

PD-AP 7-154

**EXECUTIVE SUMMARIES OF EVALUATIONS AND SPECIAL STUDIES
CONDUCTED FOR A.I.D. IN ASIA
IN FISCAL YEAR 1985**

**Bureau for Asia and the Near East
Office of Development Planning
Agency for International Development
Washington D.C.**

**EXECUTIVE SUMMARIES OF EVALUATIONS AND SPECIAL STUDIES
CONDUCTED FOR A.I.D. IN ASIA
IN FISCAL YEAR 1985**

**The Bureau for Asia and the Near East
Office of Development Planning
Agency for International Development
Washington D.C.**

**Prepared by
Barbara Pillsbury, Ph.D.**

July 1986

PREFACE

In keeping with A.I.D.'s emphasis on using evaluation findings to improve project planning and implementation, the Asia and Near East Bureau is making available this collection of summaries of evaluations and special studies conducted on A.I.D.-supported projects and programs in Asia during fiscal year 1985 (October 1, 1984 to September 30, 1985).

This is the fifth year that the Bureau has provided this resource. Together the five volumes, covering fiscal years 1981 to 1985, contain about 280 summaries of evaluations and special studies and provide an overview of the impacts of A.I.D.-sponsored projects and programs in Asia.

This collection provides a record of Bureau evaluation accomplishments in Asia as well as concise, easily accessible information on the outcomes or relatively recent status of specific projects. This volume, and the four companion volumes, should be a valuable reference for project designers in the field and project reviewers in Washington, as well as for contractors and developing country personnel with whom A.I.D. works.

Fifty-four reports are summarized in this volume. (The actual number of evaluations conducted for A.I.D. in Asia in FY 85 was higher than the number of evaluations summarized here, but their reports were not received by AID/Washington in time to be included in this report.)

This volume was written and compiled by Barbara Pillsbury, Ph.D., who served as Chief for Research and Evaluation in the Asia Bureau from 1979 to 1981 and also prepared the 1983 volume in this series. To help the reader derive "lessons learned", Dr. Pillsbury has included in each summary a section titled "Project Design and Policy Implications." The summaries are based on the actual reports, complemented where necessary by Dr. Pillsbury's knowledge of many of the projects and by information contained in the 1981-1984 executive summaries.

Most of the projects and programs contained in this volume were initiated in the late 1970s and early 1980s when A.I.D. policy gave priority to basic human needs projects to benefit poor rural populations as directly as possible through strategies involving community participation and appropriate technology. This set of evaluations thus presents valuable insights into how basic human needs projects have fared in

implementation. Many of the projects (perhaps half) also had institution building (or "strengthening the institutional capacity" of the host-country implementing agency) as part of the project purpose or strategy, and the evaluations tell us about achievements in this area as well.

Dr. Pillsbury found several recurring, albeit not surprising, themes in the evaluations and recommends that project designers be alert to them:

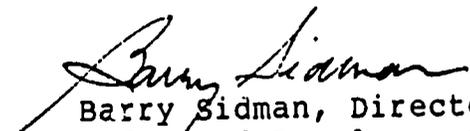
1. The quality of personnel is a major determinant of success. In most of the projects that are judged successful, good project managers and other key personnel are singled out as a major reason for the success. In several projects, exceptional personnel were even able to turn a poor project design into a case of successful implementation.

2. Many implementation difficulties can be traced to inadequacies in project design--specifically, inadequate institutional analysis during the planning stage, a "hazy project concept", or a vague project paper.

3. Beneficiary participation is important for project success and can be achieved in A.I.D. projects (especially in local subprojects), but requires continued effort.

4. Participant training can be a major contributor to success, but only when it is initiated very early in the project and is linked directly to project and program needs.

Copies of the evaluations and studies summarized are available from the Asia and Near East Bureau's Office of Development Planning (ANE/DP) or from A.I.D.'s Center for Development Information and Utilization (CDIE/DIU).


