation OSU advisors and researchers became more interested in the modelling of farm household systems, and in any case had come to the conclusion from prior work that rural credit was not a significant issue.

Recommendation: If a modification in project objectives is deemed adviseable during implementation, and if the project is destined to be evaluated at its conclusion, then it is mandatory that a justification for the change be made immediately and that a Project Agreement be modified accordingly through a Project Implementation Letter. Project Agreements and Project Papers constitute contractual agreements, and evaluations essentially assess the degree to which contractual promises have been kept. To avoid potential suggestions of irresponsibility during future studies, project participants and USAID project supervisors should pay close attention to any significant departures from explicit project objectives, and then make adjustments to those objectives in a timely manner.

c. Estimate the Impact of Changing Credit Terms and Supplies on Farms and Non-Farm Firms. Conclusions and recommendations with respect to this objective are the same as in point 2, above.

d. Identify the Incentives and Impediments which Exist for Financial Markets to Broaden Lending and Savings Services in Rural Areas. The study has produced one paper which addresses this objective. The paper concludes that although local bank branches are interested in and compete heavily in mobilizing rural savings and deposits, they are not yet equipped for effective lending to smaller borrowers

engaged in agricultural or manufacturing activities. Thus the supply of capital resources per se is not an immediate problem. The problem is one of identifying a mechanism to bridge the gap which separates lenders from credit-worthy potential borrowers. This potentially fruitful line of inquiry was not prusued further in part because the OSU inputs to this component had been diverted elsewhere, in part because participants responsible for the paper were also obliged to shift attention to more pressing management matters, and in part because the project as a whole did not have, as noted earlier, a strong motivation to follow through from analysis to program identification and development.

Recommendation: As suggested several times already, the phrasing of project component objectives to a large extent determines the way in which analysis proceeds, and the purposes to which the analysis will be used. The study of incentives and impediments was carried out to the letter, and was brought to the edge of policy and program identification. In future studies the specification of this particular objective should read something like: Identify and develop policy, program and project interventions to increase incentives and to remove impediments to the expansion of lending and savings services in rural areas. This kind of framework obliges researchers to extend themselves well beyond simple statements about the "problem".

e. Examine the Impact of Informal Credit Provided Through Input and Produce Marketing Firms. Conclusions and recommendations with respect to this objective are the same as in point 2, above.

Part III

FUTURE PROJECT DEVELOPMENT POTENTIAL

Research and analysis undertaken during the past few years by the RTG and interested donor agencies, like the World Bank and the International Labor Office, all seem to arrive at the same conclusion: sooner or later, depending on the particular area and its possibilities agriculture will no longer be able to provide increasing income generation opportunities to an expanding national labor force. They suggest that before the situation become critical, it would be wise to actively promote non-agricultural sectors in a way which maximizes employment potential across the country; while at the same time working towards further development in agriculture (Annex 10).

This expansion in sectoral development priorities, a part of the industrial restructuring process, has taken hold in the policy planning areas of government and is now being actively supported by such donor agencies as the World Bank, UNDP, UNIDO, and bilateral assistance from Germany, Australia and Japan-to name a few. In fact, there is something of a "bandwagon" effect taking place at present.

In any case, the RTG in public statements, and to some extent in action, indicates that it is now committed to the policy of more comprehensive approaches to rural development in order to expand employment and income in rural areas. Industrial expansion is an important strategy of this rural development policy. This has been stated explicitly in the Fifth National Economic and Social Development Plan which covers the period 1982-1986. At present the Industrial Restructuring Committee, appointed to co-ordinate the implementation of the industrial development plan, has been in the process of designing a work program for the implemention of rural industrialization policy. It is expected that the Fifth Plan will see the beginning of a long term movement towards the promotion of industries outside the Bangkok Metropolitan Area. The commitment to this strategy is a reflection of the government's realization that rural industrialization, particularly in small scale industries, is an effective means to provide employment and income to the rural poor.

The question of whether USAID should become more actively involved in assisting the RTG in this new approach to employment and income expansion is not answered easily. There is yet much to do in agriculture, health and education; and it may well be that other donor agencies have greater strengths with respect to rural enterprise development than does USAID. The Agency can, however, integrate into its' current and planned portfolio of activity a number of components which directly or indirectly support current RTG policy directions.

The following five program possibilities, which integrate the findings of RDFEAP, among other sources of information, suggest the things that USAID might wish to consider for implementation in a near term. The first three are essentially component addition to current projects. The other two constitute new project ideas.

1. Northeast Rainfed Agricultural Development Project (493-0308) - NERAD

The purpose of the NERAD project is to demonstrate an agricultural development program for increasing farm productivity and farm income in rainfed agricultural zones. This project was designed in early 1980 and therefore could not benefit from the findings of the ROFEAP study. The design was therefore based on a NERAD Socio-Economic Survey (1979 - 80) at the Tambon level. This data base suggests that between 75% and 90% of household income is derived farming activities.[1/]

The ROFEAP data now indicate that such figures can be misleading. The NERAD data, for example, suggest that 80-85% of household income in Roi Et province is drawn from farming. ROFEAP data from 5 villages in the province indicate that farming contributes to only 22% of household income on average; and that this figure varies from 1.5% to 41% between villages.[2/] The balance of household income is derived from non-farm enterprises of the family (28%), wages from off-farm work (25%), and other sources (25%).

The ROFEAP data, taken from a small sample of households, does not necessarily question NERAD's Tambon averages. What it does imply is that there is considerable variation in the ways households generate income within a province, and within a Tambon. There is therefore a danger that without care in the selection of villages to be addressed by the NERAD project, considerable effort will be wasted. It will, for example, be difficult to convince households to add labor or capital to a new agricultural practice if farming is, from a total income-generation perspective, essentially a secondary activity. A new practice may increase the return relative to traditional agricultural practice, but it may be less than the current return from non-farm and off-farm activities.

NERAD's "farm-systems" approach is, at present, partial It ignores the non-farm and off-farm components of the "system" which, if nothing else, the ROFEAP study argues convincingly is in appropriate in the circumstances of the Northeast. To minimize the risks to the NERAD project and to maximize the practical utility of the ROFEAP study, the Center for Applied Economics Research at Kasetsart University should be integrated by one means or another into the project. Among other possibilities, the Center can : 1) test NERAD staff ideas for new agricultural/Livestock practices against current ROFEAP data files (e.g. comparative return to labor, etc.) ; 2) identify through simplified means villages in which farming activities do not compete acutely with other household activities for family labor and capital; 3) conduct comprehensive "farm-systems" surveys and analysis as required (through simpler means than those used during the ROFEAP study); and 4) any other reserach requested to clarify the role of non-farm and off-farm activities with respect to the goals and objectives of the NERAD project. Should NERAD staff wish to expand their scope to actively cover non-farm enterprise promotion, Kasetsart can help with the analytical work required in this aspect as well.

