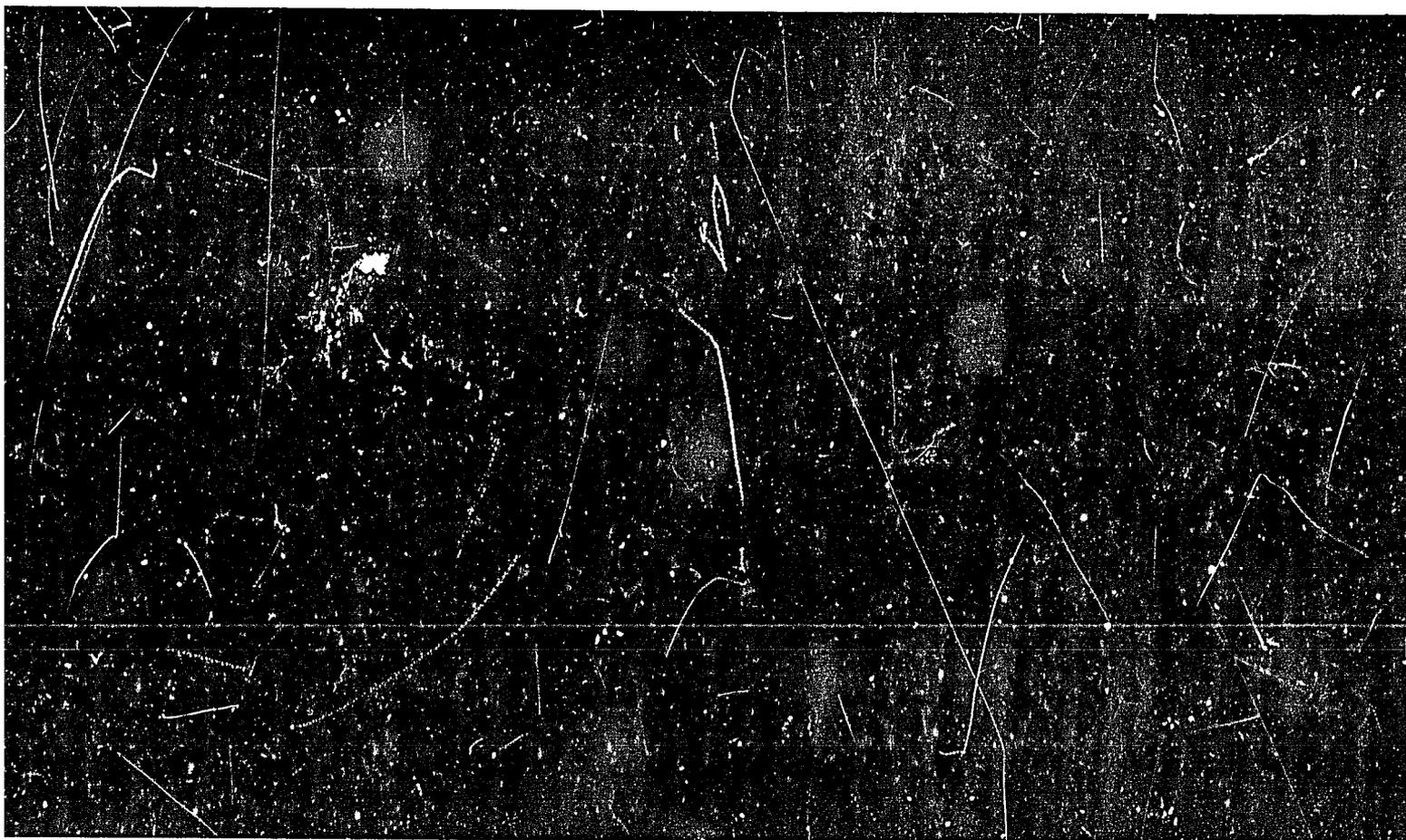


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**KKU Research Development Project Completion Report
Research and Development Institute
Khon Kaen University**

Dr. Twatchai Yongkittikul



**Thailand Development Research Institute Foundation
Prepared for USAID/Bangkok and
Research and Development Institute, Khon Kaen University
May 1990**

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THAILAND DEVELOPMENT RESEARCH INSTITUTE

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The author is solely responsible for the views presented herein, however.

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CHAPTER 1

INTRODUCTION

1.1 Background

The Khon Kaen University Research Development Project, initiated in 1983, is a collaboration between the United States and the Royal Thai Government (RTG) aimed at strengthening the university's capacity to conduct research that serves the development needs of the rural poor in the Northeast. The project focuses on strengthening, (a) the Research and Development Institute's (RDI's) capacity to administer, facilitate, and coordinate research in Khon Kaen University (KKU); and (b) the KKU faculty's ability to conduct research relevant to rural development in the Northeast. To support these activities, the United States Agency for International Development (USAID) provided 2.17 million US dollars over a six-year period (1983-1989), and the RTG provided another 1.5 million US dollars to supplement the USAID contribution. The activities funded by the project fall into four categories: rural development research, integrated farming systems research, the strengthening of RDI's administrative capacity, and promoting agricultural research at the Agricultural Development Research Center (ADRC) in the Northeast.

The project was implemented in May 1983 and was planned to end in April 1989; however, it was extended to December 1989. Two evaluations of the project's operations were planned during the life of the project period: a midterm evaluation and a project completion report. The first phase midterm evaluation, which was conducted in March 1985, reported favorably on the project's progress and achievements. It also provided recommendations for improving the

procedures and administration of the USAID grant. In addition to this evaluation, RDI, in collaboration with USAID and the Department of Technical and Economic Cooperation (DTEC), conducted two in-house assessments of the project: a follow-up assessment on the operational procedures, conducted in July 1987, and an assessment of the project's technical aspects in September 1987. The present study represents the Project Completion Report scheduled at the project's termination.

The purposes of this study are as follows:

1. To review the accomplishments of the KKU Research Development Project toward the project goals and objectives.
2. To assess the quality of research conducted.
3. To examine the technical management in support of the Agricultural Development Research Center in Khon Kaen.
4. To ascertain the beneficiaries and lessons learned from the project.

