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EVALUATION
OF THE
INTEGRATED AGRICULTURAL PRODUCTION
AND MARKETING PROJECT (IAPMP)

AID PROJECT NO. 492-0302 (PHILIPPINES)

BY

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F O R E W O R D

A foreword must precede this version of the final report on the evaluation of the Integrated Agricultural Production and Marketing (IAPM) Project. The reason is mainly the fact that this version emerged after the evaluation team had dispersed, leaving only the Philippine members of the team to submit revised recommendations.

The revised recommendations became possible after written reactions from implementing units of IAPM Project were submitted to the remaining team members by the Overall Project Coordinator, Dr. Edgardo C. Quisumbing. Earlier, on March 15, 1979, the key members of the project implementing staff had a chance to hear the first verbal report of the evaluation team. At that time, there was a free exchange of views the results of which were considered by the team in formulating its report. But understandably, it was only after the first draft of the complete report became available that the implementing staff gave their final comments. These comments were considered by the Philippine members of the evaluation team and many of these have been incorporated in this report.

It is, therefore, in this light that this report should be read.

The American members of the evaluation team, having gone back to the United States, were unable to participate in the finalization of the report. But it is our hope that the additional ideas the Philippine members of the team chose for inclusion in the report would be acceptable to the American members of the team. For, during the evaluation process, the entire team developed a sense of oneness which hopefully by momentum at least, extended itself to the last day for writing the report.

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May 17, 1979

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We are most grateful to the Ministry of Agriculture, which provided the team with office space and secretarial assistance, volumes of documents and reports concerning the IAPM Project and the time of many staff members for the numerous interviews requested by the team. We wish to thank President Amado Campos and Dr. Filomena Campos for the gracious hospitality extended by them, the members of the CLSU staff, and the CLSU students. We would also like to express our appreciation for the reception accorded to the team by Dean Pedro Sandoval and his colleagues at UPLB.

Members of the staff of the USAID Mission in Manila and the Kansas State University Team Leader and long-term consultants very helpful to the team.

Special mention must be made of Mrs. Ciosena L. Ungson, who facilitated the schedule of activities of the team and Mrs. Lilia L. Reyes, who was assigned by the Ministry of Agriculture to serve as secretary to the team, without whose assistance it would not have been possible to produce this report.

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THE INTEGRATED AGRICULTURAL PRODUCTION
AND MARKETING PROJECT (IAPMP)

Introduction

This is an evaluation report on the Integrated Agricultural Production and Marketing Project (IAPMP) of the Republic of the Philippines. Launched in 1977-78, the Project is expected to run for a total of five years. It is funded jointly by the United States Agency for International Development (USAID), through grant and loan funds, and the Government of the Republic of the Philippines (GRP). The Kansas State University serves as a contractor to assist in the implementation of the Project.

Recently, a number of American and Filipino consultants was asked by the GRP to serve as a Team to evaluate the IAPMP, essentially to assess overall progress and to see whether opportunities exist for improvement during the remainder of the life of the Project.

The Evaluation Team members were as follow:

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Although behavioral and personality problems were perceived, the Team concentrated its attention on program dimensions. This was its interpretation of its mandate. Moreover, the team recognized that any organization tasked to implement complex a program as IAPMP is bound to have behavioral and personality problems and that such problems are better resolved or minimized internally as the organization proceeds with implementation.

The team first attempted to understand IAPMP in order to obtain a reading of legitimate project expectations. It then appraised the progress and the problems, made observations and formulated recommendations.

For these purposes, the team was furnished by the IAPM Project staff with ample documents. The information derived from these was supplemented by interviews conducted at the Ministry of Agriculture, the Central Luzon State University and its project area, and the University of the Philippines at Los Baños. (A list of persons interviewed appears in Annex A.)

Considering the time available to it (roughly 2-1/2 weeks), the Team limited itself to the examination of four area:

1. Policy Thrust,
2. Technological Packaging and Extension Thrusts,
3. Academic Thrust, and
4. Overall Project Management.

This report partly reflects this approach. Initially, it presents comments on the project design--the project concept, components, linkages and objectives. It then proceeds briefly to offer observations and recommendations which are grouped into (1) observations and recommendations relative to the project thrusts and (2) observations and recommendations which cut across all thrusts.

On March 15, 1979, the team verbally reported to the IAPM Project staff, USAID officers and Minister Arturo R. Tanco, Jr. of the Philippines. The exchange of information and ideas which resulted, contributed additional perspectives which have been included in this report.

EXECUTIVE SUMMARY AND RECOMMENDATIONS

The team concluded that the original design of the project is still highly relevant to the present state of agricultural development in the Philippines and that if it is successfully implemented, the project can make an important contribution to the institutionalization of a complex system which is designed to improve the lot of the country's small farmers.

Although initial delays were encountered and project implementation is therefore slightly behind schedule, good progress is now being

made in all of the four "thrust" areas (national policy, academic, tech pack, and extension/outreach). It was noted that there had been some tendency on the part of the various thrusts to pursue their programs more or less independently. The team sees an urgent need for even much more time and attention to the integration of and coordination among the thrusts. However, the team recognizes the benefits, on the whole, that accrue to the project from having the Overall Project Coordinator also performing other important jobs in the Ministry of Agriculture. The latter provides him a strategic leadership position, administrative access to and communication linkage with relevant cooperating agencies and institutions. In view of these advantages, the team recommends that he be relieved of responsibilities which are unrelated or marginal to IAPM Project so that greater attention could be focused on the overall implementation and integration of the Project.

Initial delays in the staffing of the Kansas State University (KSU) contract have now been overcome. The evaluation team hopes that KSU will be able to provide a suitably-qualified replacement for the current team leader, whose tour of duty will be over this coming August, and that no hiatus in project activity will be permitted to develop.

A summary of the team's detailed recommendations follows.

RECOMMENDATIONS

NATIONAL POLICY THRUST

1. Crystallize the plans for institutionalizing a two-pronged policy development system both for short-term crisis management and for long-term policy research needs.
2. Identify the indicators which will be used to evaluate progress towards that system.
3. Define total sector data needs for policy and program formulation.
4. Develop a staff development program for the information sub-system.

ACADEMIC THRUST

1. Review the need for developing separate curricula for master and bachelor degrees in "Food Systems" as against "Food Systems" simply being major fields in existing degree programs.
2. Seek inputs from private agribusiness and cooperatives (the targeted job markets) in curricula development.
3. Decrease target output of MS Ag Econ graduates with major in agricultural marketing from 50 to 30.
4. Increase target output of BS Ag with major in marketing from 25 to 35/40.
5. Expand thrust to include training of extension students and agents in technological packaging.
6. Where possible, training at the MS level should be done at UPLB or any other university in the country.

7. Where possible, training at the Ph. D. level should be done at the UPLB or any other university in the country, but with an opportunity to take a year of course work abroad, credited towards the Ph. D. degree, to minimize inbreeding.
8. Increase time allotment for international training to 16 months for MS and 36 months for Ph. D.
9. Increase stipend from \$300 to \$700 per month for post-doctoral fellowships abroad, reducing number of slots if necessary.
10. Inventory current and proposed in-country degree and non-degree training programs of UPLB, CLSU, BAEcon, BAEx and others, and check the fit of these programs within the objectives and activities of IAPMP.
11. Consider in-country short-training programs involving local and foreign trainers in lieu of some foreign fellowship slots.
12. Encourage and support field trips, observation tours and first-hand exposure to places and projects in-country, which will provide experiences relevant to IAPM Project purposes.

TECHNOLOGICAL PACKAGE THRUST

1. Activate the tech pack advisory committee to provide overall policy and technical guidance.
2. Examine once again the conceptualization and operating plan for the Food & Feed/Grains Processing Center in the context of IAPMP's objectives and CLSU's expected capabilities and plans for the future.

3. Determine soon the future consultant needs for CLSU in view of the forthcoming completion of the incumbents' tour of duty.
4. Review the feasibility of the proposal for students' cooperatives' to operate the university farm and processing center, and study alternative approaches.
5. Consider other sources of technologies suitable for the four (4) pilot areas of BAFx and relate these to the work going on at CLSU.
6. Include in the technology packaging some technologies suitable for subsistence purposes as a cushion for the small farmer against market failure.
7. Strengthen the integrative aspects or linkages among production, processing, and marketing in any tech pack.
8. Instead of the term tech pack, adopt the term technology packaging to emphasize the process rather than the commodity.

EXTENSION/OUTREACH THRUST

1. Appoint a specific coordinator for the entire thrust.
2. Conceptualize and operationalize as one thrust, the sub-project activities of the extension delivery system, the agribusiness and market assistance centers and cooperatives development which are now being pursued independently of each other.
3. Expand the Extension Delivery Systems Committee to include representatives from the Academic and Tech Pack Thrusts and from KSU.

4. Consider greater functional fusion of the Tech Pack and Extension/ Outreach Thrusts with respect to identification, development and pilot testing of potential technologies.
5. Develop staffing pattern for both thrusts particularly for the operating manpower of the food, feed and grain processing center.

OVERALL

Planning

1. In a host country contract, a different pattern and quality of relationship among AID, KSU and GRP has to be developed. This would require on the part of the contractor, an acute cross-cultural sensitivity and conscious seeking of opportunities to play their technical assistance role in a more imaginative manner. Given this new era in the host country-contractor relationship, all parties must face up to these new demands. Since the term of the KSU Team Leader is to expire in August, the search for and recruitment of the next KSU Team Leader has to be initiated immediately with these above considerations in mind. The leader has to take an active professional and programmatic role. Likewise, the consultants where applicable, could be more effective if they were to take greater initiative in the exercise of their technical expertise role.
2. Where it would be advantageous to do so, IAPMP should tie in with PCARR, and other projects such as the National Extension, Aquaculture Production/Fisheries Development, Small Farmers' Irrigation, etc., for reasons of possible input from or output through them.

3. Build in a regular feedback mechanism from small farmers to the institution and agencies within Tech Pack, Extension/Outreach and Academic Thrusts.
4. Develop a monitoring and evaluation scheme which will identify and define suitable indicators and appropriate methodology to measure progress at the impact level.
5. Review support operations in the spirit of giving maximum support from available peso and dollar resources to project implementation.
6. For an early spin-off, consider the possibility of replicating IAPMP at the regional level utilizing regional universities as a base.

ORGANIZATION AND STAFFING

1. Make appropriate arrangements in order that the Overall Project Coordinator may devote more time not only to provide leadership for project implementation but also to strengthen organizational and functional linkages.
2. Reorganize the Executive Committee on two levels:
 - a. Retaining the present structure to discuss project policies, meeting quarterly or as the need arises;
 - b. Creating a working group of task forces to tackle operating problems, meeting at least monthly.
3. Analyze the functions of all committees in the project to identify unnecessary overlaps.

4. Hire a capable Filipino administrative officer for the KSU Office to take care of the todious, but essential complexities of administrative details, in order to permit the Team Leader and his assistant to assume a more active professional leadership role.
5. Hire additions to the MA Management Staff with expertise in fruits and vegetables, cereals and other crops.

DIRECTION AND CONTROL

1. Solve whatever problems remain so that KSU can establish formal relationships with other US universities to augment the scope and quality of expertise available for long-term and short-term consultant positions.
2. Do whatever is necessary to facilitate placement of participants sent for graduate training at a variety of US institutions.
3. Settle all questions of costs (direct and indirect) between KSU and GRP, with appropriate AID concurrence, on a business-like basis.
4. All parties involved in the IAPMP should now concentrate their energies on working together in a professional collaborative manner to achieve the success of the project to which all are committed.

THE PROJECT

A Point of View

"Every planner has his dream; every project has its gleam, but translating the dream and the gleam into a workable scheme is seldom ever as easy as it seems". The IAPM Project is creative, complex, timely and relevant. Precisely because of these qualities, it is also difficult to implement. But this should be its virtue, not its shortcoming, for in many ways, Filipinos are through doing a lot of easy things in agriculture and rural development. The remaining problems are tough and demanding. The IAPM Project represents an exciting attempt to do something difficult but essential. The talent and vision invested in project creation should only be matched by imaginative interpretation, if any of its concept will find fruition. Any project review must be humble for those who design projects are not the same people who implement them and those who evaluate and recommend changes in design are still another group who tend to reshape the concept in their own image. Whatever the intermediate outputs might look like, one must remember that the wisdom of hindsight is less of a claim than the genius of foresight which was responsible for the project being in the first place.

Considering that the project is only 18 months old, reasonable progress toward functional integration has been made, mainly in terms of bringing different pieces of the action within a single concept. The team appreciates that orchestrating all the components within, between and across thrusts with their share of personalities and bureaucratic boundary maintenance tendencies is no mean task. But in general, there is much goodwill, mutual respect, and the management style from the GRP

side is one of coordinating without compelling; integrating without absorbing. The delicate touches of human relations skills and the subtleties in the exercise of administrative leadership which are very much in evidence serve as definite assets.