1/ NERAD, Addendum to Project Paper (493-0308), April 1980, page 17.

2/ Chalamwong, Y. and Meyer, R. "Farm Household Income Levels, Sources and Patterns in Selected Thai Villages", July 30, 1982

2. Rainfed Agricultural Intensification Project - RAI

The purpose of the RAI project is to accelerate small farmer productivity through the strengthening of the RTG's program and operational activities directed toward rainfed agriculture intensification. This project is currently in the design stage. As presently described it's principal components will be: applied rainfed research methodology; soil and water conservation improvement; improved livestock technology; diffusion of improved farming practices; administrative and project management staff development; and research in rainfed agriculture.[1/] Key themes in these components are an emphasis on institutional strengthening, and a strategy of working back from farm level problems to develop programs of support.

As in the case of the NERAD project, the premise underlying RAI is that non-farm and off-farm household activities are of secondary importance in the Northeast, and that the principal constraints to raising income are to be found in improvements to agriculture and livestock practices. This may in fact be the case. However, as indicated above, the ROFEAP study has shown that one should not, a priori, assume away other family activities - at least not without thinking it through casefully. In the context of institutional strengthening (e.g. training) RTG personnel should at least be made aware of the relationships between farm, non-farm and off-farm activities. In the analysis of farm-level problems the "complete" system should represent the point of departure in order that the farming aspects be understood as parts of a larger and more complex household enterprise. This does not mean to imply that RAI should significantly expand its focus to include non-farm activities. Like the NERAD project, it need not be complicated by additional components. What is implied is that, at some appropriate points in the project, non-farm and off-farm dimensions investigated by ROFEAP be integrated into the institutional strengthening and research components of RAI in order that RTG personnel have a broader sense of what the rural economy is about. In this way the knowledge produced by ROFEAP can make its way out of the university and into the "field" (where it can be more useful).

If RAI is approved, then a small training role for Kasetsart University within the institutional strengthening and research aspects of the project appears wise. As in the NERAD project, USAID and the RTG can make maximum use of the investment in ROFEAP by integrating the data and the researchers into new programs where they can be very productive.

1/ Rainfed Agricultural Intensification Project, Project Identification Document, USAID/Thailand, September 26, 1981

3. Private Sector in Development Project

In a regional or rural economic development framework which stresses expansion and distribution of employment and income to as wide a spectrum of population as possible, promotion of productive activities should be based on probable outcomes rather than the form of inputs. To be more specific, it does not really matter whether rural industry is very small or very large, or whether it appears labor-intensive or capital-intensive, or whether it is in one subsector or another. What really matters is whether the particular industry or enterprise generates net benefits to the population directly or indirectly affected. During the evaluation the team visited a number of IFCT - financed enterprises in Khon Kaen. By Bangkok standards these are small operations, but by local standards they are large. But whether defined as large or small, their one characteristic, at least on the basis of superficial evidence gathered, is that they provide net benefits to the population as well as profits to investors; as follows :

a. Fishing Net Factory: The plant appears as a very capital intensive operation employing about 40 workers. It also sub-contracts finishing operations to between 1000 and 1500 women in surrounding villages and earn them up to ฿ 80 per day. Sales cover most of northern Thailand (and as a result the RTG has banned further investments of this type). The plant has displaced an unknown number of traditional net-makers at the village level. Prices for nets are now significantly lower than before, and thus more widely available for the extensive village fishing activity which occurs after flooding in the rainy season.

b. Brick Factory: The plant appears and is relatively capital intensive. It produces higher-grade finishing bricks for construction in the area and thus does not compete with traditional brick markets. The product substitutes for previously imported (i.e. to the region) higher cost bricks, and has constrained the rise in the cost of building construction-thus serving to enhance construction activity and the labor required for it.. The plant produces about 20% of the area's current demand for bricks of all types.

c. Poultry Farm: This is a capital intensive operation which has brought down the price of chicken to consumers and has correspondingly expanded demand. In part the operation substitutes for regional imports. It may also have affected incomes of farmers who had previously received higher market prices, although there's no way of assessing the scope of this impact.

d. Water Jug Factory: Also a capital intensive operation, this enterprise produces low-grade plastic water containers. It substitutes for higher priced regional imports, and also for less durable clay pot containers produced by village households. At the village level this product makes it easier to transport and store water, and is safer than many clay containers for this purpose.

e. Agricultural Machinery Factory: This produces rice mills of various sizes, tillers and vehicles powered by 2 h.p. to 8 h.p. Japanese single-piston engines. The market is limited to individuals or groups with relative economic means. The technology is adapted to local circumstances. Thus mills become accessible to smaller villages, and tillers become accessible to smaller farmers. Compensating for the potential decline in hired labor which these technologies may cause are higher regional output and greater competition among millers (and hence returns to farmers).

f. Pulp and Paper Factory: This unit, very capital intensive produces paper from kenaf. It offers higher prices for inputs than gunny-bag producers, and thus serves to increase farm revenue from upland crop production. The number of workers displaced in bag production, however, is unknown.

g. Canned Foods: This factory, producing for a wide market and substituting for regional imports, purchases meat, fruit and vegetables from local producers. It may have displaced some traditional preserving operations, but it has also lowered consumer costs and increased farm revenues in the process.

All the foregoing units have been established with IFCT assistance since 1976. The nature of these investments, each one is something of a pioneer in the region, suggests that the area has considerably more potential for various kinds of industrial expansion. It also suggests that although businessmen had ideas, it was not until IFCT took on active role in industrial promotion (to market its lending portfolio) combining credit, technical assistance and follow-through, that the ideas could be implemented. One may also note that local bank branches have co-financed many of the IFCT-related industries in the region. They defer to IFCT's lending appraisal capabilities.

At the risk of exaggeration, one can suggest that the region is still somewhat in a "frontier stage" of development which has historically been present in other developing countries as well as the U.S. Other regions of Thailand may be similar in this respect. At this stage investment is risky and very few investors, banks or entrepreneurs, are interested in being the first to try something out. In this context IFCT serves the purpose of providing the financial and technical support necessary to reduce investor wariness and encourage the translation of ideas into practice; both in terms of putting capital into the area and in terms of capitalizing smaller firms which banks in particular have avoided. The fact that IFCT is a subsidized operation is, within this framework, largely irrelevant. In marketing terms the corporation is a "loss leader" which the RTG hopes can provide a basis to stimulate independent private sector initiative vis a vis the regionand smaller enterprises. In the longer-term an operation like IFCT, if it has no other areasor sectors to experiment with,will phase itself out.

In the context of USAID's Private Sector in Development Project, IFCT would appear as a logical and competent institutional vehicle for implementing the rural/smaller-scale components of the project. Although subsidized, it is regarded as a private operation, works on a profit-making basis, is organized as a corporation, has competent staff and is understood as a leader in this kind of industrial development. It's human and financial resources are limited however, and USAID can be instrumental in expanding the scope and scale of IFCT operations, and through this, to promote activities of the private sector in general, particularly outside Bangkok.