1.2 Methodology

Data for the study were obtained from RDI and USAID documents related to the Project, which included the KKU Research Development Project Paper, Midterm Evaluation Reports of the FSR and ADRC Projects, RDI Fulbright Newsletters, RDI Quarterly Progress Reports, annual work plans, minutes of meetings, and USAID and Canadian International Development Agency (CIDA) review reports. In addition, the author fully utilized the information he had obtained from previous reviews of the project, including interviews, group dialogues with the RDI staff and its board of directors, and visits to project sites. These were supplemented by additional discussions with key persons in order to fill in the gaps from the information already obtained.

CHAPTER 2

PURPOSE AND GOAL

2.1 The Mandate of the Research and Development Institute

Thailand's Northeast Region is the poorest and most underdeveloped region in the country. The incidence of poverty among villages in the Northeast is almost twice that of the national average. Among the obstacles to development are poor soils, population pressures, lack of education, and insufficient infrastructure. Since the 1960s the Royal Thai Government has implemented successive development programs, which provide basic infrastructure and technical services to improve income-generating activities of the rural poor. During the two decades following 1960, there was evidence that the poverty incidence in the Northeast had improved; however, falling commodity prices in the early 1980s have reversed the situation.

Khon Kaen University has been designated the regional university to assist in the development of the Northeast Region. In the early stages, the university emphasized training and awarding degrees in technical fields--such as agriculture, engineering, and science--which were viewed as having a direct impact on development. Research at the university was very limited, compared with the size of the faculty and the needs of the region. Moreover, the research projects undertaken were mostly single projects dispersed into different directions and were not directly linked with rural conditions. (See, for example, Harold W. See's Consultant's Report, Khon Kaen University, September 14-25, 1981; Akin Rabibhadana, Report

of the Feasibility Study for the Research and Development Institute at Khon Kaen University, July 22, 1983.)

To promote and coordinate research relevant to Northeastern rural communities, RDI was thus established in Khon Kaen University in 1980. Its primary purpose was to promote research inside the university. Later, the institute expanded its role to include research and coordination with development agencies outside the university as well.

2.2 The Goal of the KKU Research Development Project

Although RDI has a much broader goal of promoting rural development in the Northeast both inside and outside KKU, the KKU Research Development Project has a more specific purpose. Implemented in May 1983, the project primarily aimed at encouraging development-related research inside KKU, i.e., by KKU faculty and staff. The project also emphasized supporting junior and inexperienced researchers from faculties and departments that had been less involved in research. The project provided support for four categories of activities:

1. Strengthening the RDI's administrative capacity. The project assisted RDI in recruiting and training additional staff for administration. It also provided assistance for the staff to develop a financial and administrative system that provides for efficient management of research projects funded from various sources.

2. Promoting rural development research. Two categories of research were funded by the project--open competition research and commissioned research. The former consisted mainly of short-term, problem specific and often technical projects. The latter consisted of longer term and multidisciplinary research that also encouraged greater participation by those disciplines underrepresented in the open competition.

3. Farming Systems Research (FSR). This activity grew out of a previous technically oriented "cropping systems" project that had been funded by the Ford Foundation. The KKU Research Development Project has developed this project into a multidisciplinary "agroecosystems" study incorporating the concepts of human ecology in the study as well.

4. Agricultural Development Research Center (ADRC). This activity is a tripartite project supported by the governments of Thailand, the United States and Japan. The project's objective is to promote agricultural research and utilization of agricultural technologies in the Northeast of Thailand. USAID's contribution provides support for organizing workshops, training and study tours.

The first two activities are related and are under the administrative responsibility of RDI closely, whereas the other two projects are quite independent of the first two and are separately administered. The FSR project is administered by a team of researchers under the leadership of an experienced researcher at the Faculty of Agriculture, while the ADRC project is jointly

administered by KCU and the various departments of the Ministry of Agriculture and Cooperatives.

This study is an evaluation of the four activities supported by the KCU Research Development Project. The major emphasis, however, is on the project's first two components: assessing RDI's administrative capacity first and the quality of the research projects that have been promoted.

CHAPTER 3

SUMMARIZED PROJECT HISTORY

3.1 The Original Plans for RDI

The first plans to establish the Research and Development Institute at Khon Kaen University were formulated in 1979. At that time, KKU's role was viewed as that of a regional university to teach and conduct research in areas believed to be directly contributing to the Northeast's rural development: agriculture, engineering and science. In the early stages, research was scarce, and research capability was limited, since most of the researchers lacked experience. To overcome these problems, RDI was set up in 1980 through a charter. Its role at that time was limited to strengthening and coordinating research inside Khon Kaen University.

3.2 An Expanded Role for RDI

After its establishment in 1980, the institute remained inactive for two years due to the lack of supportive facilities, resources, qualified staff, and a full-time director to run it.

In 1982 Dr. Akin Rabibhadana was appointed director of RDI. Upon assuming the new position, he undertook a feasibility study to examine the viability of expanding RDI's mandate to promote rural development in the Northeast of Thailand, both inside and outside KKU. The report, completed in 1983, stressed that for rural development to be successful, a holistic and grass-roots approach is needed. To accomplish this, the report proposed that RDI should expand its role

to support and coordinate the activities of university researchers, local development agencies and village leaders in order to serve the development needs of the rural poor. With respect to research, the report noted the lack of a multidisciplinary approach in research and the particular weaknesses of social science research conducted at KKU. It therefore concluded that multidisciplinary research needed to be promoted and that social science research needed to be strengthened. The report's conclusions received much support for these strategies, and the university agreed to expand RDI's mandate and role as proposed.

3.3 The Role of External Donors in Support of Research and Institutional Development

The new director's immediate task was to strengthen RDI's administrative capacity and to mobilize resources to support research. Negotiations were conducted with major donor agencies that were known to have played important roles in the country's rural development. Through Dr. Akin's strong leadership RDI was able to attract substantial outside support for its programs. The most notable support came from USAID and CIDA.

In June 1983 USAID agreed to provide 2.17 million US dollars to support the KKU and RDI program over a six-year period. This support was complemented by the Royal Thai Government's contribution of 1.5 million US dollars. USAID funding was allocated for four main purposes: 500,000 US dollars to develop RDI's institutional capability, especially in the administration of research funds; 770,000 US dollars to support rural development research to be

administered by RDI; 800,000 US dollars to support KKU's Farm Systems Research Project; and 101,760 US dollars to support the Agricultural Development Research Center.

In 1985 CIDA made an additional five-year contribution of 4.6 million Canadian dollars for support of RDI's activities, including funding a new building, vehicles, computers, and so forth. Thus, the USAID and CIDA contributions are very complementary. While USAID support focuses on strengthening the research capability within KKU, CIDA's contribution emphasizes RDI's longer term institutional development in order to coordinate and support the efforts of university researchers, local development agencies, and village leaders in the rural development of the Northeast.

