

9311026-6  
 PLCAA6-225-B1

**ORIGINAL**

CLASSIFICATION  
 PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE Consequences of Small Rice Farm Mechanization on Production, Incomes and Rural Employment in Selected Countries of Asia	2. PROJECT NUMBER 931-1026 931-	3. MISSION/AID/W OFFICE DS/AGR/ESP
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) Team <input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES	6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
A. First PRO-AG or Equivalent FY <u>77</u>	A. Total \$ <u>653,600</u>	From (month/yr.) <u>Sept 1977</u>
B. Final Obligation Expected FY <u>78</u>	B. U.S. \$ <u>653,600</u>	To (month/yr.) <u>Sept 1979</u>
C. Final Input Delivery FY <u>82</u>		Date of Evaluation Review <u>Oct 1-7 1979</u>

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR		
A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., sirgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Request a 2 year unfunded extension of the project	Rehnberg	1/80
2. Request that RAC authorize the initiation of analysis except for the regional modelling specifications and that this be presented to RAC by January 1981.	Rehnberg	1/80
3. Request that the contract be modified to delete Pakistan as a study site and that the budget for Pakistan be reallocated to the remaining three countries.	Rehnberg	1/80

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Financial Plan	<input checked="" type="checkbox"/> PID/T	_____
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PID/C	<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Project Agreement	<input type="checkbox"/> PID/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A. <input type="checkbox"/> Continue Project Without Change
B. <input type="checkbox"/> Change Project Design and/or
<input checked="" type="checkbox"/> Change Implementation Plan
C. <input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Dr. Rex Rehnberg, Project Manager *Rex Rehnberg*  
 DS/AGR, *NIETH BYERS* *MB 1/9/80*  
 DS/AGR/ESP, Rollo Ehrich *RE 1/7/80*  
 DS/AGR, Mary Mozynski *ME 1/7/80*  
 DS/PO, Patrick Gage  
 DS/PO/ESP, Miloslav Rechcigl *MR* Date *1/13/80*

12. Mission/AID/W Office Director Approval

Signature: *Eugene M. Babb*  
 Typed Name: Eugene Babb, DAA/DS/FN  
 Date: *1/28/80*

### 13. SUMMARY

This statement is filed following a team review of the project in early October, 1979 (see attached draft of report).

In the judgement of the team the project is proceeding well after getting off to a very slow start. A total of eleven recommendations were made by the team. Most of these recommendations pertain to the details of project management and operations and have been noted by the project manager and project leader at IRRI. In several cases corrective actions have already been taken.

Three recommendations will require action by AID/Washington and are spelled out in section 8 of this report. They relate to extending the life of the project, requesting a 1 year delay in presenting the proposed regional modelling specification to the Research Advisory Committee (RAC) and modifying the contract to delete Pakistan from the study.

### 14. EVALUATION METHODOLOGY

This is a regular team evaluation conducted at the end of the second year of the project as specified in the project paper. The team was composed of the following members:

Stanley S. Johnson, USDA/ESCS, Davis, California  
Martin Billings, USAID/Manila, Philippines  
Rex D. Rehnberg, DS/AGR/ESP, and Project Manager

The review was scheduled to correspond with a 4 day workshop for project participants in Los Banos, October 1-4. Team members attended the workshop, interviewed participants and met with IRRI administrative personnel the day following the workshop. In addition the Project Manager visited the study sites in the Philippines preceding the workshop and in Indonesia and Thailand the following week.

### 15. EXTERNAL FACTORS

Three events have been responsible for this project deviating from the original purpose and timing outlined in the project statement:

- a) Although the contract was signed in September, 1977 nearly 10 months passed before the revised project proposal was approved and the funds made available to IRRI.
- b) The approved project statement called for a four country comparison; one of these countries being Pakistan. Events beyond the control of the contractor

make it impossible to initiate work in Pakistan. This event will require a contract modification.

c) Drought conditions in two of the sites, South Sulawesi in Indonesia and in Thailand raise questions concerning the representativeness of the data being collected. An additional year of data collection in these two sites is planned in order to provide a check on the data.

## 16. INPUTS

Except for minor problems in coordinating the activities among the three countries the project is proceeding well. The events listed above (in 15), however, have placed the project behind schedule.

## 17. OUTPUTS

Three seminars/workshops have been held as a part of project activities. Two have been published and the third is in process. The results of the research will be published at a later date.

Methodologies for selecting the sites, gathering the data and performing elementary analysis have been agreed upon. Specification of the model to be used in the regional analysis is yet to be completed.

## 18. PURPOSE

The project has two major purposes:

- a) To provide LDCs, AID and other development practitioners with an improved assessment of food output, employment and income effects of mechanical technology at both farm-level and more macro levels.
- b) To develop and strengthen capability of in-country institutions to conduct technology impact studies in the future.

The first objective can not be achieved prior to the completion of the research and the publication of the results. Progress toward this end at this time is judged to be satisfactory.

As to the second objective, in-country scientists have been actively engaged in the site selection and data gathering phases. Limited analytical work has been performed to date but the workshop was largely devoted to data management and analysis issues. Again the judgement is that the project is proceeding satisfactorily toward the achievement of this objective.