An IFCT-centered program could readily complement the project's intended work with BOI especially with regard to moving the BOI to expand its interests beyond Bangkok and large-scale investment. At the regional level an IFCT-centered operation can also extend to formally work with the Dept. of Industrial Promotion (DIP) and its Industrial Services Institute (ISI). These latter institutions are inthe process of setting up promotional efforts in Khon Kaen and other regions. USAID may be able to assist them in upgrading the types and range of technical assistance services which they hope to provide to regional entrepreneurs, and in organizing investment promotion and management activities.

Finally, USAID should note that at the moment there is considerable "dust" in the environment of rural industry promotion. The World Bank and RTG are in the process of negotiating a $ 350-400 million APEX package for agriculture and industry, although it may be 2 or 3 years before an agreement is reached. The UNDP is providing a small grant to the DIP to assist them in requesting support for the ISI operation in Khon Kaen from the World Bank. In the meantime the Japanese government has offered ฿ 156 million to the DIP to construct and equip the ISI facility in Khon Kaen. UNIDO has approved part of a $ 450,000 assistance package for industrial promotion in the Northeast, at Udon Thani, through the DIP. The Canadian Agency for Int'l Development (CIDA) has also expressed interest in doing something in this area. In designing subcomponents for the Private Sector Project, through IFCT or others, it will be very important to assure that account is taken of all these other activities in order to minimize potential redundancy and RTG institutional overload.

4. Enterprise Development at the Village Level

Much of the Private Sector Project is based on the premise that there exists an information gap between the U.S. and Thai entrepreneurs. To various extents the same gap separates Bangkok from other major towns (providing part of the justification for the program suggested above). There is also a gap between Bangkok, major towns and the villages of the countryside. If villages were only active in agriculture, the gap as far as rural industry is concerned would not be particularly important. The ROFEAP project has, however, emphasized the importance of very small-scale manufacturing at the village level. In an enumeration of 10,600 households, the project identified 6500 such enterprises. In detailed surveys of 421 families, the project found that households in some villages generate more than 50% of income farm such activities (the average is 21%). As with any economic activity, some villages are very successful in these endeavors while others simply lose money at it. The essential point is that the countryside contains a vastly underestimated number of actual and potential entrepreneurs of various types.

At present some of the more remunerative activities like silk-weaving and garment making are tied into the larger private enterprises, through sub-contracting or other arrangements (like the fishing nets discussed above). Most of the enterprises, however, suffer from raw material constraints, limited knowledge of markets and products, poor technological processes, etc.-all the basic obstacles to any enterprise. The only major institution which seems active in promoting this level of entrepreneurship is the Community Development Department.

At the local level CDD agents work in collaboration with DIP/ISI in providing training and introducing new product lines. Though there have been remarkable exceptions, the CDD has not been particularly effective in raising village incomes in this way.

Much of the problem is that most of the over 9000 agents have, according to a ROFEAP study, backgrounds in sociology, anthropology, social work, etc. They do not have backgrounds in economics, or business or finance or development in general. Thus, for example, they provide training for the production of crafts which not only have limited markets, but also provide lower returns than the old crafts.

There would seem here to be some potential for reaching village entrepreneurs in a more effective manner. Types of more effective assistance might include creation of intermediate financial institutions, linking enterprises to existing financial institutions and technical assistance units, arranging sub-contracts and purchases by larger industrial and commercial firms, identifying markets and the assistance required to enter and expand in those markets (e.g. credit, training, technology, etc.), arranging for the assistance, appraising and screening individual or group projects on behalf of banks, IFCT or others, and so on.

For the CDD to become effective in this way, it needs outside support. As in other countries this kind of operation is not highly regarded in economic policy circles, and the worth of CDD activity is viewed as a social welfare operation. Thus substantive additional support from within the RTG is unlikely to be forthcoming in a near future. In the grand pecking order of things this parallels the situation with respect to rural and smaller-scale industry. IFCT needed World Bank support to convince the RTG of the viability of going beyond what they were doing several years ago. The CDD requires similar outside support if it is going to change and improve what it presently does.

A project in this area may be appropriate for USAID because it is essentially aimed at promoting private sector development at the village level while at the same time addressing rural poverty quite directly. The field is relatively clear with regard to donor agencies because only UNICEF is currently providing assistance. Dr. Pairoj head of CDD while disenchanted with USAID for lack of follow-through on past offers of help, is fundamentally interested in converting his department into an economic development agency. Like the case of IFCT, the CDD can become the leader into the field of very small enterprise development.

Assistance to the department by USAID should probably take the form of a combined formaland informal (i.e. on-site) training program for CDD and ISI staff at all levels; with the basic purpose of providing the staff with a more business-like orientation. AT a later stage this could be followed by provision of key facilities and supplies for existing and new CD and ISI Regional Centers. USAID, drawing from its experience over the years in similar activities with U.S. contractors (e.g. Partnership for Productivity, AITEC, etc.) is probably better able to implement such a program than other donors.

The status of the CDD and ISI as public agencies will of course limit the effectiveness of what can actually be made to happen in the field. The issue here is really one of maximizing the effectiveness of an existing recurrent budgetary expenditure. Even if only 10% of the staff can be upgraded through a project, it nevertheless represents 900 people working better at the village level.

5. Survey of Economic/Enterprise Potential in the Northeast Region

One of the difficulties in laying out the range of possibilities for the foregoing two project ideas is that for certain areas like the Northeast, information about economic potential (of the operational kind) is diffusely scattered and/or non-existant. This constrains the generation of ideas about the range of possible economic activities that can or should be promoted in those areas. The BOI, DIP/ISI, IFCT and other operational agencies may therefore be limited in the scope of their thinking and action. In this context, and for the case of the Northeast, USAID might wish to consider support to the NESDB for preparation of a regional economic survey. Although the RTG can finance such a study and can recruit capable individuals for various parts of the work, Thailand is still somewhat short of people with qualifications in some key areas such as regional economic analysis, resource economics, village industry, agro-industrial technology, etc. A joint undertaking may be in order here, perhaps linking a U.S. firm or professional school with the National Institute of Development Administration. This kind of effort would complement the Private Sector Project rather well. Arough outline of the work might be as follows:

- Resource availability for extractive and agro-based industries;
- Demand potential for manufactured goods;
- Supply and the pattern of supply of labor;
- Costs of production relative to other regions;
- Basic physical and institutional infrastructure required.

ANNEX 1

Final Evaluation Scope of Work

A. General

The purpose of the evaluation is to provide decision-makers in USAID, the RTG and other donors with sufficient information to make a determination if there are any findings of the non/off farm project which offer a potential for future project development either as a discrete project in itself or as a component of other projects.