In addition to these two major donors, RDI was also able to attract significant project funds from a variety of foundations originating in the United States, the Federal Republic of Germany, Canada and Australia (see Table 3.1).

3.4 The Implementation of the USAID/KKU Research Development Project

Staffing: The KKU Research Development Project Paper specified that in order to administer the research projects funded by USAID, RDI required six persons --consisting of a financial manager, an administrative manager, three project administrative assistants, and a driver/messenger--to staff its Administration Section. Both USAID and DTEC agreed to initially finance these staff costs on a cost share basis, and they will gradually transfer these costs to KKU. Thus, when the project is terminated, KKU will be responsible for funding all staff costs either from its budgeted funds or from its own

Table 3.1
Major Sources of Revenue, 1983-1989

<u>Organization</u>	<u>Country of Origin</u>	<u>Amount Provided</u>	<u>Period</u>
<u>Core Funding</u>			
CIDA/RDI	Canada	C\$ 4.6 M	1985-1990
USAID/RDR	U.S.	US\$ 2.17 M	1983-1989
RTG/RDR	Thailand	US\$ 1.5 M	1983-1989
<u>Project Funding</u>			
CIDA/Various	Canada	B 1.7 M	1982-1987
USAID/AIM	U.S.	B 1.35 M	1984-1987
Population Council	U.S.	B 1.29 M	1983-1984
Ford Foundation	U.S.	B .7 M	1983-1985
Asia Foundation	U.S.	B .6 M	1983-1986
Volkswagen Foundation	FRG	B .6 M	1983-1984
F-E. Stiftung Foundation	FRG	B .58 M	1983-1984
McGowan International	AUST	B .4 M	1985-1986

resources. During the project's initial phase, RDI experienced some difficulty in recruiting and retaining qualified staff because qualified graduates were not willing to accept the government's low salary level and because housing costs in Khon Kaen were high. Nonetheless, RDI was able to solve these problems by hiring local personnel. Thus, when the project was terminated in 1989, staffing had been carried out as planned.

Research Promotion: During the months of July–August, 1983, the RDI director visited KKU's various faculties to explain RDI's objectives as well as the goals of USAID's Rural Development Research Project. He also explained RDI's guidelines on research topics, methodology, and budgets, and he invited faculty members to submit research proposals. His visits were very successful, as they attracted a total of 72 research proposals for the first announcement.

At the same time, in August 1983, he proposed a list of RDR committee members for appointment by the rector. The committee consists of the RDI director as chairman, the RDI deputy director for academic affairs, the KKU vice rector for academic affairs, and representatives from the various faculties as committee members. The committee's duty was to prescreen the proposals using 'limiting' criteria. Those proposals that passed these criteria were then sent to external specialists for substantive evaluation. Of the 72 proposals submitted, 10 projects were approved, and research activities began at the end of 1984.

Project Operational Review In 1985 the KRU Research Development Project was evaluated at midterm. The midterm review report provided a fair assessment of the selection procedure, the effectiveness of the administration of grant funds, and the relevancy of the research being promoted. Notwithstanding the criticisms of faculty members concerning the fairness of selection, the report determined that most of these criticisms were unfounded. In general, the report commended the considerable progress and achievements that had been gained, and recommended improvements in the screening and contracting procedures, the staffing policy, and the administration of the USAID Grant funds. It also suggested the use of the commissioned research funds to encourage junior and inexperienced researchers to participate in research.

RDI was very receptive to these recommendations. A series of staff internal meetings were conducted to discuss ways and means of administrative improvement. As a result, operational procedures and administration were improved in a number of ways, as reported in the Follow-up Assessment on the Operation Procedures, published in July 1987.

Output Assessment Also in 1987, USAID and RDI jointly conducted an in-house assessment of RDR projects that had been granted to determine the relevancy, the appropriateness of research methodology, and the extent of dissemination of research results. While the report was very positive concerning the relevancy and appropriateness of methodology, it also pointed out a marked lack of socioeconomic consideration in a number of studies. It also stressed the need for researchers to coordinate more closely with the major

recipients of the research results, such as local development agencies, government officials, and village leaders.

Project Termination The first director's term was completed in September 1989, and a new director was appointed in October 1989. USAID funding also concluded at the end of 1989, with a total of 62 research projects having been funded.

3.5 A Chronology of Project Events

The chronology of project events is summarized below:

- 1979 - Initial plans for RDI to focus on promotion and coordination of research inside KKU.
- 1980 - RDI officially established in KKU through a charter.
- 1982 - Dr. Akin Rabibhadana was appointed first RDI director
 - Dr. Akin conducted a feasibility study of RDI to expand its role in rural development in the Northeast.
- 1983 - Dr. Akin submitted his report, recommending that RDI play an active role inside and outside KKU and that it emphasize multi-disciplinary research and service to grass-roots groups.
 - USAID provided 2.17 million US dollars over six years for rural development research, farm systems research, strengthening RDI's administrative capability, and the Agricultural Development Research Center.

- 1985 - CIDA provided 4.6 million Canadian dollars over a five-year period to strengthen RDI's role in promoting rural development in the Northeast.
 - KKU Research Development Project was evaluated at midterm.
- 1986 - The Farming Systems Research Project was evaluated at midterm.
- 1987 - USAID/RDI jointly conducted a follow-up assessment on operational procedures.
 - USAID/RDI conducted an in-house assessment of RDR projects.
- 1988 - The ADRC Project was evaluated at midterm.
- 1989 - Dr. Akin completed his second term.
 - Dr. Krasae Chanawongse was appointed new director by the board of directors.
 - USAID funding ended.
 - USAID Project Completion Report conducted.

CHAPTER 4

ACCOMPLISHMENTS

4.1 RDI's Administrative Capability

RDI's administrative structure consists of a board of directors, a director, three deputy directors, and five sections with a staff of about 50 full-time employees. The board of directors is appointed by the chairman of KKU's board of trustees through the recommendation of the RDI director. The current board of directors consists of 15 members, about one-third of whom are representatives of the university's administration; the rest are specialists outside KKU, local leaders, and Non-governmental Organization (NGO) representatives. The KKU rector is an ex-officio member of the board, as are the RDI director and the three deputy directors.