Barry Sidman, Director
Office of Development Planning
The Asia and Near East Bureau

CONTENTS
(Arranged By Country)

REGIONAL

ASEAN Agricultural Development Planning Centre, End-of-Project Evaluation	1
ASEAN Plant Quarantine Centre and Training Institute, End-of-Project Evaluation	4
ASEAN Scholarship for Tropical Medicine and Public Health, Mid-Term Evaluation	7
Asian Agricultural Research Project, Completion Report (Special Study)	10
Winrock International Assistance to PVOs in Animal Agriculture, Mid-Term Evaluation	13

BANGLADESH

Agricultural Research Project, Phase II 1985 External Evaluation	16
Rice Research and Training Project, Phase II External Biennial Review	19

BURMA

Primary Health Care I, End-of-Project Evaluation	22
Review of AID's Health Sector Strategy in Burma (Special Study).	25
Maize and Oilseeds Production Project, Mid-Term Evaluation	28

INDIA

Alternative Energy Resources Development Project Mid-Project Evaluation	31
CLUSA/India Program Development and Support Grant Mid-Term Evaluation	33
CLUSA/AID Technical Assistance to the NDDB's Oilseed Grower's Cooperative Project, Final Evaluation.	36

Development and Management Training Project, Mid-Project Evaluation	39
Technologies for the Rural Poor, Mid-Project Evaluation	42
A Planning, Monitoring, and Evaluation System for Food-for-Work Programs in India, Evaluation of Progress During the First Stage of Implementation . . .	45
The USAID-Assisted ICDS Program in India: Development of a Plan for Management Information Improvements and System Evaluation	48

INDONESIA

AID's Role in Indonesian Family Planning, 1980-1984 End-of-Project Evaluation	51
Rural Electrification, Interim Evaluation of Social and Economic Effects in Central Java	54
Sederhana Assessment Study in Four Provinces (Impact Evaluation)	57
Timor Malaria Control Project, Mid-Term Assessment	60

MALDIVES

Raa Atoll Integrated Development Project, IHAP End-of-Project Evaluation	63
---	----

NEPAL

An Assessment of Food Aid as a Development Resource in Nepal (Special Study)	66
Integrated Rural Health and Family Planning Services Project, Mid-Project Evaluation	69
Strengthening Institutional Capacity in the Food and Agricultural Sector in Nepal, Mid-Term Evaluation . . .	72

PAKISTAN

Irrigation Systems Management Project Interim Evaluation	75
Population Welfare Planning Project Mid-Project Evaluation	78

PHILIPPINES

Barangay Water Project II, Process Evaluation	81
Bicol River Basin Development Program, Impact Evaluation	84
Bicol Integrated Health, Nutrition and Population Project, Project Assistance Completion Report	87
BPI (MAF-IRRI) Small-Farm Machine Industrial Extension Program, Mid-Project Evaluation	90
Farming Systems Development Project, Eastern Visayas Mid-Project Evaluation	93
Reassessment of Proposed PL 480 Title II Program Phaseout for the Philippines (Special Study)	96
The Rural Service Center Project and The Feasibility of Its Linkage with the Local Resource Management Project, Mid-Project Evaluation	99

SOUTH PACIFIC

PVO Co-Financing Project--Summer Institute of Linguistics, Non-Formal Education and Leadership Training Project, Annual Evaluation	102
<u>Fiji</u> Council of Social Services Annual Interim Evaluation	105
Non-Formal Education and Village Development Project, Kadavu, <u>Fiji</u> , Asia Foundation End-of-Project Internal Evaluation . . .	107
Community-Based Integrated Island Development Program in the Republic of <u>Kiribati</u> , Save the Children Federation Three-Year Evaluation . . .	110
<u>Solomon Islands</u> Development By the People at the Village Level, IHAP Fourth Annual Report and Evaluation	113
Ha'apai [<u>Tonga</u>] Water Supply Project, Final Evaluation	116
<u>Tonga</u> Cooperative Federation Annual Evaluation	119
<u>Vanuatu</u> Plantation (Farm) Management Training and Rural Development Project, IHAP Interim Evaluation . .	122

SRI LANKA

Mahaweli Basin Development,
Combined Evaluation of Three Projects 125
(Mahaweli Basin Development I, Mid-Term Evaluation
Mahaweli Basin Development II, Mid-Term Evaluation
Mahaweli Sector Support Loan, End-of-Project Evaluation)

Intensive Malaria Control Programme, Anti-Malaria
Campaign, Second Annual Independent Assessment 131

