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PD-AAL-943

COOPERATIVE AGREEMENT NO. AID 492-CA-1707
Project No. 498-0265

ANNUAL PROGRESS REPORT

PROJECT TITLE: Extension of Small Scale Agricultural Equipment
The International Rice Research Institute

The Cooperative Agreement was signed on September 1, 1980. Strategy statements and work plans were developed for each country.

Activities for specific areas are reported as follows:

1. Headquarters -

Staffing. In September of 1981, only two senior staff were in the Department. C. W. Bockhop was appointed Head of the Department on July 1, 1980; and Bart Duff was on duty as head of the Economics Section. Dr. John Wicks was appointed as Associate Agricultural Economist on project 1466, Consequences of Mechanization. An Associate Agricultural Engineer was appointed in September 1981 and an Agricultural Engineer was appointed in April 1981. The staffing of the Department presently is:

Dr. C. W. Bockhop, Head of the Department
Mr. M. Ariyoshi, Agricultural Engineer in charge of Test and Evaluation (appointed April 1, 1981)
Mr. M. Nafziger, Associate Agricultural Engineer in charge of Design and Development (appointed September 1, 1980)
Mr. Bart Duff, Associate Agricultural Economist (on study leave until March 15, 1982)
Dr. John Wicks, Associate Agricultural Economist (appointment until August 31, 1982)
Mr. Ernst Henke, Research Associate (supported by GTZ until March 1982)
Dr. B. J. Cochran, Visiting Scientist (July 1, 1981 to June 30, 1982)
Dr. J. Lingard, Visiting Scientist (April 1, to December 31, 1981)

Training.

A training course was held June 1-12, 1981. Twenty-one participated from Bangladesh, Burma, Ghana, India, Indonesia, Malaysia, Nigeria, Pakistan, Sri Lanka, Thailand and Vietnam.

A second course was held July 6-17 for 15 from the Philippines. The latter school included personnel from industry, Ministry of Agriculture and the University of the Philippines at Los Baños.

Design and Development. A Project Review Committee has been activated to review Agricultural Engineering priorities in design and development. The Committee was activated in September and has had two meetings. Departments of Economics, Multiple Cropping, Entomology, Rice Production and Training and Research, Irrigation and Water Management and Agronomy are represented. Inputs have been requested from representatives in the Outreach Programs and are included in the evaluation of projects.

Although evaluation of all projects, have not been completed, the reaper project, seeders and planters, and deep placement of fertilizers have emerged as the most important current problems. As the projects continue to be reviewed the plans for 1982 and 1983 will be developed.

In the past year, work has continued on a 1 meter reaper, 3-HP power tiller, and the 1.6 meter reaper. The blueprints for these will be released in early 1982. Work has been initiated on developing equipment for the deep placement of fertilizer. Several devices have been developed and are undergoing tests.

Studies. Attached is a copy of a paper presented at the Workshop on "Consequences of Small Rice Farm Mechanization in Asia". The paper discusses the changes in the Philippine Agricultural Machinery Industry. Also attached is a report of a survey of manufacturers and the IRRI designed implements they fabricate. Note that 3,420 implements were manufactured by IRRI cooperators and 1561 were produced by non-IRRI cooperators of the firms included in the survey.

2. Philippine Outreach.-

The work plan for 1980-81 called for the establishment of an Industrial Extension project with the Ministry of Agriculture. Dr. Robert Stickney joined the staff on June 16, 1981. He has established himself at the Agricultural Engineering Division of the Bureau of Plant Industry in Manila.

The personnel for the project have been hired and have attended a training course July 6-17, 1981. Fifteen from government, Industry and the University attended. Ten more will attend a course in December 1981.

An Advisory Committee has been established as called for in the strategy statement and original work plan. The Committee held two meetings in 1981 to approve the project outline and work plans for 1982. The Chairman of the Advisory Committee is Deputy Minister Peter Lim, of the Ministry of Agriculture.

A copy of the Work Plan for 1981-82 and a Progress report is attached. The work of the Philippine Outreach Program is progressing since Dr. Stickney has joined the program.

3. Thailand -

A copy of the progress report from Mr. Ray Fischer is attached. A copy of the proposed budget for 1981-82 is attached. Also attached is a copy of a paper by Ray Fischer entitled "Farm Machinery for Upland Rice" and a copy of his final report on the "Buffalo Plow" which Mr. Fischer redesigned and tested.

The report includes data on number of new firms signed as cooperators and data on the number of IRRI designed machines fabricated.

The IRRI designed manual transplanter has been having difficulty under Thai conditions. Most of the problem is with mat-type seedling culture. This is a problem with many countries in Southeast Asia and the staff at IRRI-Los Baños are conducting tests with the hopes of modifying the seedling culture to be more like the traditional methods of growing seedlings.

4. Indonesia -

A copy of the Progress Report from V. R. Reddy is attached.

A major activity started in 1981 was participation in a new project in the Luwu district, South Sulawesi. This project is in cooperation with the local USAID Mission for a period of two years. The project will compare imported 4-wheel tractors with locally built IRRI designed two-wheel tractors.

5. India.-

The project in India has been delayed due to the lack of approval by the government. The Deputy Director General of the Indian Council of Agricultural Research assures us that the IRRI project has their approval and will be approved by the government of India.

It has been reported that the new director for the Central Institute of Agricultural Engineering will be appointed the latter part of December. A revised Strategy Statement and Work Plan will be developed with him after his appointment.