At most of the board meetings, the external specialists usually play a prominent role while KKU representatives remain somewhat in the background; however, the relationship among the board members, the external specialists, and KKU representatives is quite positive. The university administration has been fairly supportive of RDI, providing budgetary support for staff salaries, utilities and maintenance expenses. Collectively, the board plays an effective role in setting policy guidelines and guiding the institute's research and administrative direction.

RDI's first director was appointed in 1982, two years after RDI was officially established. He completed his second term of appointment in 1989 and was succeeded by a new director. The first

director was a highly respected scholar with recognized experience in rural sociology and rural development. Through his strong leadership, he set a clear research and development direction, created an extensive development network in the Northeastern Region, and laid a solid foundation for the institute's subsequent development. The second director was also an acclaimed development worker, and there was a general consensus that he would provide the strong leadership necessary to continue the activities that meet the development needs of the rural poor in the coming years.

The three deputy directors assist the director in supervising the five sections, which include the Research and Evaluation Section, the Information and Dissemination Section, the Coordination Section, the Training Section, and the Administration Section. The Research and Evaluation Section and the Administration Section are primarily responsible for USAID-funded activities. However, the five sections collaborate closely with one another to ensure that the research proposals are fairly evaluated; that the disbursement is efficiently managed; that project financial reports are properly prepared; and that the research outputs are widely disseminated.

Thus, throughout the project period, both the board and the management have clearly exercised their leadership in laying a solid foundation for the institute's growth, in setting policy guidelines, and in managing and monitoring the effectiveness of the institute's activities.

RDI can also be credited for its accomplishments in building and developing a strong core staff that constitutes an impressive combination of academic and development expertise. In spite of the difficulty in recruiting and retaining qualified management, it has applied a flexible administrative system that is able to attract qualified graduates to join who also have a long-term commitment to RDI. These staffers have been instrumental--especially in the project's early phase--in establishing criteria for proposal evaluation, designing uncomplicated accounting procedures for the researchers, assisting the researchers preparing financial reports, and serving as the liaison between USAID, DTEC and KKU researchers. Their ability to handle these tasks has rapidly improved, contributing to the development of a positive relationship between RDI and KKU researchers.

Although RDI staffers tend to develop their skills and knowledge by practical experience and through participation in institute activities, they have also learned specific skills from formal and informal training courses organized by the institute. These include internal sessions on planning and annual work plan preparation, English language training, and the use of microcomputers.

The staff's administrative skills and their willingness to adapt to change are particularly worthy of praise. In the project's midterm evaluation report, for example, it was found that the selection of RDR projects took much longer than originally planned; that requiring the researchers to submit monthly reports and to place the request for quarterly disbursements together with all vouchers two weeks before the next quarter was an inflexible procedure; and that

the screening procedure failed to promote inexperienced researchers, particularly in the social sciences and education. These comments were given serious consideration, and subsequently, the proposal screening procedure was streamlined, enabling RDI to announce two research fundings per year instead of one. The evaluation criteria were also revised to ensure a fair and objective selection of proposals. Furthermore, to reduce the researchers administrative burden in preparing monthly and financial reports, RDI staff decided to take over the responsibility of preparing these reports for every project. A project monitoring system was set up to check the projects' progress, to arrange interim seminars, and to intervene when a project encountered difficulty. Finally, to encourage junior researchers, workshops were arranged to provide training on research methodology, and these researchers were later invited to participate in research projects under the supervision of experienced researchers.

To date, RDI can claim accomplishments in the development of its staff's skill in administering, promoting, and coordinating the research activity of the KKU faculty. The in-house assessment of the KKU Research Development Project conducted in July 1987 reported that none of the projects funded had failed in their implementation and that as of March 1989, 34 projects out of the total 62 projects funded had been completed.

4.2 Rural Development Research

The RDR Project is supervised by KKU's RDR subcommittee, which sets research priority, specifies requirements for research to

meet development objectives, and assesses the research proposals. The research projects funded are monitored by RDI staff to ensure that they are carried out in accordance with project objectives. By the end of 1989, all RDR funds--totaling 20.7 million baht--had been allocated, and altogether, 62 projects were funded. The distribution of research funds by discipline is shown in Table 4.1:

Table 4.1 Distribution of Research Funds by Discipline

	<u>Number of projects</u>	<u>Total amount</u> (Baht)	<u>Percentage</u>
1. Agriculture	17	6,145,348	29.7
2. Humanities & Social Sciences	6	1,780,172	8.6
3. Engineering	11	3,779,144	18.3
4. Sciences	5	2,074,318	10.0
5. Public Health	3	727,438	3.5
6. Education	3	1,072,179	5.2
7. RDI	1	225,879	1.1
8. Nursing	2	994,661	4.8
9. Medicine	6	1,914,206	9.2
10. Technology	3	731,198	3.5
11. Teachers' College	1	249,260	1.2
12. Veterinary Medicine	1	249,775	1.2
13. Dentistry	1	249,466	1.2
14. Pharmaceutical Sciences	1	249,775	1.2
15. Associate Medical Sciences	1	249,775	1.2
	---	-----	-----
Total	62	20,692,594	100.0
	==	=====	=====

In 1987 RDI organized an in-house assessment of the research projects that it has funded thus far. A total of 26 projects were selected from those that were completed and from the ongoing projects that had passed the interim seminars. These projects were classified into four groups: biological sciences, physical science, health science, and social sciences. Each group was assessed and discussed by specialists in its respective area.

On the whole, all four groups concluded that all the projects selected for assessment were relevant to the development needs of the rural Northeast. While some of the projects were carried out only to ascertain a better knowledge of rural conditions and thus did not have specific policy implications, most of the projects produced results that met the immediate needs of the farmers. It was also concluded that most of the projects had adopted the appropriate research methodology. These achievements are undoubtedly attributable to the selection procedures and the effective monitoring system.

One of the most serious weaknesses found in most of the projects assessed was the inadequate attention given to socioeconomic aspects of the study, which thereby limited the usefulness of the research results. This weakness was found in varying degrees in different disciplines, but it was the most serious in physical science research. The rice barn development project and the hydroagro resources project, for example, provided appropriate technical designs but lacked a study on the farmers' attitude and socioeconomic status to determine whether these results will be accepted by the farmers, who are the intended beneficiaries.