Intensive Malaria Control Programme, Anti-Malaria
Campaign, Third Annual Independent Assessment 134

Reforestation and Watershed Management Project
Mid-Term Evaluation 137

Rice Research Project
Project Assistance Completion Report 140

THAILAND

Accelerated Impact Program (with Peace Corps)
Project Assistance Completion Report 143

Anti-Malaria Project, End-of-Project Evaluation 146

Integrated Improvement for the Urban Poor
Final Evaluation 149

Khon Kaen University Research Development Project
First Phase Mid-Term Evaluation 152

Land Settlements Project
End-of-Project Evaluation 155

Managing Energy and Resource Efficient Cities
Mini-Evaluation 158

Northeast Rainfed Agricultural Development Project
Mid-Term Evaluation 161

Appendix

ACRONYMS USED IN THIS REPORT 164

CONTENTS
(Arranged by Sector)

AGRICULTURE

Agricultural Research

<u>Regional: Asian Agricultural Research Project</u> Completion Report (Special Study)	10
<u>Bangladesh: Agricultural Research Project - Phase II</u> 1985 External Evaluation	16
<u>Bangladesh: Bangladesh Rice Research and Training</u> Project, Phase II, External Biennial Review	19
<u>Sri Lanka: Rice Research Project</u> Project Assistance Completion Report	140
<u>Thailand: Khon Kaen University Research Development</u> Project, First Phase Mid-Term Evaluation	152

Agriculture: General

<u>Regional: ASEAN Agricultural Development Planning</u> Centre, End-of-Project Evaluation	1
<u>Regional: ASEAN Plant Quarantine Centre and Training</u> Institute, End-of-Project Evaluation	4
<u>Regional: Winrock International Assistance to PVOs</u> in Animal Agriculture, Mid-Term Evaluation	13
<u>Burma: Maize and Oilseeds Production Project</u> Mid-Term Evaluation	28
<u>Nepal: Strengthening Institutional Capacity in the Food</u> and Agricultural Sector in Nepal, Mid-Term Evaluation	72
<u>Nepal: An Assessment of Food Aid as a Development</u> Resource in Nepal (Special Study)	66
<u>Philippines: BPI (MAF-IRRI) Small-Farm Machine</u> Industrial Extension Program, Mid-Project Evaluation	90
<u>Philippines: Farming Systems Development Project,</u> Eastern Visayas, Mid-Project Evaluation	93
<u>South Pacific: Vanuatu Plantation (Farm)</u> Management Training and Rural Development Project, IHAP Interim Evaluation	122

<u>Thailand: Land Settlements Project</u> <u>End-of-Project Evaluation</u>	155
<u>Thailand: Northeast Rainfed Agricultural Development</u> <u>Project, Mid-Term Evaluation</u>	161

IRRIGATION

<u>Indonesia: Sederhana Assessment Study in Four Provinces</u> <u>(Impact Evaluation)</u>	57
<u>Pakistan: Irrigation Systems Management Project</u> <u>Interim Evaluation</u>	75
<u>Sri Lanka: Mahaweli Basin Development,</u> <u>Combined Evaluation of Three Projects</u>	125
(Mahaweli Basin Development I, Mid-Term Evaluation Mahaweli Basin Development II, Mid-Term Evaluation Mahaweli Sector Support Loan, End-of-Project Evaluation)	

RURAL DEVELOPMENT

Watershed Development and Natural Resource Management

<u>Sri Lanka: Reforestation and Watershed Management</u> <u>Project, Mid-Term Evaluation</u>	137
---	-----

Rural Energy and Electrification

<u>India: Technologies for the Rural Poor,</u> <u>Mid-Project Evaluation</u>	42
<u>Indonesia: Rural Electrification, Interim Evaluation</u> <u>of Social and Economic Effects in Central Java</u>	54

Area Development

<u>Philippines: Bicol River Basin Development Program</u> <u>Impact Evaluation</u>	84
---	----

Rural Development: Other

<u>India: A Planning, Monitoring, and Evaluation System</u> <u>for Food-for-Work Programs in India: Evaluation of</u> <u>Progress During the First Stage of Implementation</u>	45
<u>South Pacific: Vanuatu Plantation (Farm) Management</u> <u>Training and Rural Development Project</u> <u>IHAP Interim Evaluation</u>	122