Brief Background

In a brief description provided by the Project Paper, the IAPMP is composed of four interrelated and mutually supportive areas, namely: Academic, National Policy, Technological Pack and Extension/Outreach. These complementary thrusts deal with problem areas considered to be critical or basic to increased production and income of small farmers.

Although the IAPM Project comes at a time when "integration" has become fashionable in development circles, it should not be regarded as another fashionable undertaking tailored to ride on the currently reigning bandwagon. The impetus came from a combination of fortuitous as well as demanding circumstances at this stage in Philippine agricultural development. The country had made considerable strides in rice production; attributed to technology, infrastructure, credit, extension service delivery and blessed by unusually good weather. But even good fortune carries its own hazards, for a new set of problems arose, such as: lack of adequate storage facilities; shortage of funds and breakdown of the administrative mechanism for price support payments; lower prices to farmers; and little change in food availabilities or lower prices to the poor majority. In the meantime, a cooperatives development program is underway; regional agricultural universities are undergoing further strengthening to serve the rural areas where they are located; and the national agricultural research system has been organized to facilitate

the generation and utilization of research results. The country's leading agricultural university, through its teaching, research, and extension functions, has had a long tradition of academic capability as well as many years of close collaboration and partnership with development agencies concerned with agriculture and rural development. The situation, therefore, calls for the forging of new institutional relationships to deal with the new sets of problems more effectively.

It was under these circumstances that IAPMP was born and it must be noted that no new component was created just for the project. All the ingredients were in place, so to speak, when it was conceived. What is particularly innovative and worth watching about IAPMP is the manner in which the different ingredients have been brought together in one concept to serve a single purpose--to raise the productivity and income of small farmers. It is new functional relationships, not new structures, not new organizations, which are being built.

Some Salient Features of Project Design

1. The Project in General

The IAPM Project in its totality is many projects all at once. It is applied research; it is agribusiness; it is extension; it is cooperatives development; it is non-formal education; it is non-degree short-term training; it is undergraduate and graduate degree curriculum building; it is MS/PhD and post-graduate staff development; it is the translation into action of an educational philosophy for a regional agricultural university; and it is an attempt to integrate production, processing and marketing. It is

vertically oriented in a sense because it ranges from elements of national policy at the top to consideration of small farmers' problems at the village. From the farmer side, there is inclusion of both horizontal and vertical organizations in cooperatives development starting from the Samahang Nayon (the village cooperatives), the Agricultural Marketing Cooperatives, and the Cooperative Rural Banks. The Project is multi-agency and multi-institutional, involving a clientele of various educational levels from grade school to PhD., but hopefully all "tied" together by a common concern for those who are at the vital, but lower, end of the agricultural development spectrum. It is wittingly or unwittingly concerned with institution building from the Samahang Nayon at the village level, to policy planning bodies at the national level, to academia in the Philippines and the United States. Whoever designed the IAPM Project could not possibly be lacking in imagination or vision. This description is not merely an exercise in putting words together, but is meant to show the complexities of the project. Any assessment of performance must, therefore, be premised on this basic character.

2. Purpose and Objectives

"In order for the GRP to achieve sustained growth rates of farm output significantly above population growth rates, production must be geared to market demand in quality, quantity, and timing of output. Steps in the marketing process (harvesting, handling, processing, storing, transporting, packaging and selling to the consumer) must deliver a product that meets consumer

demand at competitive prices. The project will work with new and traditional commodities grown on small farms for both domestic and export markets..." (Project Paper, page 55)

"The proposed IAPM Project is designed to provide efficiently the missing links of knowledge and skills necessary to enable Philippine agencies and institutions to achieve their goals more effectively and systematically. It will also provide a model by which more effective outreach and extension methods can be used in providing profitable technology to the small farmer, the principal intended beneficiary of the Project and to the food delivery systems serving him. For example, the Project will provide the vehicle for effective utilization of the research and educational programs of IRRI, PCARR, SEARCA, UPLB and other agencies to achieve reduction of post-harvest losses of major foods produced by small farmers. The project will provide the overall structure through which other technical assistance programs for the development of Philippine agriculture supported by AID and other donors can be implemented effectively." (Project Paper, page 55)

"The fundamental purpose of the project is to increase small farmer productivity and income. To achieve this, three closely interrelated sub-purposes are included as objectives of the project. They are:

- a. Strengthen capability to develop rational national policies for food systems.
- b. Establish institutional capacity to develop integrated packages of production/processing/marketing technology.

- c. Systematically extend new technological packages to small farmers and small rural entrepreneurs.

Attainment of the basic purpose is predicated on a strong infusion of academic training into each of the three sub-purposes.

(Project Paper, page 54-c)

3. Major Issues of Concern

Given this purpose, some questions arise, answers to which have implications not only for program content and methodology of implementation, but also for consideration of indicators of project performance and impact:

- a. Can we identify the missing links of knowledge and skills?

In the past, when the problem was mainly one of production, the major goal was to get farmers to adopt yield-increasing pieces of technology, whether they come singly or in packages. Now, the agricultural production picture has changed and new problems have emerged. While agriculture remains the major employer of our labor force, productive non-farm jobs in sufficient quantities have yet to materialize. Fortunately, there is a marked tendency for farmers (even small ones) to use hired rather than their own or family labor, thus absorbing some of the agriculturally landless whose numbers can only be expected to increase, not decrease. This trend has important implications in terms of missing links in knowledge and skills. If farmers and their families are providing less and less of the labor required in farming, it would seem apropos to shift emphasis on training

for manipulative (manual) skills to the hired farm labor (the landless). On the other hand, in view of the changing circumstances, the farmers themselves need a higher level of sophistication in marginal know-how. Considering the high cost of inputs, infrastructure, labor and the advent of institutional credit, the farmer has to learn farm management, not just adoption of recommended farm practices to increase production. He has to relate to a different arena of factors beyond his farm, his village, his province, and even outside his country. But unless those who are going to teach him, such as extension workers, the academicians who produce them, and the researchers who study technical as well as socio-economic problems confronting farmers, learn what it takes to operate and manage a viable farming system in an increasingly competitive market, the farmer will be in limbo. The farmer will also have to learn how to function in an organization of co-farmers. Otherwise, he is relatively powerless to deal with forces outside his own farm.

There are missing knowledge and skills all along the line from the farmer and those who work with him. A new production-orientation with signals coming from the market implies a different extension approach and an accompanying new set of knowledge and skills. Furthermore, the farmer has to be quality-control minded if he is to be demand-oriented. The subject matter content of the academic thrust, both degree and non-degree must take this into account and so must the selection, development, packaging and extension of

technology. There are managerial, technical, as well as manipulative skills involved in processing and marketing. There is a host of manpower training implications in these, as well as in the organization and management of services designed to meet farmers emerging needs. Finally, the knowledge and skills generated from the actual experience in this project have to find their way into the content of academic courses and the syllabi of training programs.

b. How will small farmers benefit from the project?

While the Tech Pack in combination with the Extension/ Outreach Thrust appear to have a direct potential contribution to small farmer productivity and income, more rational policies arising from data systems improvement, enhanced analytical capability, etc. and expanded manpower in the food systems possessed with new knowledge and skills would improve the environment within which produce moves to market more efficiently.

For example, the ability to determine the consequences of a particular commodity price policy on the income of the small farmer and to make decisions in the light of such knowledge is certainly not inconsequential in its likely impact. The outputs from the academic and policy thrusts may be more indirect, but are nonetheless instrumental means for attaining the purpose. However, the ethos of what is taught and how it is taught and brought to bear on small

farmer problems must permeate the curricular offerings, training programs, and policy research activities. There must be a deliberate effort to analyze how each policy (or at least those 12 presently being considered) would affect the intended beneficiaries of the project. In the academic program as well as in policy analysis, there must be a built-in institutional sensitivity to this major purpose. This would be helped along by a planned exposure of those involved in the implementation of the policy and academic thrusts to the realities of agricultural and rural development in general and small farmer problems in particular. Study tours, field trips, and other related experiences offered in the Philippines should be at least as desirable as a study tour in Korea, Japan, or Taiwan. The fact that one is a Filipino offers no guarantee that one is conversant with the actual problems encountered in agricultural development. Providing such first-hand exposure requires time and money, both of which must be made available by the Project.

The academicians in the instructional programs (undergraduate or graduate), regardless of what courses they teach, should not be locked in their ivory towers or the policy analysts stuck to their computer. There must be an opportunity for them to relate their work with the "real" world. Furthermore, unless classified, outputs from policy analysis such as research reports or translated versions thereof whether substantive or methodological, must find their way into the classroom, the workshops, training programs and conferences,

directly or indirectly concerned with the project purpose.

c. What is integrated in the IAPM Project?

The integration of production, processing, and marketing is only one aspect of integration in this project. Even these three functions are not ordinarily lodged in one agency, institution or locale. For example, institutional capacity to develop Tech Packs effectively means several institutions and agencies not necessarily integrated administratively but at least attuned to the same objective. There is a great deal of communication linkages and information flows which need to evolve, develop, and be institutionalized not in an administrative integration but in a mutually informed consideration of their respective plans, decisions, and actions geared toward a common purpose of increasing the productivity of small farmers. As many threads as possible have to be woven within, between and among thrusts, agencies, institutions, and personalities so that IAPMP can begin to operate as one project and not a series of parallel, related, yet, independent sub-projects. This is the essence of what "functional integration" means in the context of project objectives.

d. What are the assumptions and expectations of this project?

The project paper states the following assumptions for achieving purpose:

- (1) "Small farmers can be motivated to adopt new technological packages developed under this project.
- (2) There is continued GRP commitment to equity and income distribution strategies in agricultural development.
- (3) GRP will insure availability of agricultural inputs on a timely basis.
- (4) Sufficient investment opportunity exists to attract small rural entrepreneurs into technological packages process.
- (5) Adequate amounts of credit will be readily available to participating small farmers and small agro-entrepreneurs."

These assumptions are restated here so that Project staff can "monitor" what is happening to these assumed conditions which will undoubtedly influence outcomes and impact.

With regard to end-of-project status for purposes of monitoring and evaluation, the Project Paper (11/27/76) as finalized by AID Washington shows three different indicators:

- (a) On page 54-a, it states "...increase small farmer net income by 10 percent by 1981".
- (b) On page 54-c, it says "Small farmers participating will accrue gross profits per production unit of at least 50 percent more than non-participants".
- (c) On pages 128 and 129 (E-2), the statement is "Small farmer productivity increased by at least 50 percent by 1981".

Perhaps these three indicators are not necessarily inconsistent but are applicable and useful for different target populations and for measuring different aspects of income and productivity at the farmer level. For example, to assess the impact of a particular price policy with a potential benefit to farmers nationwide, the first indicator could be applied. On the other hand, in a defined area where all or most of the IAPM Project ingredients are operational, it might be more valid and meaningful to gauge impact in terms of the differentials between participants and non-participants. Furthermore, the third indicator could focus as much on quantitative production as on profitability. Since amount produced is a significant factor in the supply-demand situation of the market, it no doubt affects profitability.

The means of verification indicated in the Project Paper are:

- (1) Ministry of Agriculture records on small farmer and small agro-entrepreneurs productivity and income.
- (2) Project records of AID and NEDA.
- (3) Periodic field evaluations conducted in accordance with the evaluation plan to insure that planned inputs are reaching small farmers and entrepreneurs.
- (4) NFAC reports and evaluations.
- (5) BAEcon computer center records.

These data have to be reviewed and their utility and relevance to the project objectives and impact areas need to be ascertained.

By way of comment on one of the indicators expected output i.e., "small farmers participating will accrue gross profits per production unit of at least fifty percent more than non-participating", it would be equally important, if not more so, to find out why non-participants have remained non-participants. When no differences are observed between the two groups, the possibility of radiation effects from participants to non-participants cannot be ruled out and should be investigated. The phenomenon of non-participants is of particular interest because we need to be concerned about those who fail to benefit from development projects intended for their welfare.

One further assumption for achieving outputs as stated in the Project Paper is that "adverse weather does not have negative trend effect on production".

In a country which receives an average of 19 typhoons a year, it is "whistling in the dark" to assume that expected project output would be achieved if "adverse weather does not have negative trend on production". It would be more realistic to face up to the fact that "bad weather" is a condition farmers have to live with and that technology development has to take **this** into account. Furthermore, the extent to which a small farmer is able to "weather the

storm", so to speak, is perhaps one indication of his viability and management capability.

e. What is the long-range view for the project itself?

The project design is not only broad, it is also far-reaching in its outlook. It is envisioned that in the future, the project may provide the overall structure, the conduit for other technical assistance programs from AID and other donor agencies. If the myriad of project activities can collectively succeed in the attainment of its major purposes, the IAPMP should represent a significant step in providing an umbrella framework for a meaningful consolidation, without administrative take over, of small farmer programs which usually come in ad hoc fashion and in bits and pieces. If we keep this larger and longer view in mind, the activities may change, but the purpose will continuously be served. Furthermore, at this stage in the country's development and in the light of the government's regionalization plans, IAPMP can be readily replicated at the regional level where analogous project components may be available.