The institute's rural development research focuses on micro-studies of social and cultural processes, and RDI has done a very good job in these areas. What has not occurred to date is an open dialogue between researchers involved in microstudies and those involved in macrostudies. There appears to be a large gap in understanding between the two groups--one is more interested in social and cultural cohesion, while the other often focuses on economics and the market mechanism. Neither approach provides an adequate answer to rural problems. Clearly, solutions to rural poverty must be drawn from both perspectives. Thus, it is critical that the micro- and macro-studies be brought together in the service of better policies. RDI, in concert with other research agencies that focus on macrostudies, can make a valuable contribution to the government's policy-making process by organizing macro/micro dialogues.

RDI disseminates its research results through various channels, including end-of-project seminars, published reports, and summary articles in its quarterly newsletters. To some extent, RDI's influence over development agencies and researchers appears to be generally effective. Results of certain studies are referenced in NGO publications and donor reports. Internationally, a number of books and articles have disseminated RDI's experiences to audiences in the field of rural development around the world. There is little evidence, however, that RDI research has influenced government policy makers. This is an area in which RDI does not appear to be especially effective.

This weakness is perhaps due to RDI's emphasis on the grass-roots approach to development. RDI staff have created an extensive network with the NGOs and local leaders, while collaboration with government agencies has been very limited. The strength of the grass-roots approach is firsthand knowledge of local conditions and flexibility in dealing with problems. But it is also true that most nongovernmental organizations lack the technical capability to solve the farmers' problems--a capability that most government agencies must provide. Clearly, a closer collaboration with government agencies could improve the effectiveness of RDI's development efforts.

4.3 Farming Systems Research Project (FSR)

The project is an outgrowth of KCU's Cropping Systems Project funded by the Ford Foundation. Following the technical specialists' finding that the cropping systems developed at the university were not adopted by Northeastern farmers due to the complexity of environmental, climatic, technical, social and cultural factors, the researchers then developed the project into a multi-disciplinary "agroecosystems" project, incorporating the concepts of human ecology and using the methods of "Rapid Rural Appraisal" (RRA) introduced by the scientists at KCU. The FSR project is administered by a team of researchers at KCU and is collaborated by officials of the related government agencies that are the main users of the research output. Because KCU is primarily an education and research institute that does not implement development projects, such collaboration is essential to ensure that the results will either be utilized by these collaborating agencies or disseminated by them to the farmers.

The research staff of FSR is organized into three "sections" : social science, crop science and animal science; each section meets frequently to discuss progress. Meetings at the "project" level are also held periodically to promote interaction and coordination among all researchers and to maintain a clear perspective of the "systems" that guide the overall research program. One Fulbright consultant who had attended such meetings noted impressively that the interdisciplinary perspective was indeed highly observed by the research team. (See RDI'S NEWSLETTER FROM THE NORTHEAST #8, Spring 1986)

In the early phase of the project, research activities concentrated on the selection of villages as its bases for on-farm in-depth research. The activities included collection of base-line data, site description, an in-depth study of farming practices and household record keeping in order to understand how the farmers utilize their resources, how they overcome their constraints, and how they make their decisions. Later, the activities shifted to technology testing and experimenting with the transfer of technologies from one location to another. The research methodologies adopted were in fact a continuous process of testing, refining and disseminating the research approach and research results.

As the number of researchers and research projects grew, meetings of the research team became more difficult to organize. They therefore decided to reorganize the research projects by programs instead of by sections in order to increase the effectiveness of discussion and supervision.

By 1988, the research team was working effectively with the various action agencies in three major activities--training, follow-up studies and dissemination of research methods. Thus, training workshops were organized on the preparation of village development plans, area analyses of the Lampao and New Chao Praya irrigation projects, training on area analysis for the staff of the Northeast Self-help Land Settlement Center and the Small Farmer Participation Project, and training on the Rapid Rural Appraisal technique for the staff of the Departments of Agriculture and Agricultural Extension. Seminars and workshops were also organized to disseminate research methodologies and results to the staff from various government departments. Thus, throughout the project period the research team appeared to have established a close link, and a good relationship with the various action agencies in the Northeast.

The project's innovative adoption of the so-called "leverage methodologies" is also praiseworthy. By recognizing that the university is not the appropriate institution either to develop new technologies on a large scale or to take responsibility for their extension to the farmers, the project utilizes its limited resources to develop new methodologies for generating and extending the new technologies to the farmers. After developing and testing these methodologies, KKU introduces them to the action agencies that bear formal responsibility for rural development. By focusing on developing methodologies of this sort rather than on direct development and extension of technology to the farmers, the FSR Project's impact greatly exceeds its own size and strength.

The project has also notably increased researchers' awareness of the interplay between social and ecological factors in farmers' acceptance of new component technology, which represents a major advance from the situation at KKU before the project's initiation.

The FSR Project's networking with other national and international institutions was also very impressive. To date, it has organized and cosponsored six National Conferences on Farming Systems, attended by acclaimed scientists from universities in Thailand, from the various government departments, and from universities and institutions outside Thailand. The key project researchers also played an important role in establishing the Southeast Asian Universities Agroecosystem Network (SUAN), an informal association of university-based research groups in Indonesia, The Philippines and Thailand.