19. GOAL/SUBGOAL

Not relevant at this time.

20. BENEFICIARIES

The primary beneficiaries to date have been the staff members actively associated with the project. The project has provided them with an opportunity to engage in an organized research activity which should enhance their abilities to conduct research when this project is terminated. Those who will benefit from the results of the research have not been reached at this stage.

21. UNPLANNED EFFECTS

Not relevant at this time.

22. LESSONS LEARNED

Two overall impressions from the conduct of this review seem worthy of comment; one positive and the other negative.

Having a staff member from USAID/Manila serve as a member of the review team worked very well in this case. He brought to the team knowledge of the customs and practices of the area which added significantly to the review process. Further he provided a link between the mission and a centrally funded project which is sometimes lacking. His close association with the project for about 10 days should enhance the usefulness of the project findings to the Mission.

In retrospect it seems unrealistic to place a three year time limit on a research undertaking of this type. The time and effort required to set up cooperating institutions in three countries should not be underestimated. With two years of data collection required in some cases it seems unrealistic to expect that all of the remaining components of the research could be performed in one year.

23. SPECIAL COMMENTS OR REMARKS

Attachment A - Draft of Team Evaluation Report (34p)

**PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

Life of Project:  
From FY 77 to FY 80  
Total US Funding \$635  
Date Prepared: 4/18/77

Project Title & Number: Effects of Mechanizing Grain Producing Small Farms Upon Food Output, Income and Employment - #1026

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <ol style="list-style-type: none"> <li>To increase employment and income opportunities for rural poor of LDCs.</li> <li>To increase food grain production.</li> </ol>	<p>Measure of Goal Achievement:</p> <ol style="list-style-type: none"> <li>Increased use of employment and income creating technology in LDCs.</li> <li>Reduced underemployment of rural poor.</li> <li>Increased domestic production of agricultural inputs.</li> <li>Increased food grain output at lower cost.</li> </ol>	<ol style="list-style-type: none"> <li>Sample surveys to estimate local changes in employment and income.</li> <li>Review of agricultural input and output data.</li> <li>Survey of FAO estimates of changes in unemployment and underemployment in the agricultural sector of LDCs.</li> </ol>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> <li>Governments are able to promote appropriate technology to increase rural employment opportunities.</li> <li>Increased ability to estimate impacts of capital and labor intensive technologies will affect government decisions to encourage specific technologies.</li> </ol>
<p>Project Purpose:</p> <ol style="list-style-type: none"> <li>To provide LDCs, AID and other development practitioners with an improved assessment of food output, employment and income effects of mechanical technology at both farm-level and more macro levels. To develop and strengthen capability of in-country institutions to conduct technology impact studies in the future.</li> </ol>	<p>Conditions that will indicate purpose has been achieved: End of project status:</p> <ol style="list-style-type: none"> <li>Greater availability of data on the effects of farm mechanization on employment, food production, and income distribution.</li> <li>Increased attention being given by agricultural planners to the development and use of appropriate agricultural technology.</li> <li>Improved ability to evaluate the potential effects of alternative mechanical technology packages designed to increase food production.</li> </ol>	<ol style="list-style-type: none"> <li>Comprehensive review of project reports and their distribution.</li> <li>Changes in the type and number of studies being carried out on appropriate technology.</li> <li>Changes in type of equipment sold and used by farmers.</li> </ol>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> <li>Government agencies in LDCs and international research groups willing to cooperate by supplying data and personnel for research.</li> <li>Some of the basic field data required for the work is already available in several countries.</li> </ol>
<p>Outputs:</p> <ol style="list-style-type: none"> <li>Reports, articles and seminars which identify how different technologies affect employment and income in production of cereal grains.</li> <li>Methodologies designed to assess the effects of mechanical technologies used in agricultural sector planning.</li> </ol>	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> <li>At least one major report and conference and two workshops.</li> <li>Studies in at least five countries where A/D/C has research associates.</li> <li>Information and methodologies developed by the project used in at least one of the four Asian countries.</li> </ol>	<ol style="list-style-type: none"> <li>Review and analysis of project reports and studies.</li> <li>Analysis of Agricultural planning systems in selected countries.</li> </ol>	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> <li>Researchers with extensive field experience in the four Asian countries are available to undertake the studies.</li> <li>Work will be carried out in close cooperation with at least one LDC agricultural planning unit.</li> </ol>
<p>Inputs:</p> <p>Specialists in the analysis of appropriate agricultural technologies.</p> <p>Support for LDC technicians.</p>	<p>Implementation Target (Type and Quantity)</p> <ol style="list-style-type: none"> <li>Specialists: 3 man years</li> <li>Support Staff: 24 man years</li> </ol>	<ol style="list-style-type: none"> <li>PAR</li> <li>On-site inspection.</li> </ol>	<p>Assumptions for providing inputs:</p> <ol style="list-style-type: none"> <li>LDC agencies and international research and development organizations willing to provide support facilities and in-country contacts.</li> </ol>