The U.S. consultant will serve as team leader and be responsible for preparing a final report which will:

(1) review project purpose, scope of work and project methodology with a view towards determining if project objectives were achieved;

(2) focus on current situation within the non/off form sector and note specific constraints that may be impeding further development in the sector; and

(3) discuss specific interventionssuch as organisational factors related to carrying out activities in this sector.

Recommendations should be specific and made within a realistic context of limited donor and RTG resources which have many competing projects in need of funds. Arguments for supporting this sector should not ignore competing sectorsbut rather should provide decision makers with substantive reasons as to why interventions in this particular sector would better meet donor strategies and objectives than other types of activities. Format of the report well follow AID evaluation report guidelines which will be provided to the consultant.

B. Specific

(1) Review relevant documentation and data produced by the project and available from other agencies.

(2) Discuss non/off farm sector activities and problems with project personnel RTG officials and ind iduals from other agencies-public and private, located in Bangkok and up-country.

(3) Review and Discuss USAID Private Sector and other projects with a view toward how non/off form activities might related to them.

(4) Visit 1 or 2 up-country areas to review provincial non/off farm sector activities and relationships with Bangkok.

(5) Spend 5 working days in the U.S. with USA and AID/W personnel who are formular with the project, prior to departure for Thailand.

(6) Participate in final project workshop to be held at the end of the evaluation period.

ANNEX 2

Individuals Contacted

1. ROFEAP Staff and Consultants

- Jacques Amyot, Chulalongkorn University Social Research Institute
- Saroj Aungsumalin, Kasetsart University (KU)
- James Boomgard, Michigan State University (MSU)
- Pitaksit Chayapooti, Khon Kaen University (KKU)
- Carl Liedholm, MSU
- Donald Mead, MSU
- Merle Menegay, MSU
- Richard Meyer, Ohio State University
- Tongroj Onchan, KU
- Preeda Prapertchob, KKU
- Somsak Priebprom, KU
- Supachai Suetrong, KKU
- Nongluk Suphanchaimat, KKU
- Somsak Tambunlertchai, Thammasat University

2. Royal Thai Government

- Chakramon Phasukavanich, Chief, Industrial Planning Section, NESDB
- Chirayu Isarangun, Deputy Minister of Industry
- Staporn Kawitanon, Director, Economic Projects Division, NESDB
- Kittipan, Director, AID Division, DTEC
- Mando Leopairoj, Dept. of Industrial Promotion
- Pairoj, Director, Community Development Department
- Kosit Panpiemras, Director, NESDB
- Cheera Panupong, Deputy Secretary General, Board of Investment
- Puangtip, Small Industry Finance Office
- Thamnu, Director, Management and Productivity Center, Dept. of Industrial Promotion
- Orapin Veeravut, Director, Planning Division, Dept. of Industrial Promotion

3. USAID Staff and Consultants

- Charles Alton, Northeast Rainfed Agriculture Development Project (NERAD)
- Cliff Barton, AID/Washington
- Jeff Evans, Private Sector in Development Project (PSD)
- Frank Gillespie, Project Officer
- Robert Halligan, Director
- Bruce Odell, Head, Program Office
- Carol Peasley, Deputy Director
- Robert Ressequie, Project Officer
- David Thomas, NERAD
- Jack Williamson, Assistant Program Officer
- Tom Johnson, Deputy Director, Project Development Section
- John Foti, Chief, Agriculture Division
- John Coughlin, Acting Comptroller

4. Private Sector (Khon Kaen)

- Peckaeo Chakankengkaj, Charoen Plastic Co.
- Wanit Dejanubaksa, Dejapanij Fish Net Co.
- Somchai Lertburapha, Lablae Canned Foods Co.
- Bancha Maneechoteskul, Siam Kamyont Co. (agricultural machinery & vehicles)
- Somkiat Paladejujomkun, Maharaj Brick Co.
- Mr. Preecha, Industrial Finance Corporation of Thailand (IFCT)
- Pin Somjaiwongse, IFCT

5. Other Donor Agencies

- Fatch Chaudhri, World Bank
- Kamm-Ericson, UNIDO
- Yumiko Saito, UNIDO
- Kenneth Sigrist, World Bank

6. Others

- Jamlong Atikul, National Institute of Development Administration
- Chira Hongladarom, Thammasat University

ANNEX 1

Summary of ROFTAP Output

1. Rural Non-farm Enterprise (i.e. Town Enterprises)

The project focussed attention on 14 types of manufacturing activities: ready-made garments silk weaving, cotton weaving, bamboo products, mats, metal hand tools, soybean curds, noodles, fruit and vegetable pickling, cement products, bricks, pottery, furniture, and wood carving. Information on cotton weaving, bamboo products, pottery mats and tools was obtained from the village survey of farm households. Information on the other activities was obtained from the town survey covering a sample of 146 firms. The data provides considerable information on employment, production, sales, entrepreneur characteristics, marketing, production costs, characteristics of the labor force, and finance.

The overall conclusions regarding the growth of income and employment among rural small producers, as described in "Rural Industries in Thailand: Some Characteristics and Growth Potentials", (May 14, 1982) prepared by T. Onchan, P. Charsombut and D. Mead, are:

1. These is need for rationalisation of current government policy regarding the supply of wood and cement.
2. More effective programs are required to promote village sericulture.
3. A better information network is required to convey questions to research centers and answers to producers.
4. The flow of working capital to producers should be increased.
5. The flow of fixed capital to new firms should be increased.
6. New product development work at existing research centers needs to be strengthened, and dessemination of findings should be improved.
7. Businessmen should through education be convinced of the desirability of investment in product development.
8. Contracts between producers and commercial firms should be encouraged to improve marketing links.
9. Training to upgrade skills of best existing workers should be undertaken.

These conclusions and recommendations summarize key findings contained in each of the 14 industry studies. The key findings for each industry to date are indicated in the following.

Ready Made Garments (Conference Paper No. 7)

Demand is the crucial constraint to expansion of output and employment among sample firms. Other, less serious difficulties include product design, dyeing quality, shortage of unskilled labor during the wet season, scarcity of skilled labor and working capital finance. The firms are labor intensive, production is adapted to seasonal variations in labor supply, initial capital investment for entry is low, production skills are easily acquired, and output demand appears promising. For these reasons the government should consider the following potentially helpful interventions: provision of technical assistance, cultivation of certain types of co-operatives, expansion of formal credit facilities, and promotion of garment exports.

Silk Weaving (conference Paper No. 17)

This industry is very labor intensive and is characterized by high rates of self-employment and subcontracting arrangements which generate substantial returns to labor for higher quality products. At present domestic production is insufficient to meet demand, and the major constraint on domestic production is a shortage in the supply of raw material. Other, less important problems include dyeing technology, pattern design, and labor shortages in the wet season. The policy and program actions which may be helpful in this context include: promotion of sericulture, improvement of skills in dyeing and design, promotion of export markets, promotion of subcontracting arrangements, promotion of filature factories, research and development on appropriate weaving machines, and modification of minimum wage and excise tax policy to maximize employment and income.