4.4 Technical Assistance for the Agricultural Development Research Center (ADRC)

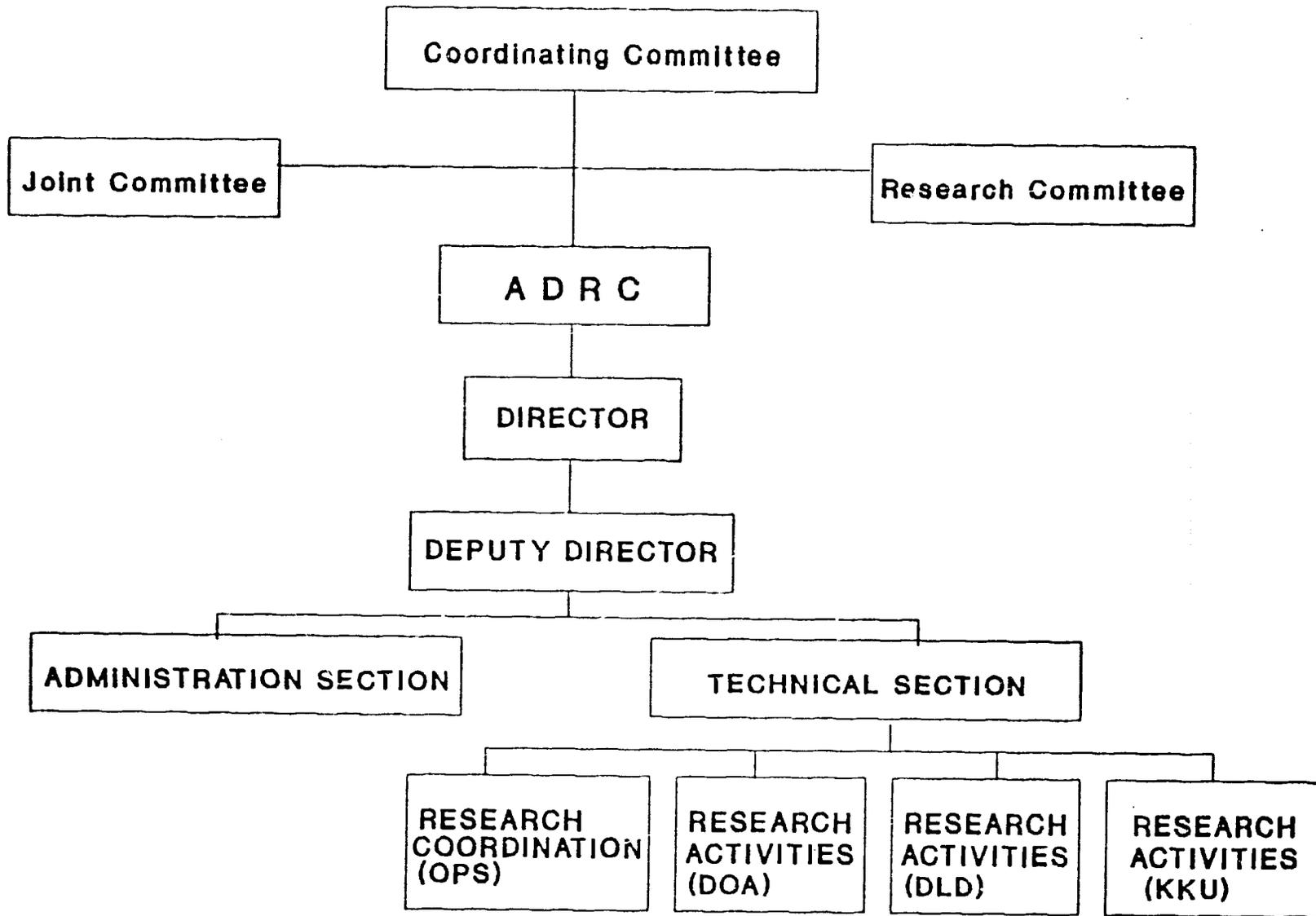
The Agricultural Development Research Center (ADRC) in Northeast Thailand is a tripartite project supported by the governments of Thailand, the United States and Japan. Initiated in 1983, the project aimed at increasing agricultural productivity in the Northeast by promoting research and utilization of agricultural technologies in the region. USAID's contribution consists of experts, support for organizing workshops, training, and study tours.

The project was jointly operated by the Department of Agriculture (responsible for research in crop science), the Department of Land Development (research in soil science), Khon Kaen University (research in similar areas of expertise), and the Office of the Permanent Secretary for Cooperatives and Agriculture (coordinating the project).

ADRC's administrative structure is shown in Chart 1. The Coordinating Committee, chaired by the Permanent Secretary, is at the highest level of administration. The Coordinating Committee sets the policy guidelines and supervises ADRC's operation. They are assisted by two other committees--the Joint Committee and the Research Committee--both of which are chaired by the Deputy Permanent Secretary. The Joint Committee is responsible for monitoring the research projects, while the Research Committee prepares ADRC's research programs. The ADRC is administered by a Director and a Deputy Director, both of whom are appointed by the Permanent Secretary. Apart from these two administrators, the ADRC does not have a staff of its own either to administer or to carry out research projects. All of its staff are seconded from the agencies collaborating in the projects.

In the early stage of implementation, the ADRC Project was hampered by a number of severe constraints. First, because all of its staff were seconded from other government agencies, they had to perform their functions at the ADRC as well as their regular

Chart 1. ADRC Administrative Structure



departmental duties. Thus, staff morale and motivation were generally very low. Second, ADRC did not have its own operating budget; its budget was allocated through the various collaborating agencies, who exercised tight control over ADRC's operation and research program. This was reflected by the fact that of the total 40 million baht allocated to this project by the Thai Government for the period of 1984-1988, only 30 million baht was actually transferred to ADRC for its operation and research. The remaining 10 million baht was used to support the central administration in Bangkok. Finally, the Research Committee, which determined the ADRC's research programs, was represented by researchers from the various participating agencies. Each committee member therefore tended to promote his own project rather than attempting to formulate a truly meaningful research program that would generate a real impact on the farmers. As a result, the research programs that were carried out were characterized by a large number of unrelated small projects.

ADRC's administration has undergone several changes since its implementation, including a change of committee members, a change of committee mandates, and decentralization of decision making. These changes have resulted in greater effectiveness of research implementation and have enabled field officers to carry out research projects that are more relevant to local conditions.

ADRC's research can be broadly grouped into three areas: natural environment and agricultural resources, crop improvement and soil improvement. During the first two years of its operation, from

1985-1987, a total of 171 projects were undertaken. Of these, research on soil improvement accounted for the largest share, numbering 109 projects, or about 64 percent of the total; research on crop improvement ranked second, amounting to 49 projects, or 29 percent; and natural environment and agricultural resources totaled only 13 projects, or about 7 percent.

ADRC's midterm evaluation conducted in 1988 found most of these research projects had high quality. Positive aspects included the sound research methodologies used, the relevant findings arrived at, and the useful database created, which will be extremely useful for further research. The evaluation report also noted, however, that the publications format still needed improvement and that the different research projects should be more related and better integrated. ARDC's management was very responsive to these comments, and made changes that resulted in considerable improvement in its operation.

The USAID-sponsored workshop--which was organized in 1987, the second year of ADRC's operation--was found to have contributed greatly in setting a clearer direction and priority of research topics. This has improved the focus and relevancy of research projects that were undertaken in subsequent years.

CHAPTER 5
BENEFICIARIES

5.1 University Community

Although the ultimate beneficiaries of RDI activities are the villagers in the Northeast, there are many groups of people who are intermediate beneficiaries: including the KKU researchers who receive funding for their projects; outside researchers and development workers who participate in research and seminars sponsored by RDI; and those who receive information disseminated by RDI. This section focuses on the beneficiaries in the university community.