NATIONAL POLICY THRUST

Purpose of the Thrust

The objective of this thrust is to improve the planning and policy making capabilities of the GRP to deal with issues and problems of agricultural and rural development. It is expected to strengthen the capability of the Ministry of Agriculture and related public sector institutions to

identify and evaluate alternative policies affecting the production and marketing of agricultural outputs and inputs as they relate to the needs of small farmers. As stated in the Project Paper, the purpose of this thrust is:

"To strengthen the capability to develop rational national policies for food systems, i.e., the total agricultural sector and its interaction with the rest of the economy."

The planned outputs are improved:

1. Linkages between analysts and decision makers;
2. Agricultural data;
3. Computer capacity for national policy development and support;
4. Agricultural subsector models;
5. Policy Analyses; and
6. Trained GRP policy analysts.

The inputs provided by the project include technical assistance, participant training, local staff, expanded computer capacity and office facilities.

The team finds little evidence that much attention has not yet been given to conceptualizing how this thrust can result in higher incomes for small farmers and what indicators should be used to evaluate success in achieving its purpose and objectives. The focus of this thrust is by and large on things that are matters of degree and quality rather than existence or non-existence. Policy decision have been, are being, and

will be made with or without this Project. The concern here is with better policies, and the system for formulating, implementing and evaluating policies that can support qualitative improvements in decision making. We suggest that more attention be given now to developing a consensus on what kind of system is desired by the GRP and what indicators will be used to evaluate progress towards that system at the end of the project.

Background of the Thrust

The AID supported Agricultural Diversification and Market Project (Project ADAM), implemented by BAEcon, developed a national linear-programming model of agricultural production and utilization that has been used to analyze various input and output price policies. A prototype regional model was constructed and development of operational regional models is continuing in BAEcon. (The peso budget support to ADAM from PCARR ended in 1978 and has been assumed by the BAEcon Economic Research Division Budget under IAPMP) This previous work will be used as one of the elements in a family of sector and subsector models to be developed under IAPM Project.

During March-June 1977, a Kansas State University Team under Contract with the USAID Mission and in cooperation with the Ministry (then Department) of Agriculture carried out a "management analysis" that resulted in recommendations for improved organizational linkages and managerial guidelines for effective interfacing between and among GRP officials responsible for data assembly policy analyses and policy re-

commendations^{1/}. This analysis was used by Filipino and KSU staff in designing activities under the National Policy Thrust.

Activities under the National Policy Thrust

Policy Analysis

The purpose of this activity is to assist the Ministry to develop and use analytical sector and subsector models to provide information on policy alternatives to decision makers. Initially, a plan was developed to work on priority policy issues identified by Minister Tanco. These issues were commodity pricing, diversification of marginal rice land, feed grain production, fertilizer/pesticide prices and availabilities, animal feed industry, agricultural marketing problems, farm mechanization, dairy industry development, cooperatives, regionalization of commodity production and development of an Asean common market. These issues were identified at a workshop held May 8-10, 1978.

Following this workshop, inter-agency committees were formed to develop detailed work plans and carry out actual work on each of the policy issues. However, due to competing work responsibilities of the key people assigned to these committees, not much was accomplished. More recently, a group of 10 analysts have been recruited and attached to the Office of the Minister. Working under the direction of senior Filipino staff from BAEcon and KSU long-term consultants, this staff

^{1/} Management Analysis Team, Kansas State University, Management Analysis of Linkages and Interfacing of the Department of Agriculture: Executive Digest of Findings and Recommendations, Quezon City, June 1977.

will assemble data and analyze policy questions directed at them by top Management officials in the Ministry. Soon after this group was organized, analytical work on rice price policy alternatives was completed and presented to Minister Tanco. This work will be extended to an econometric simulation model for rice and corn to provide a basis for outlook projections and appraisal of policy options.

Looking back, the Team feels that it was unrealistic to expect to be able to mobilize sufficient resources through the task force approach to do all the analysis for the 12 priority issues that were identified. Indeed, many of those topics cannot be handled on the basis of a single short-term analysis but would require sustained long-term research to arrive at valid and policy-relevant conclusions.

Thus, we believe that the decision to form a policy analysis staff was correct and much more likely to meet some of management's needs for analytical information. It also provides a more effective mechanism for fully utilizing the two KSU long-term consultants working on the policy analysis activity.

1.1 Long Term Policy Development

Nevertheless, this interim action does not solve the longer term problem of how to organize, expand and utilize the Ministry's capability for policy analysis. We are of the view that a permanent staff economists group attached to the Office of the Minister is an important element in this capability. Such a group, directly linked to key decision makers through the Management staff, can assemble data and available research information and carry out short-term analyses of specific policy issues on a quick response

basis. We recommend that IAPMF work for the creation of a permanent policy analysis staff.

A longer-term research/investigative capability is another element in the country's capacity to generate knowledge, identify relevant policy options, and appraise the results of existing policies and the consequences of alternatives. This capability is likely to exist in several places, both in and out of the Ministry. At present, for example, BAEcon, the Special Studies Division, are all involved. A thorough inventory of this capability is needed and a program prepared to decide what work should be undertaken in each agency. If, as seems likely, the decision is made to integrate UPLB into this research network, the MA should provide funds on a regular and continuing basis to support the required research. Funding through the UPLB Center for Policy and Development Studies is one way to accomplish this integration. Continuity of support is critical since the University cannot maintain a research program on the basis of an occasional contract for short-term work on a specific policy issue.

1.2 Crisis Management

The development of capacity for policy formulation appears to be a problem of long-term dimensions. An analysis of the present capability of the Ministry of Agriculture pointed up to the conclusion that such capability served well the purposes of the incumbent Minister of Agriculture, particularly in terms of coping with emergency problems requiring quick action. For instance, the response capability of the Ministry of Agriculture to policy issues

periodically raised by the President of the Philippines has been observed to be quite remarkable.

There are two level organizational units in the Ministry of Agriculture whose functions relate to policy formulation. These are

- (1) The Management Staff, and
- (2) The Planning Service.

The Management Staff is a small group of management-oriented professionals expected to provide fast-stepping, close-in staff support to the Minister. One senior staff member regards the management staff as the firefighters who perform their jobs quickly under fire. Their jobs, he said, vary widely. In many instances they act as the deputies of the Minister. They seek and marshall information and present them in actionable formats to the Minister.

The Planning Service is composed of three divisions: (1) Projects and Programs, (2) Project Evaluation and (3) Special Studies. Projects and Programs handle short to medium-term studies and turn out project studies. Project Evaluation monitors and assesses progress of project implementation. Special Studies takes care of "quick and dirty" research on food consumption patterns and various aspects of selected commodities.

The Planning Service, in general, is mostly a short-term policy-formulation instrument. There is a need for organizing for long-term policy formulation.

Considering problems the Ministry of Agriculture encounters in attracting and retaining well-trained, competent professionals, one should probably look to institutions, agencies or firms external to but associated with, the Ministry--particularly the Universities--for professional assistance in the formulation of policies which are long term in nature. The formation of policy centers in selected Universities and Colleges should be encouraged to serve as manpower reservoirs to draw from or to act as contracting parties to handle policy assignments. Given these centers, it would probably be easier for the Ministry to even replenish its own manpower pool when turnover takes a high turn.

Planning Analysis and Linkage Activity

This activity was originally conceived to solve the problem of linking data flows, policy analysis and decision makers. As noted above, little has yet been done to create these linkages. We would hope they will receive accelerated attention by both Filipino and KSU staff in the coming months.

As it has evolved, this activity is now concerned with the creation of a regional planning capability in the context of the Ministry's sector planning process, interfacing budgeting and planning through annual operational plans, and monitoring and evaluating plan and project implementation. The team recognizes that planning and policy analysis are closely related. Policies along with investment programs and projects, are instruments through which the public sector attempts to direct, control and improve the performance of the sector.

We have not attempted to appraise the existing planning process nor identify what is needed to improve that process and extend it to the

regional level. We believe those steps should be accomplished under the National Policy Thrust, possibly with the assistance of a short-term consultant. We find that much remains to be done to establish specific objectives and final work plans under this activity.

Computer Enhancement

Due to the fortuitous appearance of a new and cheaper generation of computers, it now appears that funds available from IAPMP and from the disposal of the existing machine will be sufficient to greatly expand the machine capacity of the Ministry's computer center. This action, which we hope will proceed expeditiously, will solve many of the problems of machine access and turn-around time that have existed in the past.

Also under this activity, work is underway on a promising computer software package that will have capability to edit questionnaire data and monitor field survey operations (SPEED). This program has the potential for improving and speeding up the processing of a survey data collected by BAEcon for its production estimates. It can also be used on a wide array of other field surveys.

Agricultural Data Systems Improvement Activity

Work to date in BAEcon under this activity has involved:

- a) Compilation of data series available from different agencies;
- b) Using area-frame samples to obtain production data in 12 pilot provinces; and
- c) Research on sources of error in production data.

A long-term consultant position that will assist BAEcon to improve data collection techniques, processing procedures, and reporting is expected to be filled in the near future.

The team sees less evidence that IAPMP has yet engaged the larger problem of defining total sector data needs for policy and program formulation, implementation and evaluation. (We note, for example, that a specific activity on improvement of the Management Information System in NFAC is included in the Extension/Outreach Thrust.) Attempts are underway in the BAEcon and by the NEDA Interagency Committee to develop a strategy for rationalizing and improving the overall system for data collection and dissemination. Hopefully overlapping efforts within the Ministry and with outside agencies will be minimized. It is especially timely to work on this problem now in light of the greatly enlarged data processing capacity that will be available when the new computer is in operation.

Concluding Comments and Recommendations

Our general conclusion is that while useful work is underway in policy analysis and statistical data collection and progress is being made in upgrading computer hardware and software, too little attention has as yet been paid to the broader issues with which this thrust is concerned:

1. What organization can be institutionalized and staffed to provide a short-term policy analysis capability directly linked to key policy decision makers?

2. How can a program of longer-term research, involving development and utilization of quantitative tools, be organized and funded on a continuous basis?
3. How can the planning process for the sector be improved and extended to the regional level?
4. Can the needs for information for planning and policy and program formulation, implementation and evaluation be defined on a sector-wide basis and a strategy for improving the existing system for collecting, processing and disseminating information be devised?

We recommend that the Filipino staff, KSU long-term consultants, and additional short-term consultants plan a program of work that addresses all of these critical areas.

ACADEMIC THRUST

Purpose of the Academic Thrust

The purpose of the academic thrust as stated in the project documents is "to develop a continuing supply of professionally trained people in Philippine agricultural and food systems development for government agencies, agricultural educational institutions, small farmers' cooperatives, and agribusiness enterprises". Skills resulting from this thrust are expected to "provide expertise in agricultural marketing, development planning, management, cooperative management, credit and finance, international trade, and processing of agricultural products".

The proposed strategy to attain these objectives is two-pronged:

1. Establishment of a "specialized masters degree program in agricultural economics and marketing at UPLB and a specialized food systems (agricultural economics/marketing) major" at CLSU.
2. Offering of non-degree training for professional management in government institutions and private enterprises involved in food production, processing and marketing. UPLB is expected to offer "level II short courses for senior professionals such as cooperative managers, government department heads, and rural bank managers". CLSU is supposed to offer "level I short courses for mid-career professionals".

For UPLB and CLSU to implement the plans and achieve the objectives, the IAPM Project provides for necessary staff development. While training staff members, early implementation of the new programs at UPLB and CLSU is made possible, since there is a provision for both institutions to "draw upon the resources of the contracting university" in the U.S.

The evaluation team feels that the objectives and strategies of the Academic Thrust component as reflected in the original project paper are both sound and feasible.

Achievement of targeted outputs within the time frame

The project paper envisioned the graduate training of ten UPLB and CLSU staff members to begin on January 1977. A year later, another ten

were to be sent abroad for advanced studies. By 1979, all of the twenty scholars would have completed their studies and would then be involved in operationalizing the M.S. and B.S. degree programs in agricultural economics and marketing.

There was a slight delay in the implementation of the project because the project loan and grant agreement between the GRP and USAID was not signed until June 27, 1977 and the GRP/KSU Contract was signed August 19, 1977.