Cotton Weaving (conference Paper No. 19)

The industry is characterized by female labor intensity and seasonal variations in labor supply. Employment is maximized through subcontracting arrangements. Returns to labor range from ₦ 8 to ₦ 37 per day, and translate into family income generation of between ₦ 300 and ₦ 850 per month. Recommendations in regard to this industry include: encouragement of business and marketing leadership, improvement in rural roads, introduction of looms, skill development, formation of co-operatives and povision of credit.

Bamboo Products (Conference Paper No. 20)

The market for bamboo products is at present relatively limited because the types and quality of current output is suitable only for local consumption. Expansion of employment and income in the industry will require government assistance in demonstration of new and improved product lines, training in skills required to engage in new production, introduction of small-scale technologies, promotion of products to expand markets, and development of leadership and creative skills among producers. Actions to encourage bamboo planting to provide a sustained yield of material are also required. Although finance is not now a constraint on production, it would be a constraint on upgrading technology.

Mats (Conference Paper No. 28)

Production of mats generally provides low returns to labor, about ₱ 6 per day, although higher quality output can generate up to ₱ 50 per day. The low returns do not encourage cultivation or seeds, and the resulting shortage of raw material acts to maintain low productivity. Therefore seed production should be encouraged and high quality mat production should be promoted.

Metal Hand Tools (Research Paper No. 12)

Relatively low returns to labor in some areas are a function of the availability of steel and charcoal, and technologies in current use. Efforts to improve output and income will require introduction of better equipment and machinery, removal of input constraints, and provision of credit to finance the shift in technology.

Soybean Curds (Conference Paper No. 29)

Curd production is highly competitive and tied to local demand. Although returns to labor are relatively good (from ₱ 5 to ₱ 10 per hour), prospects for expansion of employment in the future are not encouraging .

Noodles (Conference Paper No. 33)

Major problems in the industry are labor turnover, excess machine capacity and fluctuations in input (broken rice) prices. Current trends indicate a shift in production from hand to machine processing, and from smaller to larger producers. As a result smaller rural producers are switching from manufacture to marketing of noodles. Expansion of employment will thus depend on increases in the aggregate demand for output. The government might wish to explore the export potential of dried noodles in this regard.

Fruit and Vegetable Pickling (Research Paper No. 6)

The principal problems faced by this industry are product spoilage and raw material price fluctuations accompanied by cash flow constraints. Expansion of employment and income will depend on increases in demand for pickled as well as canned fruits and vegetables. The current situation requires an analysis of local and export market potential, development of improved technology (in particular domestic production of vinegar), identification of a substitute for saccharin, provision of guidelines for the use of safe plastic containers, provision of management training for high-school aged youth in pickling households, and rationalisation of government regulations.

Cement Products (Working Paper No. 32)

Expansion of employment will depend on increases in demand for specific cement products. In this regard production of lamp poles has high potential in terms of government programs for rural electrification. Similarly, increases in demand for housing components and related infrastructure will serve to expand production of floor slabs, drainage pipes, cement blocks, etc.

Bricks (Conference Paper No. 27)

Larger and more capital intensive firms are more productive and can produce a wider range of outputs than smaller firms. To improve the competitive position of smaller producers, actions in the areas of clay preparation, forming and drying of bricks, and firing and removal of bricks from kilns may be helpful.

Furniture (Conference Paper No. 14)

While increases in rural incomes are likely to yield increasing demand for furniture, small producers in rural areas are unlikely to benefit if present trends continue. Bangkok manufacturers have a comparative production cost advantage related to their larger scale, greater capital intensity and proximity to material supplies (i.e. plywood and veneer). Smaller rural producers, if not forced out of the market, will tend to concentrate more on sales of Bangkok-made furniture. The decentralisation of government purchasing, however, may still serve to shelter small rural producers from this trend.

Policies and programs for this industry should serve the purpose of providing a supportive environment for rural producers. In this context actions in the area of raw material supplies might include: logging controls to assure a more stable wood supply, reduction of interregional price disparities for wood, decentralisation incentives for plywood and veneer plants, and wood pricing policy to encourage substitution (e.g. rattan, para-rubber wood, metal, plastic, etc.). With respect to this last, actions in the areas of training, materials procurement and investment credit may help reduce the costs of the transition from traditional to newer materials use.

Mr. James Boomgard at Michigan State University is completing a dissertation on the subject of changwat-level funiture industry marketing, and additional insights and implications will be forthcoming from this work.

Wood Carving (Working Paper No. 33)

This is a relatively high return industry with significant income and employment impacts. The major constraint is the availability of teak wood, and government policy with regard to management of teak reserves should be reconsidered in the light of potential and actual impact upon villager incomes. A tax on carved exports, for example, would be superior to the continued ineffectiveness of prohibitions on forest exploitation. Formation of wood carver co-operatives for procurement and marketing would also constitute a helpful step.

Pottery (Conference Paper No. 21)

The current status of this industry is not promising. Returns to family labor are low and demand is limited for current product lines. Improvements would require identification of quality clay deposits, upgrading of types and quality of output, improvements in production technology, and creation of procurement/marketing co-operatives.

In addition to the individual industry analyses, six other papers were prepared which analyze characteristics across the sample. One is "Profitability and Efficiency" (Conference Paper No. 6). It estimates the rate of return per hour of labor for each major product output of each type of firm, profitability, returns to capital, and capital-labor ratios. The conclusion is that certain cement products, sweetened mango, pickled garlic, tables, desks, chairs, cupboards and ready-made garments are worthy of promotion.

The second paper is "Entrepreneurship and the Performance of Non-farm Firms" (Conference Paper No. 8). The paper arrives at no conclusions. However, the subject is being pursued by Preeyanuch Apibunyopas in dissertation work at Purdue University.

The third paper is "Subcontracting in Rural Areas of Thailand" (Conference Paper No. 3, and revised as Research Paper No. 5), which recommends that businessmen be made aware of the advantages of the subcontracting system, and that the government re-evaluate taxation policy and regulation of household producers.

The remaining papers are "Marketing of Rurally Produced Non-Agricultural Products" (Conference Paper No. 5), "A Marketing Perspective for Village Farm Products" (Conference Paper No. 15), and "Marketing Patterns for Manufacturing Firms in Rural Towns (Conference Paper No. 35). These papers on the subject of marketing provide numerous insights into the marketing process, but draw no conclusions.