Over the 1984-1989 period, RDI has spent about 700,000 US dollars (20.7 million baht) to support rural development research. Out of this amount, the KKU faculty receives 20.2 million baht, or 97.7 percent of the total. Researchers outside KKU receive 0.25 million baht, or 1.2 percent, and RDI staffers receive 0.23 million baht, or 1.1 percent. Clearly, almost all of the research funds are given to the KKU faculty.

In RDI's report, "Building Capacity: Report on the Operational Review of the Research and Development Institute," published in October 1989, it was noted that there is a general feeling among the faculty members that RDI has spent too much of its funding to support research outside KKU. The majority of KKU faculty still believe that RDI should limit its activity to promoting research only. Some faculty administrators are also concerned that RDI's research funds are not fairly distributed among the different

faculties, and they think that the faculty deans should play a role in determining research topic priorities and perhaps have input in judging research proposals. Faculty members from the natural and physical sciences also believe that RDI places too much emphasis on the humanities and social science research. They also believe that RDI staffers have an advantage over other faculties in winning research awards. Most of these negative comments are in fact unfounded, as Chapter 4 clearly indicated. By far, agriculture and engineering were allocated much larger amounts for research--accounting for 29.7 percent and 18.3 percent respectively, compared with 8.6 percent allocated to the humanities and social sciences. Similarly, medicine and sciences also received significant shares of the total resources, accounting for 9.2 percent and 10 percent, respectively. With regard to the opinion that RDI's staff might have an advantage over other faculties, RDI financial reports reveal that the only research project under its name--amounting to 225,879 baht--was actually undertaken by a research team at the faculty of agriculture. This project was classified under RDI simply because the project director was an RDI staff member, even though he was at the time seconded to the faculty of agriculture. In fact, RDI's staff has not received any funding from RDI resources to date. The RDI director explained that it was RDI's policy not to encourage its staff to seek RDI funding for research. All of the studies carried out by its staff involved contract work funded by different external agencies.

It is interesting to note that there were some inconsistencies in the criticisms of RDI when comparing the interviews conducted in 1985 and in 1989. In the earlier interviews, for

example, most faculty members stated that research in the fields of the humanities, social sciences, and education had not received sufficient support; the 1989 interviews showed contrary views. Again, the 1985 interviews cautioned the role of administrators in proposal screening, suggesting that they might bring faculty politics into the screening process; the 1989 interviews suggested the faculty deans should have a voice in project selection.

Overall, however, there is considerable improvement in the faculty's attitude toward RDI. There is a general consensus that the screening process is fair and that RDI's financial management was very efficient and helpful to the researchers. RDI is also highly commended by the faculty for its training on qualitative research, which greatly benefited junior faculty members. Many of them had the opportunity to participate in commissioned research under the supervision of experienced researchers after they had completed the training sessions. The 1989 report noted RDI's strong commitment to strengthen the KKU faculty's research capability, and RDI was very successful in accomplishing this goal.

RDI has clearly raised the level of awareness and developed the skills of young KKU faculty members in development-oriented research. The KKU Research Development Project has provided the "carrot" of research grants to motivate faculty members to make their research relevant to the needs of the rural poor. The impact of this experience for young faculty members is likely to extend well beyond the life and scope of the KKU Research Development Project.

5.2 Beneficiaries Outside KKU

RDI frequently organizes workshops, meetings, and seminars to share information and experience with government officials, NGO workers, and farmer groups. It also provides training about working with farmers for NGO field workers, conducts evaluations of their work, and serves as an information center for NGOs.

The largest group of beneficiaries outside KKU appears to be the NGOs. RDI has played an important role in building the capacity development of NGOs in the Northeast. The leadership of RDI has maintained credibility with all elements of the NGO movement. The institute has opened up the university's resources to NGOs and local leaders and has provided them with timely and relevant training, information, and coordination.

The impact of RDI's activities upon the rural communities is less clear, however. Although RDI has development activities in virtually all provinces in the Northeast, choosing a village in which it plans to initiate a development activity is primarily determined by the existence of local leadership or by the presence of an active NGO in a village. This could be a good strategy because its limited resources dictate that RDI must be selective and must therefore concentrate on villages with a good potential for success. However, this strategy tends to eliminate many backward villages that should be given high priority for development assistance. These are the villages that are normally overlooked by the government agencies as well.

To remedy this situation, RDI has initiated an observation tour program for villagers from the poorest, most neglected areas to visit other villages to share their experience in problem solving. So far, this program has produced no dramatic results, nor has there been any attempt to systematically assess its impact. It might be argued that such an impact cannot be measured in quantitative terms, much less in the short run. But rigorous follow-up assessment would be critical to improve RDI's effectiveness and to ensure that RDI achieve its desired goals in the long run.

CHAPTER 6

LESSONS LEARNED

Over the years, RDI has grown rapidly in terms of both staff development and administrative capability. This rapid growth has enabled RDI to play an important role not only in developing the KKU faculty's research capacity, but also in promoting the application of innovative research methods in the region--particularly in the areas of qualitative research, participatory research, and the social sciences in general. It has raised the awareness and developed the skills of young faculty members in development-oriented research, and it has acted as a focus for attracting external funds for research. Through its leadership, RDI has gained widely recognized prestige and credibility and has played an important role in building the capacity of NGOs in the region through its training, coordination, and networking activities. In view of these accomplishments, the KKU Research Development Project can claim considerable success in achieving its objectives.

There are several reasons for the achievement of these successes. First, the project specifies clear and feasible objectives to strengthen RDI's administrative capability in promoting and coordinating the KKU faculty's research in development-related topics. It also specifies staff requirements that would enable RDI to carry out its planned activities.

Second, the project provides for a flexible administrative framework that streamlines procedures and provides a consultative

process enabling the project's management to determine priorities, appropriate work plans, and operational procedures. RDI's leadership had considerable flexibility in determining research priorities and resource allocation, in designing appropriate selection procedures, and in simplifying the financial and accounting procedures to a large extent. The relationship of representatives from RDI, USAID and DTEC has been generally positive, and all parties concerned have been very cooperative in solving the problems that were encountered.