Participant Training

The scholarship schedule in the GRP/KSU contract could not be strictly followed and had to be readjusted in 1978. The following table shows considerable delay in the implementation of the participant training program:

<u>Category</u>	<u>Available for 1978</u>	<u>Utilized as of Dec. '78</u>	<u>Balance</u>
<u>Ph. D. Degree (Abroad)</u>			
UPLB	7	2	5
CLSU	4	1	3
<u>M. S. Degree (Abroad)</u>			
UPLB	13	4	9
CLSU	7	0	7
<u>Faculty Fellowships (Abroad)</u>			
UPLB	9	2	7
CLSU	9	1	8

Some of the problems encountered are:

1. Delay in the identification of candidates for training.
2. Difficulties or delay in acceptance of candidates in the graduate school abroad.
3. Refusal of some candidates to participate in the short-term training program because they do not wish to sign the required contract binding them to serve the government for "three years for every year of scholarship abroad or a fraction thereof".
4. Some faculty members could not go on scholarships because no one else is available to take over the courses they teach.
5. There are few takers of non-degree (post-doctoral) fellowships abroad. One of the reasons for this is that the small stipend of only \$300/month.

Curriculum Development

The development of the M.S. and B.S. curricula at UPLB and CLSU, respectively, are still within the time frame, despite delays in the arrival of consultants. However, this activity should be expedited if the new curricula are to become operational by the start of the next school year in June 1979. At present, it is not easy to push any new curriculum through the mill because of a law requiring approval by the National Board of Education and the Ministry of the Budget. Expanding and strengthening existing M.S. and B.S. degree programs through the infusion of relevant subjects would therefore appear to be more expeditious and convenient.

Short Training Program

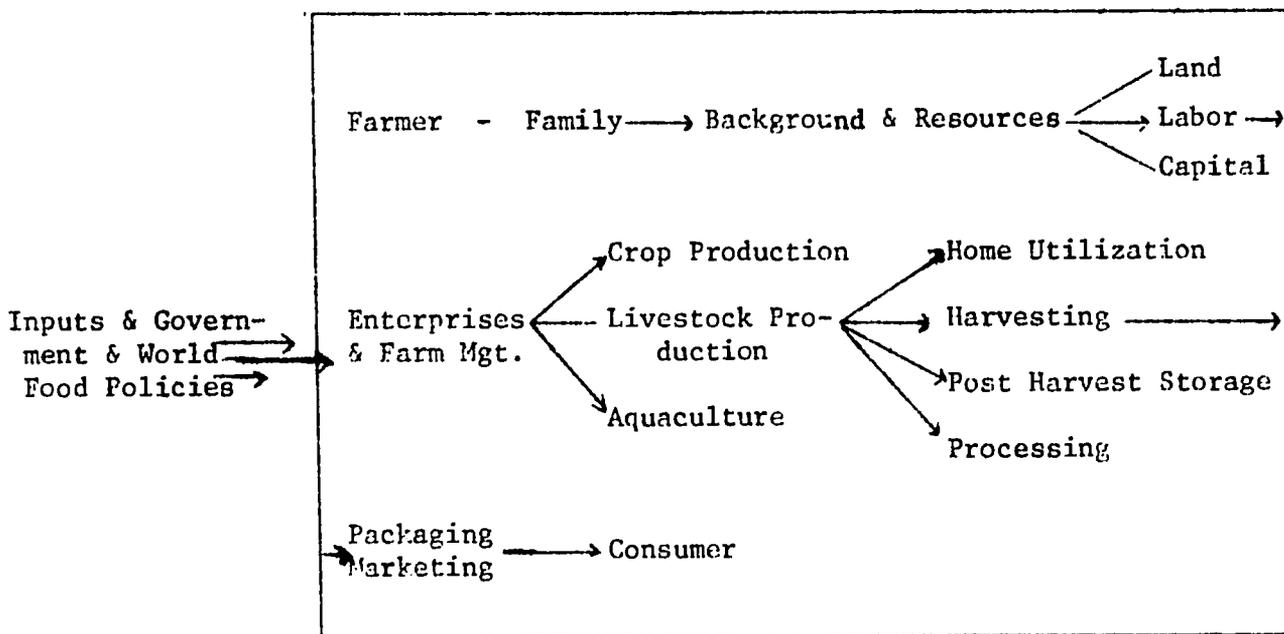
UPLB's short training programs in agribusiness and agricultural marketing were held in 1978 and there seems to be no reason why this program cannot be on target again in 1979. At CLSU, there is a slight delay in designing a short training program in cooperatives.

There appears to be a need to strengthen short-term training programs not only through greater involvement of the target clientele in designing the training course, but also through external post-training evaluation to make sure that this activity serves a real purpose. The project management, particularly the M/F staff should spear-head the evaluation. Furthermore, for the short training programs to become strongly institutionalized in UPLB and CLSU, there should be an assurance of continued support from the Ministry of Budget.

Curriculum on Food Systems

Plans are being developed to initiate a curriculum for a new course in what is termed "Food Systems" at both UPLB and CLSU. Before such a name is given to this course, there is a need to conceptualize what a food system is. The system approach, as commonly applied, involves looking at a system as a whole or at all the contributing aspects. When one looks at "Food Systems", he must start on the farm with a recognition of the farmer, his family, and their background: land resources, labor and capital, and the enterprises the farmer has chosen. The system begins to operate if he chooses a cropping system, when he prepares the land and plants the seed and carries through production, harvesting, post-harvest storage, processing and marketing, or utilization in the home. Similarly,

if he also chooses to carry on a livestock enterprise, it begins when the chick is hatched, the pig farrowed, or other livestock is born, or purchased, and involves all the steps in management and production of the animal plus marketing or home utilization. Likewise, if aquaculture is a chosen enterprise, similar steps in production, marketing, or utilization are involved. Part of the system is the inputs necessary for the successful operation of all of these enterprises. The system end-user is the consumer, either here or in some other country. Affecting all aspects of the system are the government and world food policies. This concept is diagrammed as follows:



The proposed "Food Systems" curriculum does not encompass all aspects of the system as conceptualized here. It concerns itself mainly with agricultural economics and agricultural business management, including management of food processing plants. Therefore, it seems inappropriate to use the term "Food Systems" for the proposed new curriculum, rather it should be named something such as "Food Processing and Marketing Management" or

'FPM Management', for short. This is not a simple matter of semantics for regardless of what the curriculum's ultimate label might be, the above Food Systems Flow Chart might be useful in defining course and curricular content and as a check list of what a student might need to know in Food Systems. For example, a graduate student in this field would need some background in farm management or it would be difficult to relate production and marketing in an economic sense. In other words, farm management seems to be a necessary "building block" especially with the present concern not only for quantity and timeliness but also for quality control of produce vis-a-vis market requirements.

Specialized Masters Degree Required to Provide Specified Professional Skills

UPLB is now offering the M.S. degree in Ag. Economics which is research oriented the Master of Agriculture degree, which is being phased out because of lack of student interest, and the Master of Professional Studies (MPS) in Food and Nutrition Planning which is a highly specialized degree offered jointly with the Institute of Human Ecology. Under the MPS, a major field in cooperatives is being designed.

Also under study is a new degree program called Master in Management with two major fields: Agribusiness and agricultural development administration. The institution of a masters degree in "Food Systems" is also being seriously studied under the LAMP Project.

Are all of these masters degree programs necessary?

The following table which matches these degree programs against the specific professional skills needed as specified in the purpose of the Academic Thrust should give us the answer

DEGREE PROGRAM	Ag. Marketing	Dev. Planning & Mgt.	Coop Mgt.	Resource Econ	Finance & Credit	International Trade	Regional Development	Food Processing
<u>Existing</u>								
MS Ag. Econ	S	W	W	-	S	W	W	-
MPS Food & Nutrition Planning	W	S	-	-	W	-	-	S
<u>Proposed</u>								
MPS Cooperatives	W	-	S	-	S	W	-	-
MM Agribusiness	W	-	W	-	S	S	-	-
MM Agricultural Dev. Administration	W	S	W	S	W	W	S	W
Masters Degree in "Food Systems"	S	-	W	-	-	W	-	S
W = Weak S = Strong								

It can be seen in the table above that the different masters degree programs have their own specific strengths and could be justified if the skills listed are indeed necessary to man government agencies, agricultural educational institutions, farmers' cooperatives, and varied agribusiness

enterprises. However, in view of the numerous overlaps among degree programs and in order to minimize the proliferation of masters degree programs, it would be better to make the so-called "Food Systems" program simply a major field under either the MPS or the MM. A separate masters degree program is not necessary and not called for in the original design of the Academic Thrust.

In the development of the Academic programs, it is highly recommended that inputs other than those from the campus be obtained. Due consideration should be given to the advice and opinions of agricultural business and marketing firms, cooperatives, the Bureau of Agricultural Extension and leadership from the Technological Packages and Extension/Outreach Thrusts.

Undergraduate Academic Program in CLSU

Plans are afoot in CLSU to establish a BS Food Systems degree program. The previous comment made on the appropriateness of using the all encompassing term "food systems" is also applicable here. The idea of developing a BS Agricultural Marketing was also pursued for some time, but this did not gain supporters because it seemed to be too highly specialized for undergraduates. It would seem to be more logical simply to offer the BS agricultural economics course with a major field in agricultural economics/marketing with some needed emphasis on farm management. Specialized subjects on food systems and marketing management may be included in the list of major courses.

Quantified Outputs Expected by the End of the Project

The project paper prescribed quantified outputs of the Academic Thrust as follows:

- a) A functioning graduate degree program at UPLB capable of graduating at least fifty students with an MS in Agricultural Marketing, annually by 1981.
- b) A functioning undergraduate program at CLSU capable of graduating at least 25 BS Agriculture students with a major in Agricultural Marketing and an additional 30 BS Agriculture, BS Agricultural Education and BS Agricultural Engineering students with a minor in Agricultural Marketing, annually by 1982.
- c) A functioning post-graduate, non-degree program at each university, each capable of graduating at least 50 adult and post-graduate students with Certificates of Completion of a post-graduate academic program in agricultural marketing, annually by 1982.

UPLB's present output of MS Ag Econ graduates with majors in agricultural marketing is only about 10 annually. It would be quite an achievement if they would graduate 50 students every year. However, the team feels that an annual output of 30 graduates is more realistic. On the other hand, the expected output of the CLSU academic program is low. The team suggests that the target of 25 BS majors in marketing be increased to 35-40 per year.

Additional Role of the Academic Thrust: Training of Extension Students and Extension Agents in Technology Packaging

The Tech Pack and Extension/Outreach Thrusts are the most important components of the IAPM Project, yet training of students in extension and extension workers now in the field has been left out of the list of supportive roles of the Academic Thrust. The evaluation team feels that the role of the Academic Thrust should be expanded to include this important aspect. It is felt that the BAEx agents are not involved at present in technology packaging and field testing, yet they are the ones who are supposed to be more knowledgeable as far as the farmers' problems and field conditions are concerned.

Extension agents must be involved in technology packaging. This can be done only through a deliberate plan to strengthen their technical training, a redefinition of their roles and responsibility, and the establishment of linkages with experiment stations, research centers, and agricultural colleges and universities.

The team recommends that a seminar-workshop be conducted on this issue and, should a consensus be reached, a task force be created to design a project proposal for this purpose. Funds to support this project could come from NFAC, BAEx, the WR loan for strengthening extension, or from savings of the IAPM Project.

The team feels that for this project component to stay on target, there must be some basic changes in the participant training program policies. The team suggests the following:

1. Whenever possible, training at the M.S. level should be done at UPLB or any other university in the country. In

this case, the participant might not be subject to the 1:3 service contract, but, more importantly, the training received would be more relevant and less expensive.

2. For the Ph. D. degree, a combination scheme should be tried. In this scheme, the participant would register for Ph. D. studies at UPLB (or another local university), but would be given the opportunity to take a year of course work abroad, to be credited towards his Ph. D. degree. It is important that the advisory committee carefully plan the participants' course work in an appropriate university abroad. This scheme, aside from being more relevant, will have the advantage of reducing the service contract time for the participant. The service contract for local scholarships or fellowships is 1:1 or 1:2, depending on the amount invested placed in the participant. However, KSU will need to play an aggressive role in making the necessary arrangements with universities abroad. Needless to say, if the needed training is not available locally or if the combination scheme is neither feasible nor desirable, it should not be enforced.
3. M.S. and Ph. D. degree candidates selected for international training should be allowed 16 months and 36 months -respectively for the completion of their degrees, in view of the need for adjustment to the new environment and situation.

4. Obviously, there is a need to increase to \$700 per month the stipend for post-doctoral fellowships abroad (now only \$300) to make this more attractive. If funds are limited, the number of slots could be reduced to some extent to increase the allotment for each post-doctoral fellowship.
5. Ideally, it would be desirable to have the M.S. and Ph. D. students under the IAPM Project to work on thesis or dissertation subjects which are directly relevant to the policy issues and problem areas concerns of the Project.

In the area of in-country degree and non-degree training, the team has two comments/suggestions:

1. Funds for in-country degree training are included in the budget of different participating agencies. An assessment of progress made in M.S. or Ph. D. studies in the country to strengthen the capacity of participating units to contribute to the IAPM Project cannot be made in the absence of available data on this matter. The Office of the Overall Project Coordinator is now gathering data on present staffing patterns and staff developing projects of UPLB, CLSU, BAEcon, BAEx, BCOD and others.