2. Farm Level Surveys

The project has produced 10 papers that explore various aspects of household income generation in rural areas, as follows:

1. An Economic Analysis of the Irrigated Farm Household Model in Khon Kaen Province (Conference Paper No. 11)

2. Distribution of Farm, Non-Form Enterprises in Farm Households (Conference Paper No. 16)

3. An Analysis of Household Labor Supply for Off-Farm Enterprises (Conference Paper No. 18)

4. Rainfed Farm Household Modelling in Khon Kaen (Conference No. 25)

5. Results of Farm Household Modelling in Chiang Mai (Conference No.26)

6. Farm Modelling in Roi Et (Conference Paper No. 31)

7. The Role of Farm, Non-Farm Enterprises and Off-Farm Work in Household Employment and Income Generation an Irrigated and Rainfed Farms, Khon Kaen, Thailand (Research Paper No. 7)

8. Combining Farm and Non-farm Labor Employment Opportunities for Improving Income and Employment on Rainfed Farms, Khon Kaen (Research Paper No. 8)

9. Employment and Income from Farming, Non-Farm Enterprises and Off-Farm Work on Irrigated & Rainfed Farms, Khon Kaen, Thailand (Dissentation by Somsak Priebprom, Michigan State University, 1982)

10. Farm Household Income Levels, Sources and Patterns in Selected Thai Villages (Manuscript prepared by Y. Chalamwong & R. Meyer, July 30, 1982).

Although five of the papers are essentially variations on the same theme for a particular area (i.e. 1,4,7,8 and 9) taken together they constitute a rich resource of information about the dynamics of income production from farm, non-farm and off-farm activities, and about the interrelationships between these different income sources. The papers have thus far yielded the following kinds of conclusions:

- income can be maximized by combining farm and non-farm enterprises;

- there is room to increase household income through several combinations of improvements in farm, non-farm and off-farm activity;

- certain types of non-farm enterprises are more profitable than others;

- family labor responds to off-farm wages of ฿ 25 - ฿ 50 per day;

- although capital is not a limiting resource for current household operations, it may be a constraint on their undertaking significant changes in farm and non-farm activities;

- the heterogeneity of characteristics across households suggest no simple mechanism for increasing income, appropriate combinations of farm and non-farm support must be designed around specific characteristics of specific types of farms in specific areas;

- there is room for increased labor absorption (with acceptable returns to labor) in farm enterprise, non-farm enterprise and off-farm work.

In addition, there are three papers which provide useful descriptive data about selected characteristics gathered during the village survey, these are:

- Land Characteristics and Tenure Arrangements in Selected Rural Areas of Thailand (Conference Paper No. 1)
- Village Headman Questionnaire: Survey Results (Conference Paper No.13)
- Employment and Underemployment (Conference No. 22)

3. Rural Finance

To the present time the project has produced six papers which focus directly on issues pertaining to rural finance and these are described briefly below. The first is a study of formal lending institutions. The second, third and fourth, drawing from data gathered in the village surveys, focus on the characteristics of actual demand by farm households. The fifth is based on town surveys of sampled firms. The last is a modelling execise for cement product firms.

Lender Behavior in Financing Rural Non-Farm Enterprises
(Conference Paper No. 2)

After reviewing key characteristics of formal lending institutions in rural Thailand, the paper highlights major problem areas. These include; the difficulty encountered by banks in implementing government lending directives, the poor record of abuses and arrears in farm credit schemes, the obstacles created by a low and inflexible interest rate ceiling, the effect of inadequate rural transport and communication infrastructure on the marketing and supervision of loans, the need for close monitoring relationship with clients, inadequacy of local bank staff, and dependence on main offices. The report concludes that banks are interested in mobilizing local savings and deposits, and that capital availability in local areas, per se, is not a problem. The banks are not, however, equipped to lend to small rural enterprises effectively. Local savings are therefore not used for local development, but are channelled back to Bangkok.

A Descriptive Analysis of Wealth, Income and Credit in Rural Thailand (Conference Paper No. 4)

The paper takes a financial appraisal approach to determine if farm households have the ability to repay debts through liquidation of assets. The work contains very useful information which can assist lending institutions in assessing the credit worthiness of lower income clients. The information includes distribution of current, intermediate and fixed assets; composition of household income from farm and non-farm sources; distribution of outstanding debts to institutional and non-institutional lenders; annual borrowing cycles; purposes of borrowing, etc. Although the paper draws few conclusions, the data it contains can be very helpful in the design of improved rural credit schemes, if and when such schemes are deemed necessary.

Cash Flow Analysis of Farm Households in North and Northeast Thailand (Conference Paper No. 9)

For each of seven model farms developed by the ROFEAP project, this paper provides an analysis of cash management pactices adopted by sampled households. As in the previously-described paper, the content can be of great use in design of rural credit schemes. It also highlights the use of non-farm and off-farm cash income to finance farm enterprises, and is thus suggestive of alternatives to credit in increasing investment in farm activities. This analysis is being taken further by Adelaida Alibusan in a dissertation in preparation at Ohio State University.

Informal Credit for Farm Households in Chiang Mai (Conference Paper No.23)

The purpose of this paper is to analyze current uses of credit to determine household preferences for credit sources and to assess the merits of formal credit expansion. It examines the extent and distribution of debt and the uses and terms of borrowing. It recommends that farmers be permitted to obtain group loans for non-farm enterprise purposes.

Financial Structure and Perception Toward Constraints (Conference No.10)

The paper examines the financial characteristics of firms producing bricks, cement products, pickled fruits and vegetables, furniture, ready-made garments, bean curds, noodles, silk cloth and wood carvings. It recommends that banks should provide more short and long-term credit and restrict overdraft accounts, that grace periods should be permitted for long-term loans, that the rate of interest not be subsidized, and that businesses be assisted in improving their record-keeping practices.

Seasonal Credit Needs of Cement Product Firms in Rural Thailand (Research Paper No. 10)

The paper presents an attempt to model the cash flow situation of cement product firms, and to relate this to short-term credit demand. It recommends that lending and establishment of ceilings should be based on the pro forma cash flow of the firm, the income statement, and the balance sheet. This subject is also treated extensively in a dissertation written by Saroj Aungsumalin : "The Use and Productivity of Short-term Credit in Small Scale Cement and Ready-Made Garment Firms in Thailand", Michigan State University, 1982.

4. Other Output

Beyond the work already identified, the project undertook three additional analy s. One, an overview of public policy, was "Government Policies, Rural Industrialisation & Employment" (Working Paper No. 31). This paper recommends export promotion, reduction in excessiveprotection for import-substitution firms, using finance as an incentive for firms to shift to rural locations, and the strengthening of rural financial institutions.

The second, "Institutional Support for Small Industrial Enterprise Development in Thailand" (Conference Paper No. 32) and building on prior work undertaken in Working Papers 29 and 30 identifies and briefly describes a proposed program for promotion of small-scale and home industry in a regional development framework. The program stresses new product development, new enterprise development, entrepreneurship development and improved coordination between government agencies and private efforts at the regional level, and between the region and Bangkok.