Third, the project paper provides for an effective monitoring system that has enabled the staff to monitor project implementation, thereby ensuring that activities are carried out as planned and that project objectives are met. The monitoring system includes the research projects' financial reports, in-house assessment of operational procedures, in-house assessment of the technical aspects of the research projects, research-site visits, and the midterm evaluation of the project. These monitoring activities provide valuable information on the progress of activities and the problems encountered, and the information in turn is utilized as input for procedural reviews and improvement.

Finally, the project's disbursement procedures and mechanisms were also noteworthy of praise. Under the mutually agreed procedures, funds are advanced to RDI on the basis of requests, based on annual plans that are approved by the Board of Directors and the quarterly expenditure plans that are approved by USAID. The advance is closed out by accounting for funds spent and subtracting any remaining balance from the request for a new advance. USAID/DTEC then

arrange for a quarterly independent audit of the expenditures. These disbursement procedures and mechanisms thus provide considerable flexibility for RDI to carry out its activities without unnecessary delays. It is recommended that this procedure, which permits the flow of funds from USAID directly to the implementing agencies, be applied to all types of research and study programs in the future.

Overall, the project can claim successful achievement of its objectives, and all parties concerned--including USAID, DTEC, KKU, and RDI's leadership and staff--can be proud of the project's achievements.

CHAPTER 7

REVIEW OF WARRANTIES AND PROJECT COVENANTS

Article 4 of the Grant Agreement describes the Conditions Precedent to Disbursement. Sections 4.1, 4.2 and 4.3 of this Article describe Conditions Precedent to Final Disbursement, Additional Disbursement and the Disbursement after October 1, 1985, respectively.

USAID issued PIL No. 2 dated July 19, 1983 to satisfy Section 4.1. For Section 4.2, USAID issued 3 PILs, No. 3, 7 and 8 dated September 9, 1983, March 21, 1984, and June 1, 1984 to satisfy it.

SECTION 4.3 Conditions Precedent to Disbursement for Activities after October 1, 1985

Prior to the disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, for any purpose after October 1, 1985, the Grantee will, except as the Parties may otherwise agree in writing, furnish in form and substance satisfactory to A.I.D., evidence that the first project evaluation has been completed and that the Grantee and USAID have reviewed implementation procedures and have agreed upon charges as needed.

The first phase mid-term evaluation was conducted in March, 1985. The matrix showing a list of key recommendations and related courses of action toward that recommendation was developed and agreed upon between RDI and USAID as stated in the letter to Director of RDI dated June 10, 1985.

The following describes status of the Project Covenants as stated in Article 5 of the Grant Agreement.

SECTION 5.1 Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter: (a) evaluation of progress toward attainment of the objectives of the Project; (b) identification and evaluation of problem areas or constraints which may inhibit such attainment; (c) assessment of how such information may be used to help overcome such problems; and (d) evaluation, to the degree feasible, of the overall development impact of the Project. The Grantee agrees to provide AID, within six months of the date of this Agreement, an evaluation plan and program for monitoring and evaluation of the Project.

The above covenant was satisfied by USAID as recorded in PIL No. 13 dated November 2, 1984.

SECTION 5.2 Other Special Covenants. The Grantee agrees, except as A.I.D. may otherwise agree in writing:

- (a) to ensure that KKU will carry out the project in accordance with the terms and provisions of this Agreement;
- (b) to ensure that KKU will provide and maintain adequate staff at RDI throughout the life of the Project;

- (c) to arrange for short-term regional training and study tours and for services of expatriate consultants when requested by KKU, as provided for in the annual financial plan or in any modification of such plan;
- (d) to ensure that KKU widely disseminates the findings of project-funded research to potential user groups and beneficiary farmers;
- (e) to ensure that the procurement and use of pesticides, if any, for purposes of the project shall comply with A.I.D.'s environmental procedures regarding the procurement and use of pesticides.

KKU, under the direction of RDI has fulfilled the above special covenants. The 6 project staff are being supported by the RTG funds by the end of the project. The financial work plan has been developed through annual workshops. The dissemination of project results for both RDR and FSR was far beyond expectation. Dissemination occurred through various channels both domestically and internationally. RDI arranged end of project seminars, published reports, synthesized research finding into practical applications and summarized articles for the RDI quarterly newsletters. The book "Rapid Rural Appraisal in Northeast Thailand", which are case studies prepared by FSR working group are now distributed worldwide.

CHAPTER 8

POST-DISBURSEMENT REPORTING AND RESIDUAL MONITORING

The project has completed all activities within the Project Completion Date of December 21, 1989. We expect that all disbursement will be completed ahead of the terminal date of disbursement, which is September 30, 1990. Recently, the amount of U.S. \$47,803.00 unearmarked funds has been deobligated. The rest of unspent funds will be deobligated after the TDD or even sooner. There will be no requirement for post-disbursement reporting after the TDD.

CHAPTER 9
SUMMARY FINANCIAL STATEMENT
 (U.S.\$)

(As of April 30, 1990, for the project period of 6/30/83 - 12/31/89)

<u>Project Element</u>	<u>Project Title</u>	<u>Obligation</u>	<u>Commitment</u>	<u>Actual Expend.</u>	<u>% of Exp. to Comm.</u>
01	Farming Systems Research	682,096	682,096	682,096	100
02	Rural Development Research	728,347	728,347	728,347	100
03	U.S. TA - Short-Term	95,878	95,878	95,878	100
04	Local Consultants - S/T	25,040	25,040	25,040	100
05	RDI Staff Support	62,722	62,722	62,722	100
06	Training	56,296	56,296	33,371	59
07	Workshops	40,656	40,656	40,656	100
08	Publications	23,871	23,871	23,871	100
09	Evaluation	21,007	21,007	21,007	100
10	Contingency	0	0	0	0
11	KKU/RDI Project Activities	<u>386,284</u>	<u>385,779</u>	<u>208,464</u>	<u>54</u>
Project Totals		<u>2,122,197</u>	<u>2,121,692</u>	<u>1,921,452</u>	<u>91</u>

At the end of CY 1989, the project has spent 91 percent of total commitment which is very high for AID assistance projects. The percentage is 100 percent for all types of research, FSR and RDR, thus fulfilling the project objectives.

Please note that the RTG contribution for in-kind support from Khon Kaen University on the staff salaries, office space (including research spaces and office equipment) was worth about U.S.\$1.3 million. DTEC counterpart funds to pay for the RDI staff salaries and the local current cost of technical assistants amounted to about U.S.\$152,000.

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