When all of these data become available, the project management should analyze how each current and proposed degree and non-degree training program fits into the objectives and activities of the IAPM Project.

2. Instead of the fellowships abroad, specially designed short-term training programs may be more realistic and desirable.

This could involve both local experts and trainers from abroad. This type of training could be planned and implemented with assistance from the Economic Development Institute of the World Bank, the USDA, etc.

TECHNOLOGICAL PACKAGE THRUST

Purpose of the Thrust

The objective of this thrust is to contribute to the development of the institutional capacity to design and test integrated packages of production, processing and marketing technology. It is expected this will ultimately result in optimizing the small farmer's income from his land. As stated in the Project's Logical Framework, this thrust calls for research institutions (chiefly CLSU) to identify, plan, and conduct research on problems related to small farmer-production, processing, and marketing in an integrated manner. These aims were further clarified in the Project Loan and Grant Agreement which stated that "the purpose of this Project is to develop and test technological packages to integrate crop and livestock enterprises, product processing and marketing, to provide training in production, post-harvest technology, by-product utilization, processing, marketing and extension education and to construct and operate a food processing center .

Technological Packages were to be developed for producing, processing and marketing crops (e.g. rice, grain sorghum, soybeans and vegetables) either as cropping packages and/or in combination with fish, poultry and/or livestock enterprises. Methodology was to be designed and instituted to measure and predict expected cost and returns of the

technological practices. A feed, grain, meat products and vegetable processing center was to be constructed on the campus at CLSU. The plans called for the center to be used for developing and testing the components/products of the technological packages, and for training. CLSU was designated to carry out this thrust.

The planned outputs are:

1. At least ten proven technological packages for production, processing, storage, domestic marketing or export of specified crops that maximize small farmer earnings.
2. At least 8,000 small farmers (an estimated 48,000 people) will directly benefit from activities initiated at CLSU by student-operated enterprises to test newly developed technological packages. The target area is a 15-km radius from CLSU.
3. At least 500 students/motivators trained and available to assist small farmers and small agro-entrepreneurs.
4. At least 100 student entrepreneurs/motivators trained and available to assist small business processors/marketers.
5. On-campus motivation and training program for cooperative members established and at least 1,000 members trained through this program.
6. Model campus production areas organized and operating for key food commodities and at least ten models, student operated campus agribusiness facilities for processing, storing and marketing campus products operating at a net profit.

7. At least 100 undergraduate students per year serve in on-the-job internship as processing/marketing advisors to Samahang Nayons.

Background of the Thrust

Success in carrying out the Masagana 99 and Kabsaka projects had led to the decision to develop technological packages specific for other areas. Central Luzon was chosen as the location for this thrust because of the need to introduce new crop and livestock enterprises, as well as new techniques, into the rice-dominant agriculture characterizing this region. CLSU was designated as the "land demonstration" regional university in the research and development of the package concept, primarily because of the rural background of its students, the availability of an irrigated university farm, the characteristics of the surrounding agriculture, and the interest of its administration. The intent was to utilize technology already available and under development by PCARR, IRRI, BPI, BAI and elsewhere and to integrate these through adaptive research, into workable packages which are suitable and profitable to the small farmer, and will embody components from production to product marketing. Special emphasis is placed on research and processing laboratories, especially the food, feed and grain processing facilities for the testing and development of each package.

The rationale for this thrust is that as rice production increases, competition will force marginal rice producers to seek other means of obtaining income. Estimates are that there are over one million hectares of marginal rice lands in the Philippines, that should be devoted to other forms of production. For many small farmers, including those on

poor rice land, maximizing income means diversifying their operations. They can only realize the full income potential of their land by rotating two or more crops, or by simultaneous cultivation of a selected package of crops with or without production of livestock, poultry, fish or fibers.

Staffing and Participant Training Plans

Staffing plans, as stated in the KSU-GRP Contract, provide for four long-term consultants, with three for 24 months each, and one, the Senior Agricultural Economist (Farm Management), for four years. The latter position has not been filled as yet, but a candidate has been recruited and is scheduled to arrive in mid-1979. The other consultants arrived several months behind schedule. These delays have held back the progress on the project somewhat.

Sixty-six man-months of short-term KSU consultants were also scheduled, six man-months to be utilized in 1977, 24 each in 1978 and 1979 and up to eight in 1980 and four in 1981. No short-term consultants were utilized in 1977 and only a total of four man-months of four consultants were employed in 1978.

The participant training for M.S. and Ph. D. degrees in the U.S. has progressed in a satisfactory manner with three of the four Ph. D. candidates scheduled for 1978 already enrolled in U.S. institutions. Five M.S. candidates were sent in 1978, with only four scheduled. Only one of the faculty fellowships of the three planned was used in 1978.

Activities under Technological Package Thrust

The thrust has three main sub-projects: (1) Socio-Economic Research, (2) Tech Pack Testing and Adoption, and (3) the Food, Feed and Grain Processing Center. Work started on the project in January 1978. Three KSU long-term consultants and the CLSU Proparts started to work together in March. Most of the CLSU full time researchers were recruited in May and it was not until then that project plans and activities were fully implemented. Major accomplishments to date for each sub-project and an assessment of these follows:

1. Socio-Economic Research (SER)

A baseline survey was designed and conducted to obtain benchmark information on the socio-economic profile of 18 representative (of a total of 150) barrios involving 170 farmer household (of a total of 14,897). The initial data gathering has been completed and it is now being summarized and analyzed, with much of the raw data being made available for the review of the evaluation team. The team believes that this was a very worthwhile effort and that it will supply valuable information for the development of technology and for devising techniques and methods for extension delivery.

Other socio-economic studies underway include obtaining profiles of 100 barrios, a case study on the onion industry, extension strategies and analysis of farmers' concepts of success in farming, etc. We have some concern that the Socio-Economic Research Unit may be over extended in conducting so many studies with such a limited staff.

The team believes this phase of the project is progressing in a very satisfactory manner. However, the CLSU baseline survey of covering 13 barrios in its target service area is admittedly inadequate as far as providing information on processing facilities and output and marketing structure and commodity flows is concerned. If this tech pack sub-project is to attempt to integrate production, processing and marketing, baseline data on all of these must be gathered for planning and evaluation purposes. CLSU staff recognizes this need and should be encouraged and supported to undertake a special study on processing and marketing, at least within its laboratory area.

2. Technological Package Testing and Adoption (TPTA)

The group has identified possible farming/cropping systems or patterns and their components, including a number of pure crop, upland crops-rice, animal crop (Anicrop) and special packages. To arrive at these, review of literature, field trips, observations, surveys, interviews, meetings, seminars and workshops were employed. Research and testing activities and support studies are being conducted, both on campus and to some extent, on off-campus farms, on portable animal units, direct rice seeding, methods of rice seedling production, portable threshing equipment, rice-fish culture, evaluation and adaptation of soybean, mungbean, sorghum, corn and peanut varieties, planting schedules for soybeans, corn-legumes, onions and tomatoes, shallow-well pump irrigation and feeding poultry manure to livestock.

At CLSU, the major Technological Package available for extension which is distinctly CLSU product is rice-fish. However the commodity they happen to be involved with for marketing is onion. This involvement started in 1978 when the Tech Pack group conducted a seminar on Onion Production-Marketing among representatives of onion growers in Nueva Ecija. Marketing was identified as one of their serious problems. This is indeed opportune for the staff to "get their feet wet" in the tough business of marketing. This experience should provide them valuable lessons particularly in the light of the fact that these particular onion growers were readily amenable to organizing into an association. If everything falls into place, this would give CLSU staff an initiation into the intricacies of marketing, cooperatives development, extension possibilities and potential alternatives onion Technological Packages based on farmer practice and experience. Apparently, there are different onion varieties of differing marketability, shelf-life and agronomic requirements. It has been observed by the BAEx worker in the area that in another town, their system of growing onions allows for staggered harvests which reduce the glut during peak seasons. Onion growers in CLSU's impact area have shown a great deal of curiosity in how the farmers in the other town are doing it. Through the BAEx worker and in cooperation with CLSU, this could be a farmer-to-farmer technology transfer if agronomic conditions prove to be suitable but here lies the challenge in technology repackaging and redesign in response to market conditions. Mushroom culture is also being extended on some rice farms. The Team members believe several of the other technological

packages could be extended particularly the rice-rice; rice-rice-rice; rice-animals; and perhaps rice-onion; rice-potato and rice-tomato since there is enough known technology and experience already available. However, with upland crops, not commonly grown in the past, such as sorghum, soybeans, beans, and sunflowers, careful testing of varieties, cultural practices and marketing must be conducted over several years before technological packages, including these crops, can be extended to farmers. Also some consideration might be given to including small areas of perennial forage legumes or grasses and utilizing some of the land that is now idle during part of the year for growing annual legumes for forage (such as Townsville lucerne, hairy indigo, lab-lab, etc.) in the Anicrop combinations of upland crop-rice-animals.

In the excitement of developing technological packages geared to the market, some room must be left for the family subsistence--oriented technological packages which will cushion the farm family in the event of market failures. They should at least have something for consumption. In a very competitive market, small farmers, especially if unorganized, are least likely to be ahead. In other words, the strategy is a dual one with market and subsistence technological packages existing simultaneously even if the latter is only a minor component.

Coordination of the TPTA with the extension delivery system has not been developed to the point where there is adequate participation of all parties concerned. The team believes that extension workers should participate not only in the delivery aspects, but should be

involved also in the development and testing of the tech packs. The extension worker should serve to relate farmers problems, attitudes and experience to the researchers as part of the background for planning and researching tech packs.

3. Food and Feed Processing Center (FFPC)

Construction of the two buildings, one for food processing and one for the feed mill, is now underway. A concept paper for the food processing center has been prepared and the team feels that the rationale, objectives and plans for the physical facilities for this center are practical and feasible. The food and feed processing center is the most expensive single item in the Loan component of the IAPM Project and will require a substantial staff development program. The size of the food and feed facilities and the magnitude and complexity of the task will require a balanced complement of technical and supporting staff. Conservative estimates show that ten (10) technical men are needed for food technology and six (6) for feed technology, with a supporting staff at least twice as many. The team, therefore, recommends that a careful study be made of participant training particularly in food technology and consideration be given to provide a long-term food science and technology consultant to assist in training the staff in the operation of the food processing center. Assistance in the operation of the food processing facility and particularly on participant training could be solicited from the Food Industry Research and Development Institute in Taiwan, as well as from local processing companies and organizations.

Specialized subjects on food systems and marketing management may be included in the list of major courses.

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With regard to the Feed Processing Plant, considerable divergence of opinion exists relative to the planned capacity of the proposed feed mill to be installed at CLSU. Statements relative to the output of feed from the mill have ranged from one to ten tons per hour. With the latter figure being the one supplied by the consultant who designed the plant. Assuming that the latter figure is correct, then using the figure of 1225 to 1350 operating hours per year (225 days/year x 75% efficiency x 5 to 6 hours operating/day) supplied by the CLSU Technological Package Group in a letter to Dr. Amado Campos in response to John Foti's letter of May 8, 1978 to Drs. Campos and Quisumbing, a total of 12,250 to 13,500 tons of feed could be provided annually. On campus potential, feed needs are estimated at 1300 metric tons per year.

The baseline survey indicates that at present, of the 270 households surveyed only 103 were raising pigs, 38 had chicken, 1 had ducks, 1 had goats, and 33 were cattle and 20 carabao raisers. Only 21 households were raising corn and just five were producing sorghum. While figures of numbers of animals and of crop production were not as yet available, it appears that even if CLSU were to grind and mix the feed for the all farmers within the 15 km radius, the clientele for this service would be quite limited at present and for sometime to come.

It appears that the horsepower requirements and the technical people and laborers needed to operate the mill along with the fixed costs would place a severe burden on the annual budget at CLSU or on any entity chosen to operate the proposed mill. It appears to

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the evaluation team that a review of the mill should be made based on the concept that it should be designed to provide a research and training facility for feed grain processing and to take care of the feed needs of the CLSU flocks and herds. (Since the team's visit to CLSU, the review of the feed mill, recommended above has been made in a concept paper, which stipulates a feed mill of one and one-half tons per hours capacity is being developed. Likewise, staffing and participant training plans for development and operation of the FFGPC have been prepared for review and approval.)

Also, some arrangement needs to be developed so that any funds derived from the operation of the FFGPC can be returned to the Center to aid in financing it.

Defining the Technological Package

The definition of a tech pack has been pursued at length in CLSU apparently because the Technological Package sub-project is expected to produce at "least ten proven technological packages for production, processing, storage, domestic marketing or export of specified crops that maximize small farmer earnings".