The third analysis, which has been developed further as a dissertation by Deerakiat Apibunyopas at Purdue University is contained in "An Economic Analysis of Employment in Kenaf, Cassava and Sugar Cane Production and Processing in Northeast Thailand (Conference Paper No.12). The purpose of this study is to use generalizations from the farm modelling exercises, described earlier, to assess the impact on regional employment and income of a new technology, air dry kenaf and of variations in the price of cassava and sugar cane. It concludes that at current prices air dry kenaf generates more employment than alternatives.

ANNEX 4

Utilization of ROFEAP Data

According to the Project Paper, the conditions indicating that the project purpose has been achieved will be policy, program and project formulations by the RTG, USAID and other donor agencies which are based on ROFEAP data and analyses. The question of formulations cannot be answered at present. Some of ROFEAP's output has, however, already been put to constructive use, as follows:

1. World Bank

   - In a preface of the March, 1982 draft of a report on rural development, "Agricultural and Non-Agricultural Growth & Development in Rural Thailand," the following acknowledgement is made :

     "The study team relied heavily on insights gained and reports written by a joint study of Kasetsart University with MSU and OSU funded by USAID, and led by Dr.Tongroj Onchan, on the Rural Off-farm Assessment Employment Assessment Project. Indeed it was in participating at a conference organized by them at Kasetsart University that many of the hypotheses underlying this report were formed."

   - ROFEAP data has been used to estimate liquidity among farm households in an in-house report on farm credit prepared by the Bank's Thailand Office.

   - Institutional and program data from ROFEAP has been used by a June, 1982 mission examining issues of sectoral finance.

2. UNIDO

   - Institutional and program data from ROFEAP has been used in preparation of a Febuary, 1982 report entitled; "Economic Take-off for Thailand's Northeast : A Programme for Rapid Industrial Expansion (Draft)"

3. International Labor Office (ILO)

   - Farm survey data has been incorporated into a chapter of a published book, "Labor Absorption in Rice-Based Agriculture," published in May 1982 by the Asia Regional Team for Employment Promotion (ARTEP), under ILO's Asian Employment Programme.

4. Appropriate Technology International, Inc. (ATI)

   - Institutional and program data has been solicited by ATI, for purposes which are not yet evident.

5. RTG

- The NESDB is in the process of developing a rural industrialization planning project. This action was in part influenced by presentations of ROFEAP data at conferences and workshops. Two ROFEAP researchers, currently on the faculty of Kasetsart University, are being actively considered for participation in the project .

The final ROFEAP workshop, scheduled for September 18-19, 1982, in Pattaya, and which will have over 40 top-level RTG and donor agency representatives in attendance, should serve to expand awareness of the nature and uses of the data and analyses which have been produced up to that time.

ANNEX 5

SUGGESTED OUTLINE FOR ROFEAP GENERAL REPORT

บริษัท อินดัสทรียลแมนาจเมนท์ จำกัด
THE INDUSTRIAL MANAGEMENT CO., LTD.

September 15, 1982

Robert Halligan
Director
USAID
Bangkok, Thailand

Dear Bob,

With reference to your request of yesterday for names of locally-available individuals who may be able to assist in the preparation of a document which can serve to disseminate ROFEAP output to a wider public, Dr. Narongchai Akrasanee and I have arrived at the following:

1. Dr. Jamlong Atikul, National Institute of Development Administration
   - regional economics
2. Dr. Pradit Charsombut, Kasetsart University,
   - agricultural economics (participated in ROFEAP)
3. Dr. Somsak Tambunlertchai, Thammasat University
   - industrial economics (participated in 1980 review of ROFEAP)
4. Dr. Jacques Amyot, Chulalongkorn University Social Research Center
   - institutions and programs (consultant to ROFEAP)
5. Dr. Tongroj Onchan, Kasetsart University
   - rural finance (director of ROFEAP)

Each of the foregoing individuals has particular capabilities in one or more aspects of ROFEAP's primary components. Any one, however, might not be able to do justice to the whole project effort. Within the confines of a 3 to 4 man-month level of effort, AID may therefore fund it preferable to have the work done by a team composed of these individuals. Dr.Narongchai, through the Industrial Management Co.,Ltd. could serve the useful purpose of putting together such a team, preparing terms of reference for the undertaking, managing the work, and assuring, through editing and his own contributions, that the document is properly-written, properly-organized and easily understood by and useful to a wide professional audience.

7th Floor IFCT Building 1770 New Petchburi Road, Bangkok 10 Telephone 2517181-90 ext. 380-384

As a preleminary suggestion, I can propose the following general outline :

a. Introduction - scope and purpose of the report

b. Rural Income and Employment in Thailand

- distribution of agricultural and non-agricultural sources and their expansion
- relationship between agricultural and non-agricultural activities
- future trends and implications
- role of ROFEAP within this broad context

c. Village Industry

- overview of manufacturing by farm households
- comparison of Phase I ROFEAP results with RTG data sources
- operational characteristics of manufacturing from Phase II results, including*
- relationship of household manufacturing, agriculture and off-farm work
- issues of importance for policy, programs and projects

d. Town Industry

- overview of town-based economic activities, and of manufacturing in particular
- comparison of Phase I results with RTG data sources
- operational characteristics of manufacturing in 14 selected enterprise types; including inputs, labor, finance, technological process, sales and marketing
- relationship of town industry to farm household agricultural and non-agricultural activities, and to regional consumption and demand
- issues of importance for policy, programs and projects

e. Government Policy

- overview of current status and trends in RTG policy and donor support with regard to regional development, rural employment and income generation, in agricultural and non-agricultural activities
- characteristics and operation of key RTG and private institutions actually or potentially relevant to expansion of rural employment and income, including focus on rural financial institutions

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* inputs, labor, finance, technological processes, seasonality, sales and marketing

f. Conclusions

- the rural economy as an integrated system of agricultural and non-agricultural activities at all levels, from the household to the village to the town
- the rural economy as part of a national (and world) economic system
- advantages of distributing benefits of growth to wider range of economic activities, wider scales of activity, wider space of country and wider population
- implications of findings for selected policy, program and project issues

g. Annexes

1. Complete listing of data on file gathered in Phase I and Phase II
2. List and description of 7 basic from models and their various uses for analysis
3. List of reports prepared by ROFEAP
4. Analystical services which can be provided by ROFEAP consultants at Kasetsart University, for policy, program and project purposes

I should emphasize that most of the foregoing subject matters can be prepared with material already produced by ROFEAP, and from secondary information sources produced locally by the RTG, universities and donor agencies (IBRD, UNIDO, ILO, IDRC, ADB, etc.). The report should be no more that about 200 pages long, and published in both Thai & English. The audience to which it is addressed should be understood as consisting of technical professionals in the areas of economics, planning, agriculture, finance, administration, sociology, anthropology, social work, etc., as well as mid-level and senior RTG and donor agency officials. The language of the report should therefore be clear and simple.