Dr. W. H. Vincnet, a short-term consultant at CLSU, defined tech pack as "a socially acceptable, biologically stable and economically viable farming system". Two serious questions raised against this definition are: (1) what are the verifiable indicators of a socially acceptable, biologically stable and economically feasible farming system? (2) should technological packages be limited to a farming system?

Dr. Fermina T. Rivera of CLSU proposed the following definition:

"A tech pack may be a pure crop, pure animal, pure fish, animal-crop, animal-fish or animal-crop-fish packages of technology. It can also be a production-processing-marketing enterprise or technological mixes of all these. Hence, there can be as many tech packs as there are, which small farmers and their landless counterparts can consider as alternative components/packages/system for improving their lives."

In the team's view, the important innovative concept in the IAPM Project is the integration of production, processing and marketing-- whether this is organizational or functional should not matter. Therefore, for the purposes of the IAPM Project, the integrative aspects of technology-packaging should not be forgotten. The operational integration of the processing and marketing into the Technological Packages should be its most significant output.

Concluding Comments and Recommendations

Our general conclusion is that while some progress has been attained, sounder and more rapid development could ensure the following:

1. Review KSU staffing at CLSU in view of the scheduled completion of tours of duty of the three consultants presently assigned. Consideration should be given to obtaining consultant assistance in the fields of food technology and agricultural marketing. The team stresses the need for at least a six-month pre-arrival planning period for all consultants in order to eliminate the possibility of a delay in meeting a required need.
2. Coordinate the efforts of this thrust with the Technological Package to be used in the four areas chosen by BAEx in the Extension/Outreach Thrust.

3. Examine once again the conceptualization and operating plans for the food and feed/grains processing center in the context of IAPMP's objectives and CLSU's expected capabilities and plans for the future.

4. Review the proposal of having students and student cooperatives operate the university farm and facilities. The team believes that this is a task for professionals and that there would be little chance for continuity in operations if left to students. The suggestions made by Dr. A. C. Campos to spin off an independent organization, such as a foundation, to lease the farm area and processing center from the University and operate the complex on a semi-commercial basis seems to be the more feasible approach. Such an organization could be seeded with a soft loan, rather than a grant, in order to apply some pressure towards efficient operations. University administration and the Research and Development Department would be represented in the board to assure the fulfillment of Technological Package purposes. At the same time, the organization would be in a better position to service off-campus farms with operational efficiency which would reflect the economics of processing. As an independent organization, it would be in a position to pay competitive salaries for the operating staff and to manage its funds and conduct its operation in a business climate.

EXTENSION/OUTREACH THRUST

Purpose of the Thrust

The purpose of the Thrust is to achieve coordinated and profitable production, processing and marketing of priority commodities produced by small farm operators through improved extension/outreach programs designed to serve cooperatives, marketing agencies, other agribusiness enterprises in the food system and small farm producers of the priority commodities. Further, the thrust purpose is to be carried out through three lines of closely interrelated activities each of which contributes specific components to the overall purpose of the Project.

1. Outreach Delivery Systems for agricultural development in the context of local food systems. In order to provide dependable markets for small farmers, logical development is needed in assembly, transport, storage, processing and marketing. The needed outreach assistance to serve agribusiness includes market potential, market intelligence, feasibility studies, technological innovations, management, financing assistance, contract or market agreements, food systems development, etc.
2. Programs to strengthen the position of small farmers in the food systems through integrated Cooperative Marketing Development.
3. Extension Delivery Systems to provide production technology, market intelligence and credit planning for small farmers.

The project paper describes the flow of operation for agribusiness development, cooperative marketing, and extension delivery activities, plus the inter-relationship of coordination of those several activities,

all of which are designed to improve the real income of the small farmers.

The secondary purpose of the thrust is to improve the planning and policy making capabilities within the agricultural sector the capabilities of academic institutions in supplying adequately trained manpower for Thrust design and implementation, the capability of government and academic units to jointly develop and test new and appropriate technologies - which, on the one hand, enable the small farmer to diversify his production into the most profitable farm activities. and on the other hand, raise the efficiency of public and private entities in providing marketing services. The capability of the government and academic institutions to jointly disseminate such technologies to small farmers and to marketing organizations which serve them must also be addressed. In short the Thrust involves the institutionalization of a system which will effectively increase the income of the small farmer by increasing his productivity and improving efficiency in the marketing of his product.

Thrust Design and Organization

Although the Extension/Outreach Thrust is the most innovative and the most directly linked to the intended beneficiaries, it is also the most amorphous at the moment. Each sub-project in the thrust has its own impact area and target clientele. Market Assistance Center is in Benguet, testing of an extension delivery system is contemplated in four scattered pilot areas; agribusiness centers are located in the regions while Technological Package is within 15 kilometers radius of CLSU. Cooperatives development is mostly concerned with training of Agricultural Marketing Cooperatives and Cooperative Rural Banks managers from different parts of

the country. There is no one impact area where all the sub-projects converge. Although initially some sub-projects were merely riders of IAPM Project in order to avail themselves of staff development opportunities and consultancies, they do have all the ingredients of what is essential in the total Project and therefore deserve to be pursued for this purpose. However, orchestrating all these sub-projects into a unified thrust promises to be a full time job.

The integrity of the thrust was weakened when the Technological Packaging and Extension/Outreach Thrusts were dichotomized. While this designed item may have been prompted by organizational constraints, the rift was widened by a lack of prescribed interaction between the implementing agencies. The interagency Extension Delivery Service Committee that was formed does not even include CLSU.

Since no clear definition or concept description of it appears in the Project Paper, in its present form, the Technological Packaging seems defective, for it looks very much like a commodity and is treated as an end product. If it is to effectively attain its dual purpose of optimizing the small farmer's production and raising marketing efficiencies, it must really be an activity - a joint activity involving not only the government and academic institutions but also by private agribusiness.

Perhaps the name should be changed to "Technological Packaging" to emphasize that it is a process mechanism-output plans from which may vary as inputs and surrounding conditions vary.

Some thought should be given to the advisability of fusing the Technological Packages and Extension/Outreach Thrusts. This would be a fusion of functions, rather than of organizations. Thus prescribed interaction

between the various organizations would evolve to produce an effective mechanism for marshalling, selecting and delivering applicable technologies for specific locations so that the farmer is able to maximize income from given agronomic, biological and climatic resources by producing the optimal product mix to sell to specific markets within his reach.

Conceptually then, "technology packaging" as a thrust will consist of the activities which will further this mechanism - after testing which should include actually operating the mechanism itself all the way up to putting the money in the farmer's pocket.

The mechanism can be hypothesized as follows:

1. Three activities are involved in the following sequence:

<u>ACTIVITY</u>	<u>AGENCY</u>
Description of specific locations--soil, climate, other agricultural information --size of farms, capabilities of farmer, other socio-economic information.	BAEx and others
Identification and quantification of markets within reach.	BAEcon, BCOD
Identification of farming practices from research done by others; quantification and costing of inputs per commodity; selective field testing and demonstration.	CLSU and others

2. Subsequent Activities

- a. Optimize production mix.
- b. Turn out production and marketing plans.

The thrust would then consist of testing the hypothesis, particularly the feasibility of bringing the activities to interact. In testing the

mechanism, obviously the other factors are brought to bear: area marketing cooperatives, cooperative rural banks, processing centers, market assistance centers, etc. Here is where the Agribusiness Sub-project may prove to be most effective, particularly in terms of introducing into the Thrust large consumers or group of consumers, such as food processors, exporters, distributors, etc.

It should be noted that with the reorganization of the Ministry of Agriculture, the mechanism becomes even more effective. It therefore makes even more sense to "regionalize" the thrust, i.e., have the other two multi-commodity research centers of the Philippines Council for Agriculture and Resources Research, namely Visayas State College of Agriculture and University of Southern Mindanao, participate in the technological packaging and extension process.

To start this off it is suggested that CLSU pilot it. BAEx, BCOD and BAEcon can designate staff to work closely with the CLSU Research and Development Center. Agribusiness can stay close. Try the mechanism out. See how it works.

Activities of the Thrust

Based upon interviews and reports, including the IAPM Project 1978 major accomplishments and the 1979 major plans, the evaluation committee believes that progress has been slower than expected during the first 18 months of the project in moving towards the purpose of the Project. This thrust must therefore work more vigorously to catch up and keep in step with the other thrusts.

Some of the activities include: the establishments of regional pro-

files and pinpointing of pilot districts, selection of initial Market Assistance Center sites, the establishment of a market assistance center, conduct of a baseline survey on vegetable production and marketing, short time training of 28 outreach technicians for marketing and Market Assistance Center operations, initial monitoring of marketing information, establishment of agribusiness regional centers, conduct of agribusiness seminars, etc. Activities and coordination of the Thrust development should increase with the recent arrival of a KSU consultant covering extension.

The M.S. degree international training program for the thrust has used/reserved eight of the 15 slots allocated during the first 18 months of the Project (eight of 31 total slots). The eight training or in-training included: four in Agricultural Economics; two in International Agricultural and Rural Development; one in Journalism and Mass Communication and one in Vegetable Crops. At this stage of the project, a plan should be available showing the type of training anticipated for the remaining 23 slots.

The non-degree training for the thrust is practically on schedule with only four slots remaining of the 33 scheduled (ninety positions scheduled for five years). None of the Faculty Fellowships, has been used/reserved.

An Extension Delivery Systems Committee has been established (at the working level) and has been meeting at least on a monthly basis. This should greatly facilitate integration, coordination and understanding, however, the Committee should be expanded to include membership from the CLSU Curriculum Committee, the Technological Packaging Thrust with KSU Curriculum Consultant as an ex-officio member.

Since the "Overview Committee" for the entire Project has not had an official meeting in the 18-month history of the Project and since this Committee has the purpose of administrative guidance, decision making, management, and coordination, it seems that the effectiveness of Extension/Outreach Part of the Project has been adversely affected.

The following suggestions and/or recommendations should be considered for improving the Extension/Outreach Thrust:

1. Consideration should be given to the expansion of the active "Extension Delivery Systems Committee" to include membership from curriculum and training development units, Technological Packaging Thrust and ex-officio membership for the KSU consultant. These additions would provide a more integrated and coordinated effort to fulfill the purpose of the Project.
2. There seems to be little, if any, emphasis placed on training in the Extension/Outreach Thrust on food technology and processing although in the purpose of the thrust it is clearly included. Quality control in most food processing activities must necessarily start at the farm level and is, likewise, a factor in the actual storage, transport and marketing phase. A food processing specialist and knowledgeable extension/outreach staff should be included in this thrust. This will require both degree training and non-degree programs. For example, some of the greatest problems in the processing of milk and milk products is directly involved in quality control at the farm level and later in transport, marketing and storage.

3. In the area of international training, at this stage in the life of the Project a plan should be available showing the type of training anticipated for the remaining 23 training slots for the Extension/ Outreach Thrust.
4. A specific leader for the entire thrust should be appointed to handle this very important activity.

OVERALL PROJECT MANAGEMENT

The IAPM Project has been operating for one and one-half years. Its overall management appears to have been generally viable so far. Although those providing leadership for the Project are aware that areas of deficiencies exist, this awareness suggests an asset which should be utilized further to correct perceived infirmities and solidify foundations of management systems for the Project. Such systems should probably be regarded not only as devices for insuring the successful implementation of the IAPM Project as a contractual obligation. It must be itself, like the Project Thrusts, developed and used as a technology that is replicable and, therefore, applicable with increasing effectiveness in expanding the IAPM Project to continuing national programs.

The comments that follow are divided into three groups: (1) planning, (2) organizational and staffing, and (3) direction and control.

Planning

Elsewhere in this report, the impression is given that the project design was well conceived and certainly credit should be given to those who participated in the actual design process. But a plan is really fleshed

out in the process of implementation and, wittingly or unwittingly, what happens in terms of implementing action finds itself often times as a modification of the plan. The resulting series of events, on the whole, defines in effect what the plan is subsequently purported to be.

Perhaps something should be said about the manner in which IAPMT was introduced as a project. Although the signing of the IAPM Project Agreement might signify convergence of opinions among the signatories, it apparently does not completely set the stage right for implementation. It has somewhat affected the development of management relations and the tone of relationships is probably less than optimum.

Conscious efforts must be exerted at different levels of IAPM Project's implementation, and implementing plans must be evolved on a running basis to overcome the initial and lingering effects of a Project entry that could have been more welcome particularly from the standpoint of the implementors.

There is evidence of some fuzziness on the part of the KSU consultants as to what exactly are the roles they are expected to play.

"We are expected to keep a low profile...how low should that profile be?" "How assertive should we be?" "We don't know whether KSU has a distinct role to play. We are assigned to departments and we play our respective roles essentially as members of the staff of departments. But we would like someone in KSU to tell us sometime what ought to be done or to check on us to see whether assignments have been completed as expected." "This is the first time we have taken up roles as program participants where we are not the bosses. In our previous assignments elsewhere, we were the bosses and we decided what was to be done."

"Our impression of the roles we were to play was vastly different from what we found here. But we are working closely and harmoniously with our pro- parts (project partners)."

These are literally the mixture of views expressed by KSU consul- tants. They are indicative of some operational problems that could be a drag on project implementation. They suggest remedial steps such as more effective pre-employment or pre-departure-for-the-field orientation and continuing in-the-field interaction on strategies that make for less res- trained communication.

There is plenty of room for KSU leadership to exercise a vigorous pro- fessional role in program development, implementation and periodic evalua- tion at the Project level and across Thrusts. In general, the inputs of the consultants, both short-term and long-term are well appreciated and some of them are actually held in high esteem by their Filipino colleagues. It seems that the GRP components of the Project are more open to collegial exchange and professional collaboration than what is presently perceived. Since KKSU is a major partner in this endeavor, utilization of the costly expertise and services which they provide should be maximized, planned for and facilitated by enabling procedures on the part of AJD, GRP, and KSU.

The Team believes that the management of the KSU field staff may have concentrated on the administrative aspects, rather than on the substance of the project. This view is, in our opinion, borne out by the KSU Team Leader's most recent Semi-Annual Report, which is more historical than descriptive of the progress of the project. We believe it is essential to the success of the project that the KSU Team Leader take an active profes-

sional and programmatic role in project affairs and so recommend. We also recommend that a capable Filipino administrative officer be hired by KSU to take care of the tedious, but essential complexities of administrative detail in order to permit the Team Leader and his assistant to assume such a role. This may require a change in fiscal policies to allow the use of dollar grant funds to pay for a Filipino national.

The Team did not visit the KSU campus support operations, but based on the Team members' previous experience with similar AID-assisted contracts with other U.S. universities, and on interviews here, the Team believes that the support staff in Manhattan maybe somewhat larger than needed, may be somewhat slow in providing the required support, and has exhibited somewhat less understanding than normal of field problems and relationships.

This project is notable in that large support staffs are budgeted:

- 1) at KSU;
- 2) in the KSU Team Office;
- 3) in the GRP Overall Project Coordinator's Office.

In addition, AID has devoted more of its staff resources to project support and monitoring than is usual.

We have not undertaken a review of all of the support operations and have no definite opinion about their necessity. We do recommend that a thorough review of this question be undertaken in the spirit of giving maximum support from available dollar and peso resources to project implementation.

The evaluation team believes that almost all of the problems encountered to date with respect to the administration of the KSU contract

are of the type that normally arise in connection with the implementation of a technical assistance project and which, given the existence of good professional relationships among the various parties involved, are routinely solved without major difficulty and without developing into disputes. The Team, therefore, recommends that all parties involved in the IAPM Project forget the troubled events of the past and concentrate on working together in a professional and collaborative manner to achieve the success of the project to which all are committed.

Some of the planning mechanisms anticipated in the IAPM Project have not been functioning, and possibilities toward improving the situation in this regard are discussed in organization, below.

In general, the major Thrust components of IAPM Project have been planned separately and each Thrust tends to operate internally within own boundaries. Limited activities take place across interests. The need for interlacing program components has been partially met through other means such as occasional and informal coordinative contracts. The formalization of some coordinative device to include coverage of operational planning is suggested in organization below.

There is a variance among the program participants (GRF, USAID, KSU) in their notions as to when IAPM Project started. There is, therefore, a need to synchronize these timing notions to avoid small but significant and vexing problems related to contractual obligations and expectations, evaluation of accomplishments, budgetary questions, coordination of implementing efforts, reports to higher authorities, etc.

This report of the Evaluation Team is likely to influence the management of IAPM Project. When the modified IAPM Project emerges, it might be

of value in many ways to translate the modified strategy into an implementing plan for the project as a whole. This could be done by the IAPM Project staff, including the KSU consultants. The process of forging out the implementing plan will be instructive in identifying the major contact points and pathways for interlacing organizational relationships and activities in IAPM Project although at the moment, detailed implementing plans exist for each thrust. An implementing plan, as a document, would be readily identifiable and will facilitate running revisions in the course of implementing IAPM Project. Such a plan would likewise highlight in a more systematic manner the training and consultancy needs of the entire project.

With substantial professional assistance from the AID staff, the Project has evolved a comprehensive and effective system for monitoring the utilization of inputs and achievement of outputs by sub-project. The data generated from this system have been indispensable for management purposes. In the case of CLSU, a benchmark survey of the impact area and other studies associated with Technological Packaging have been conducted and will doubtless be used for evaluating Project impact on intended beneficiaries as well as for understanding the development process. The Monitoring and Evaluation Committee has devoted considerable thought and effort to the definition of relevant and basic concepts in monitoring and evaluation and several substantive and methodological issues have also been raised in two documents made available to the team.

Admittedly, the measurement and evaluation of Project impact on the target population is a much more difficult and demanding task than monitoring inputs and outputs. Just like any other project evaluation, there

are obvious problems such as: (1) how to attribute specific impacts to the Project; (2) definition of relevant target populations considering the 4 thrusts; (3) identification of valid and measurable impact indicators; and (4) establishment of benchmark data for evaluation purposes.

The Monitoring and Evaluation Committee might consider the possibility of using "intermediate impact indicators" such as adoption of technological practices or packages; farm management ability, participation in cooperative activities, exposure to market information, awareness of and contact with agribusiness opportunities, use of processing facilities, access to new marketing outlets, etc. which link the inputs and outputs to impact especially on farmer income. Furthermore, some documentation and analysis of the Project strategy itself has to be done if we are to learn from this experience and eventually to share the lessons on integration and orchestration of four thrusts involving several agencies and sub-projects in different locations. Along with the quantitative indicators, a descriptive and qualitative assessment would be valuable because, as stated elsewhere, this is a very creative albeit complex Project.

So far, although small farmers are supposed to be the central concern in this Project, there has been minimal "input" or feedback from them. The only deliberate effort to involve farmers and utilize their expertise in CLSU's model farm and the farmer who is developing it. The other creative and potentially invaluable input from farmers is CLSU's attempt to document the farming practices of the more successful farmers in their impact area. These could be the ingredients of farmer-adopted, farmer-tested technology adapted to suit local conditions.

As a simultaneous, rather than as a delayed post-Project spin-off, some immediate multiplier effects at the regional level could be generated if the role currently played by CLSU for its impact area could be taken on by other regional agricultural colleges which are also part of PCARR's national research network. This would highlight more sharply an appropriate lead role for them in something which they are already performing as far as technology development and testing is concerned. Drawing them into the orbit of the project would result in:

- (1) a conscious expansion of agricultural technology sources;
- (2) a wider availability of varied technologies than is now indicated in the Project to suit different agro-climatic environments; and perhaps
- (3) a more rapid production of the new breed of manpower required for the institutionalization of the system being developed by IAPMP.

However, if other regional colleges are to participate, an early involvement on their part especially in terms of technology packaging, curriculum development and extension outreach would be desirable. Their strength in different types of technology development could prove very complementary and any competition might even be healthy. In view of the anticipated regionalization of government ministries, the project as it is presently designed could assist in spelling out the functions of the Ministry of Agriculture's regional office along the lines of IAPMP and its four thrusts. In other words, IAPMP can be replicated at the regional level even with respect to policy analysis capability. The incremental cost of this replication will probably be minimal since practically all the

components are currently available in some form, in some degree.

Organization and Staff

The nuances of organizational relationships, particularly at the levels of individuals, depend very much upon the relative quality of individuals concerned. That quality which is the basis of the degree of mutual respect, professionally and personally, would cut -- if on the positive side -- even across the normal expectations.

Therefore, it is important that in the choice of consultants, a procedure should be followed to ensure mutual consultation and acceptance before formalization of decisions of choice. An initially heavier investment which is required to improve the procedure in this regard is likely to bring about handsome returns in better relationships.

Looking at the institutional aspects of the organization for IAPM Project (See Annex A), a number of observations emerged in the course of evaluation.

At the top of the organization is an Executive Committee. Partly due to the fact that the members of the Committee are so highly placed and so busy, this Committee has not met since the launching of IAPM Project. This committee could be reconstituted with memberships chosen at lower levels, but vested with proper authority. Hopefully, the new committee could meet regularly to handle problems which are operationally important. The need for a body to meet at policy levels as represented by memberships in the current Executive Committee could be met by occasional meetings, possibly once every quarter or as the need arises. This suggestion is merely to obviate the possibility that Project delays or infirmities will be attributed to, or will actually result from, the failure of the Executive

Committee as presently constituted to meet as expected by the IAPM Project implementing staff.

The chief operating officer of IAPM Project is designated as the Overall Project Coordinator. This position is now occupied by a well-trained individual who seems to be able to perform the responsibilities of the position while handling many other responsibilities assigned to him by the Minister of Agriculture. In the Philippine Government, it is usual that an able individual is loaded with extra jobs and this, in itself, is a pretty strong justification for the present circumstances of the IAPM Overall Project Coordinator. Another viewpoint is that the statement that there is no assurance that another person who devotes full time to the job would perform better than the incumbent Overall Project Coordinator. However, considering the importance of IAPM Project as a potential contributor agricultural development in the country and considering the magnitude of the project in money terms and its many other dimensions, prudence dictates that everything should be done to make it possible for the present Overall Project Coordinator to devote even more attention to IAPM Project. A move to relieve him of marginal responsibilities should be made immediately so that he will have more time not only to provide the necessary leadership for implementation but also to strengthen the linkages, both functional and organizational.

Next to the Overall Project Coordinator is a collegiate body called the Coordinating Committee. This is probably the most active committee through which the Overall Project Coordinator could exercise effective coordinative functions.

At the frontlines of technological packaging, a Technological Packaging Advisory Committee is expected to operate. Manned by bureau director-

level personnel, it attempted to meet at one time. Its members did not attend, but sent their representatives instead. This committee's function should probably be deemphasized and, instead, emphasis should be placed on the organization of task forces of manageable size whose function essentially is to make decisions on the choice and monitoring of technological packaging that should be promoted. This concept would at the same time deemphasize the functions of the joint monitoring committee and one technical monitoring committee.

Some general statements were made earlier on the close-support organization for policy capability in the Office of the Minister of Agriculture. An additional word.

The power center of the close-support organization is the Management Staff. The members of this staff, acting as commodity desk tenders, are supported by a secondary line of staff who logically could be located at the primary sources of information serving the Ministry of Agriculture. A scrutiny of the preparation and experience of the incumbents in this group indicated that their expertise includes competencies in -

- Economics
- Business Management
- Communication
- Agribusiness
- Irrigation
- Livestock
- Finance
- Sericulture

It seems that certain gaps in the staff exist and should be filled.

These are:

- Fruits and Vegetables
- Cereals
- Other crops

In addition if Assistant Secretary M. Zosa continues to have responsibilities in connection with the Management Staff, three or four senior members of the staff should probably be added, essentially to serve as group leaders for the staff and or representatives who could attend meetings or forums requiring some degree of status.

Direction and Control

Good planning and a good organization are requisites to good direction and control. Given the plans and the organization, the critical remaining ingredient that should be considered is management style which in most cases is a given factor that influences other factors. In this regard, two brief comments are offered.

First of all, it should be recognized that Mr. Arturo R. Tanco, Jr. is the incumbent Minister of Agriculture. His style of management is quite established and will probably continue into the future. The systems involved in the pursuit of agricultural programs, including the IAPMP, must to a certain extent be adjusted to that style, to the extent that the adjustments would be flexible enough to permit changes that might subsequently be required should there be a new Minister of Agriculture. His style is attuned to crises management and has enabled him to cope with multiple responsibilities. The design of the systems for direction and control must take into consideration the circumstances attendant to his style of management.

The other comment is with respect to the system approach of the IAPM Project. As it is with this approach as applied to the field of management, its very source of strength is also its very source of weakness. The

elements of the system must be supplied in sufficient proportions; otherwise, the system weakens or collapses. Direction and control of the IAPM Project will be effective only if the entire approach maintains a running balance. At the bottom line of this balance, is the availability of trustworthy project personnel at the critical points of the organization.

The Project suffers from inadequate pre-planning which will bring appropriate and needed consultants on time. There have been delays in framing terms of reference as well as in finding the right person for the available positions. In the case of fellowships for staff development, there is lack of specification and development of manpower support for the Project which requires a great deal of lead time, thought, and forward planning.

The Evaluation Team was not able to obtain a document or report which would indicate the overall current financial condition of the project. There are individual reports on the peso budget and on the expenditure of dollars under the KSU contract, but there appears to be a need for a simple report which would indicate in one page what has been budgeted for a particular element of the project in dollars and/or pesos as well as what are the planned and actual expenditures. Such a report would have been useful to the Evaluation Team and we recommend its adoption by the project management.