I would think that publication of 500 copies in each language should do as a start. Provision should be made for subsequent printings if demand warrants it.

I trust that you find the foregoing satisfactory.

Cordially,
Simon M. Fass
Humphrey Institute of Public Affairs
909 Social Science Bldg.
University of Minnesota
Minneapolis MN. 55455

cc. Robert Ressequie
Cliff Barton
Narongchai Akrasanee

ANNEX 6

Guidelines for Selecting Enterprises for Inclusion in Surveys

One of the major challenges in program-oriented research is the selection of enterprises to be covered by a survey. In practice there is usually little prior information about enterprise characteristics which can assist the process, especially in rural areas. The "best" solution in this case is to call upon the services of well-experienced individuals who can make necessary judgements on site;-at least for purposes of beginning the work. Some of this experience has been written up by the World Bank in connection with the terms of reference discussed in Annex 7. The material, which follows, does not clearly answer many of the issues which might be encountered in the field. It does, however, suggest ways of thinking through the selection process.

ANNEX 7

Model Terms of Reference for Identification of Enterprise Support Programs and Projects

In March 1982 the World Bank developed model terms of reference to guide consultants in urban baseline surveys that would yield program and project outputs. These terms of reference, together with supporting attachments, are provided here to suggest on alternative method of designing rural non-farm enterprise research. The content may not be entirely appropriate, nor sufficiently comprehensive to answer many questions which USAID might wish to ask. The material does, however, suggest an approach which puts visions of possible and feasible program/project actions first, and then works backwards to design a research program that examines whether or not such actions are relevant, and if so, that indicates how to proceed. The attachments also discuss some of the advantages and disadvantages of this kind of approach in comparison with statistically-oriented and general data generation-oriented research methods.

ANNEX 8

Critical Questions for Enterprise Research

The rural non-farm enterprise component of ROFEAP was in part constrained by the absence of a staff member or consultant with a background in industrial operations/economics analysis. Although the researchers learned a great deal in the survey process, their work would have been considerably assisted had they sought out some additional published material about industry operations. This would have helped in the formulation of research questions, both the quantititive ones and the qualitative ones. At the very least such reading would have highlighted the complexity and heterogeneity of the manufacturing sector. The following material, extracted from "Agroindustrial Project Analysis" by James Austin (Johns Hopkins University Press), provides a lengthy list of questions asked in industrial project appraisal. Many of these questions are also critical in basic sectoral research at the enterprise level. The answers to such questions, aggregated across a survey sample, yield more concrete findings of relevance to policy, programs and projects.

ANNEX 9

Policies and Incentives for Promoting Enterprise

As noted in the text of this evaluation report, policy, program and project-oriented research should be based on a vision of the range of possible and feasible interventions. Without such vision there is invariably a danger of research providing answers to questions which are largely irrelevant, or providing few answers to essential questions. Vision, however, is not general. It is specific to the country in which the research is to take place, and is designed around the circumstances which constrain action as well as the characteristics of the economy to be studied. For such vision to be created, research designers should carefully examine available information about these circumstances and characteristics before defining the scope, purpose and methods of a research project. If designers do this, they are likely to generate more useful output than if they do not. They are also likely to make significant contributions to knowledge rather than discover, as has been the case in the non-farm enterprise component of ROFEAP, what is already commonly known.

The following material, extracted from a recent World Bank report on small enterprises in Malaysia, outlines policies and incentives for enterprise development which by now have become standard proposals[1/]. If nothing else, this kind of material defines the starting point for further research. It contains the vision needed to give research staff something tangible to work towards. In 1982, it is insufficient for research to conclude, for example, that "subcontracting should be encouraged". Today this is the point of departure. Research should address the issues of why, how, where, when, and by whom subcontracting should or can be promoted.

1/ Malaysia: Development Issues and Prospects of Small Enterprises, Vol. 2: The Main Report. IBRD, June 25, 1982.

Annex 10

The Current Situation of Rural Employment

Given the relatively recent surge of interest in rural employment and income generation in Thailand, information about constraints and opportunities in the subject area is not extensive. The most interesting research in recent years has been produced by the International Labor Office through the Asian Employment Programe's Asian Regional Team for Employment Promotion (ARTEP). The following extracts on labor absorption (taken from "Labor Absorption in Rice-Based Agriculture" : Case Studies from Southeast Asia, "ILO, 1982) and labor intensive manufacturing (taken from "The Development of Labor Intensive Industry in ASEAN Countries", ILO, 1981) respectively do good jobs in defining the nature of the rural employment problem and in describing the sectoral constraints and opportunities which small-scale manufacturing presents in addressing the problem.

The World Bank has recently completed a draft report on agricultural and non-agricultural growth in rural Thailand (see Annex 4), and is working on another study of rural poverty. The former is a very general national study which contains an analysis of rural non-farm activities and agricultural development, an assessment of the impact of agriculture and natural resources on rural non-farm activities, an examination of rural and metropolitan consumer demand, policy analysis, etc. The only tangible conclusion the current draft arrives at is that RTG policies work at cross-purposes. Information on the poverty study could not be obtained.

In any case, the evidence from these and other reports reviewed all suggest that a major effort is required to promote, or at least to try to promote non-agricultural employment opportunities, especially outside Bangkok and the Central region. Thailand seems to be heading towards a major labor absorption crunch during the next decade which, if not addressed properly, may involve serious socio-economic and political repercussions.

In the immediate, however, all the appropriate policy statements and plans can have little effect because the institutions necessary to implement them, both the public ones and the private ones, are extremely weak in human resource terms, and in some cases in financial terms. Even if all necessary national policy changes were made into law immediately, actual response would be slow because the institutions have had no prior experience in working under a modified policy framework. Also, given the political basis of current policy, in some cases one should not expect any change (e.g. banks collaborate on collective financial policy). Thus in the short-term, besides efforts required to redirect RTG policy in more appropriate directions, a fundamental challenge will be assistance to various institutions that can make a

major impact on rural employment. In addition to the commercial banks and the Ministry of Agriculture and Cooperatives, key institutions include the Board of Investment, the Industrial Finance Corporation of Thailand, the Dept. of Industrial Promotion and its Industrial Service Institute and, at the ultimate village level, the Community Development Department. These are operational units which if they are to be instrumental in shaping the form of labor absorption in the future, must be helped along this direction now.

This is hardly the place to suggest all the things that ought to be done, but basically USAID can be instrumental in shifting RTG agency attention towards promotion of investments (of all shapes and sizes) which, subject to the constraint of self-standing viability, yields maximum levels of productive employment and director indirect income expansion. The recommendations put forward in the text regarding USAID projects have been developed within this framework.