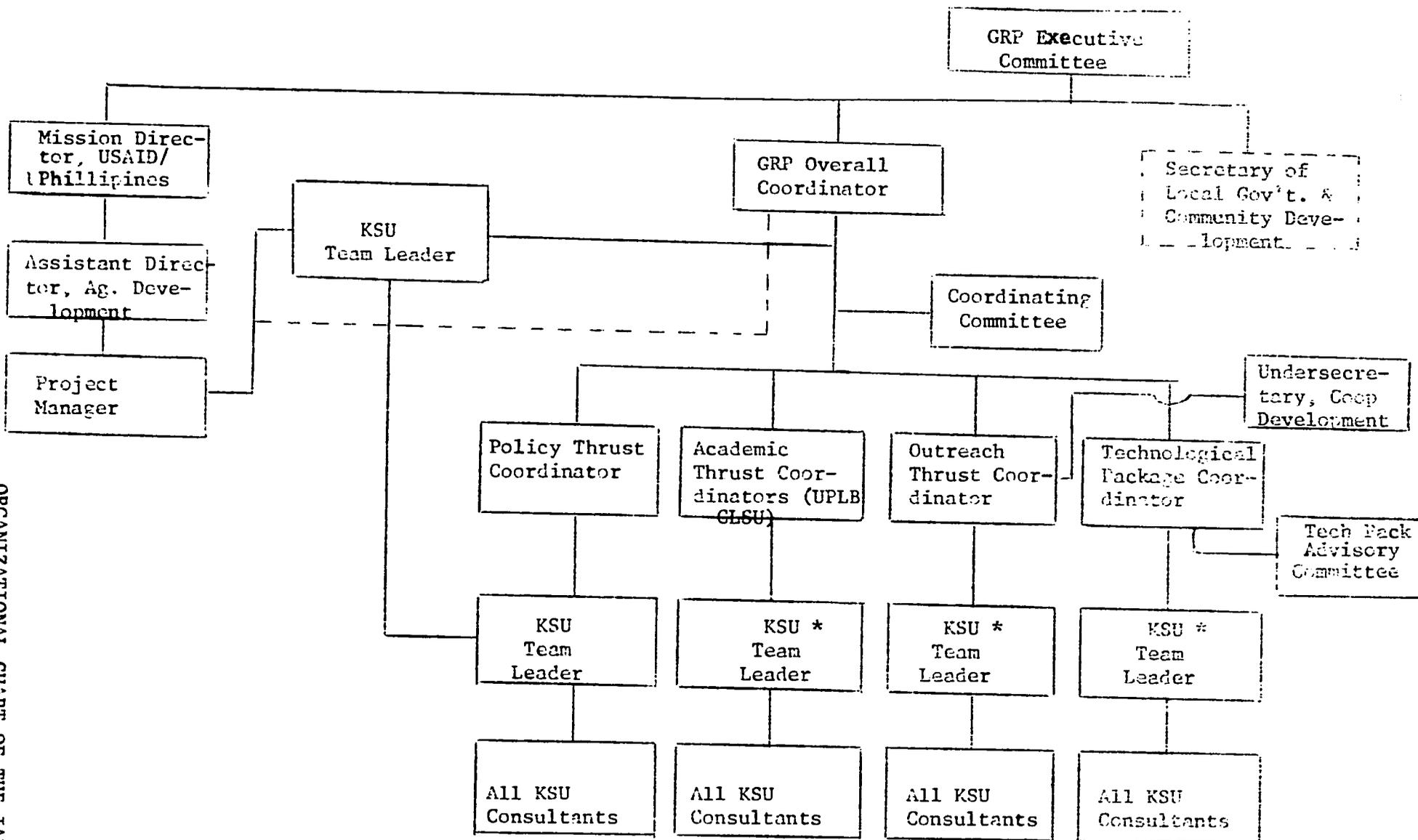
To improve direction and control of IAPMP the following steps are recommended:

- 1) House the KSU Team Leader with the GRP Overall Project Coordinator and charge him and his assistant with providing overall intellectual leadership for the university's collaborative assistance to the GRP;

- 2) Solve whatever problems remain so that KSU can establish formal working relationships with other U.S. universities to augment the scope and quality of staff available for long-term and short-term consultant positions;
- 3) Do whatever is necessary to facilitate placement of participants sent for graduate training at a variety of U.S. institutions.

It is our view that no university would wittingly place itself in the position of providing a purely contractual service on a cost basis. The work of a university is the generation of knowledge and the diffusion of that knowledge through its on-campus and off-campus educational programs. Through its work in this project, KSU should expect to provide assistance to the GRP, but also to strengthen its own capabilities and programs. The GRP should expect to benefit from access to high-quality technical assistance and support that otherwise would not be available. In turn, it should offer an intellectual and physical environment that facilitates the effective utilization of the university assistance. We believe that all questions of costs (direct and indirect) should be settled between KSU and the GRP, with appropriate AID concurrence, on a business-like basis and should not be permitted to permeate the substantive development and implementation of the project.

INTEGRATED AGRICULTURAL PRODUCTION & MARKETING PROJECT
 ORGANIZATION FOR PROJECT ACTIVITIES IN THE PHILIPPINES



* The KSU Team Leader has the same relationship to this thrust as that shown for the Policy Thrust Coordinator.

COMMITTEES OF THE IAPM PROJECT

EXECUTIVE COMMITTEE

Chairman	=	Minister, Ministry of Agriculture
Secretary	=	DLGCD
Senior Representative	=	NEDA
Executive Director	=	NFAC
President	=	CLSU
Chancellor	=	UPLB

COORDINATING COMMITTEE

Chairman	=	GRP Overall Project Coordinator
Thrust Coordinators	=	(Policy, Academic, Tech Pack & Extension/Outreach + 5 sub-project leaders)
Director	=	BCOD

JOINT MONITORING & EVALUATION COMMITTEE (Senior Level)

Co-Chairman	=	GRP Overall Project Coordinator
Co-Chairman	=	Chief, Agricultural Division, AID
Thrust Coordinators & Sub-project leaders		
USAID Program Officer		
Head, Agriculture Staff, NEDA		

MONITORING & EVALUATION TECHNICAL COMMITTEE (for reporting=staff level)

Chairman	=	M/E Officer, GRP Overall Project Coordinator's Office
		11 M/E Representatives from the National Policy (+ sub-projects), Academic, Tech Pack and Extension/Outreach (+ sub-projects) Thrusts.

TECHNICAL ADVISORY COMMITTEE (TECH PACK THRUST)

Director	=	BAEx
Director	=	BAI
Director	=	BFAR
Deputy Administrator	=	NGA
Director	=	BPI
Deputy Director-General for Research	=	PCARR
Executive Director	=	NFAC
Director	=	IPB (UPLB)

LIST OF PERSONS INTERVIEWED

- | | |
|--|---|
| <p>1. Minister Arturo R. Tanco, Jr.
Ministry of Agriculture</p> <p>2. Dr. Edgardo C. Quisumbing
GRP Overall Project Coordinator
(GRP-OPCO)</p> <p>3. Dir. Bienvenido C. Villavicencio
National Economic & Development
Authority (NEDA)</p> <p>4. Dr. Cayetano Sarmago
National Economic & Development
Authority (NEDA)</p> <p>5. Dr. Carroll V. Hess
KSU Team Leader, IAPM Project</p> <p>6. Mr. Gary E. Lewis
Asst. to the Team Leader
IAPM Project</p> <p>7. Mr. Peter M. Cody
Director, USAID/Manila</p> <p>8. Mr. Lane E. Holdcroft
Chief, Agricultural Division
USAID/Manila</p> <p>9. Mr. John A. Foti
Project Officer, IAPM Project
USAID/Manila</p> <p>10. Ms. Remedios V. Baclig
GRP-OPCO Senior Staff Officer
Tech Pack Thrust</p> <p>11. Ms. Jindra Linda L. Demeterio
GRP-OPCO Senior Staff Officer
Extension/Outreach Thrust</p> <p>12. Mr. Ernesto G. Del Rosario
GRP-OPCO Senior Staff Officer
National Policy Thrust</p> <p>13. Mr. Cesar B. Umali, Jr.
GRP-OPCO Senior Staff Officer
Academic Thrust</p> <p>14. Ms. Ciosena L. Ungson
GRP-OPCO Senior Staff Officer
Monitoring & Evaluation</p> | <p>15. Ms. Reine F. Villarosa
USAID/Manila
Monitoring Officer</p> <p style="text-align: center;"><u>NATIONAL POLICY THRUST</u></p> <p>1. Asst. Sec. Miguel M. Zosa
National Policy Thrust Coordinator
Ministry of Agriculture</p> <p>2. Director Jesus C. Alix
BAEcon</p> <p>3. Ms. Gloria A. Diño
Policy Analysis
Ministry of Agriculture</p> <p>4. Mr. Roderico Serra
Computer Enhancement
Ministry of Agriculture</p> <p>5. Dr. Julio Alunan
Planning, Analysis & Linkages
Ministry of Agriculture</p> <p>6. Mr. Mamerto Damasco
Data Systems Improvement
BAEcon</p> <p>7. Dr. Rex Daly
KSU Consultant, Policy Analysis</p> <p>8. Dr. Mark W. Rosegrant
KSU Consultant, Policy Analysis</p> <p>9. Dr. Stanley W. Driskell
KSU Consultant, Computer Enhancement</p> <p>10. Dr. Gil Rodriguez
Policy Analysis, BAEcon</p> <p>11. Dr. Leo Gonzales
Policy Analysis, BAEcon</p> <p>12. Dr. Ramon Nasol
PCARR</p> <p>13. Dr. Aida Librero
PCARR</p> |
|--|---|

ACADEMIC THRUST

1. Dean Pedro R. Sandoval
Academic Thrust Coordinator
CDEM, UPLB, College
2. Dr. Narciso Deonampo
CDEM, UPLB, College
3. Dr. Eduardo Sison
Food Science Department
UPLB, College
4. Dr. D. Ramirez
Graduate School, UPLB, College
5. Dr. Rodolfo Matienzo
ACCI, UPLB, College
6. Dean Marcelo Roguel
College of Agriculture
CLSU, Muñoz, Nueva Ecija
7. Dr. James Snell
KSU Consultant
Food Systems, UPLB
8. Faculty & Staff
CDEM, UPLB, College

TECH PACK THRUST

1. Dr. Amado C. Campos
President, CLSU
2. Dr. Filomena F. Campos
Tech Pack Thrust Coordinator
3. Dr. Cezar Salas
Food, Feed & Grains Processing
Centers Coordinator
4. Dr. Rodolfo Undan
Agricultural Engineering-
Propart
5. Dr. Fermina T. Rivera
Socio-Economic Research-
Propart
6. Dr. Josue Irabagon
Agronomy, CLSU

7. Mr. Salaador Neric
Animal Science, CLSU
8. Mr. Romy Cabanilla
Field Officer, CLSU
9. Dr. George Larson
KSU Consultant
Agricultural Engineering
10. Dr. Berl Koch
KSU Consultant, Animal Science
11. Dr. Ernest Mader
KSU Consultant, Agronomy
12. Dr. Eduardo Sison
Food, Feed & Grains Processing Center

EXTENSION/OUTREACH THRUST

1. Dir. Francisco G. Rentutat
Bureau of Agricultural Extension
2. Dir. Jesus C. Alix
Bureau of Agricultural Economics
3. Mr. Louie Villa-Real
Agribusiness Desks
Ministry of Agriculture
4. Mr. Adelino Ordoño
Bureau of Cooperatives Development
5. Mr. Antonio Arcellana
Cooperatives Foundation Phils. Inc.
6. Ms. Teresita Lalap
Management Information Service
NFAC
7. Mr. Philip E. Parker
KSU Consultant
Cooperatives Development
8. Dr. Richard C. Maxon
KSU Consultant, Agribusiness
9. Mr. William Stone
KSU Consultant, Extension Delivery
Systems

10. Mr. Jeremias Romana
Cabanatuan Rural Banks
Cabanatuan, Nueva Ecija
11. Ms. Leonila Chavez
Area Marketing Cooperatives
Cabanatuan, Nueva Ecija
12. Mr. Delfin del Rosario
Samahang, Nayon
Cabanatuan, Nueva Ecija

G L O S S A R Y

BAECON	-----	Bureau of Agricultural Economics
BAEx	-----	Bureau of Agricultural Extension
BAI	-----	Bureau of Animal Industry
BPI	-----	Bureau of Plant Industry
CLSU	-----	Central Luzon State University
IRRI	-----	International Rice Research Institute
KABSAKA	-----	Diversified crop production package for rain-fed rice production areas
Masagana 99	-----	Campaign for achieving self-sufficiency in intensive rice production
NEDA	-----	National Economic and Development Authority
PCARR	-----	Philippine Council for Agriculture and Resources Research
Propart	-----	Project partner; terms used at CLSU in preference to "counterpart"
Samahang Nayan	-----	Village level cooperative
UPLB	-----	University of the Philippines at Los Baños