<u>South Pacific</u> : Solomon Islands Development By the People At the Village Level, IHAP Fourth Annual Report and Evaluation	113
<u>Thailand</u> : Accelerated Impact Program (with Peace Corps), Project Assistance Completion Report	143
<u>Thailand</u> : Khon Kaen University Research Development Project, First Phase Mid-Term Evaluation	152
<u>Philippines</u> : The Rural Service Center Project and The Feasibility of Its Linkage with the Local Resource Management Project, Mid-Project Evaluation	99

HEALTH AND POPULATION

<u>Nepal</u> : Integrated Rural Health and Family Planning Services Project, Mid-Project Evaluation	69
<u>Philippines</u> : Bicol Integrated Health, Nutrition and Population Project, Project Assistance Completion Report	87

Population and Family Planning

<u>Indonesia</u> : AID's Role in Indonesian Family Planning, 1980-1984, End-of-Project Evaluation	51
<u>Pakistan</u> : Population Welfare Planning Project Mid-Project Evaluation	78

Health

<u>Regional</u> : ASEAN Scholarship for Tropical Medicine and Public Health, Mid-Term Evaluation	7
<u>Burma</u> : Primary Health Care I End-of-Project Evaluation	22
<u>Burma</u> : Review of AID's Health Sector Strategy in Burma (Special Study).	25
<u>India</u> : The USAID-Assisted ICDS Program in India: Development of a Plan for Management Information Improvements and System Evaluation	48
<u>Maldives</u> : Raa Atoll Integrated Development Project IHAP End-of-Project Evaluation	63

Malaria Control

<u>Indonesia</u> : Timor Malaria Control Project, Mid-Term Assessment	60
<u>Sri Lanka</u> : Intensive Malaria Control Programme, Anti-Malaria Campaign, Second Annual Independent Assessment ..	131
<u>Sri Lanka</u> : Intensive Malaria Control Programme, Anti-Malaria Campaign, Third Annual Independent Assessment . .	134
<u>South Pacific</u> : Ha'apai [Tonga] Water Supply Project Final Evaluation	116

NUTRITION

<u>Philippines</u> : Bicol Integrated Health, Nutrition and Population Project, Project Assistance Completion Report..	87
--	----

EDUCATION AND HUMAN RESOURCES

<u>India</u> : Development and Management Training Project, Mid-Project Evaluation	39
<u>South Pacific</u> : PVO Co-Financing Project -- Summer Institute of Linguistics Non-Formal Education and Leadership Training Project, Annual Evaluation	102
<u>South Pacific</u> : Non-Formal Education and Village Development Project, Kadavu, Fiji End-of-Project Internal Evaluation	107

PRIVATE AND VOLUNTARY ORGANIZATIONS

<u>Regional</u> : Winrock International Assistance to PVOs in Animal Agriculture, Mid-Term Evaluation	13
<u>Maldives</u> : Raa Atoll Integrated Development Project, IHAP End-of-Project Evaluation	63
<u>South Pacific</u> : PVO Co-Financing Project -- Summer Institute of Linguistics, Non-Formal Education and Leadership Training Project, Annual Evaluation	102
<u>South Pacific</u> : Community-Based Integrated Island Development Program in the <u>Republic of Kiribati</u> , Save the Children Federation Three-Year Evaluation . . .	110
<u>South Pacific</u> : Non-Formal Education and Village Development Project, Kadavu, Fiji End-of-Project Internal Evaluation	107

<u>South Pacific: Fiji Council of Social Services</u> Annual Interim Evaluation	105
<u>South Pacific: Vanuatu Plantation (Farm) Management</u> Training and Rural Development Project, IHAP Interim Evaluation	122
<u>South Pacific: Solomon Islands Development By the</u> People At the Village Level, IHAP Fourth Annual Report and Evaluation	113
<u>South Pacific: Tonga Cooperative Federation</u> Annual Evaluation	119
<u>South Pacific: Ha'apai [Tonga] Water Supply Project,</u> Foundation for the Peoples of the South Pacific Final Evaluation	116

PL 480

<u>India: CLUSA/India Program Development and Support</u> Grant, Mid-Term Evaluation	33
<u>India: CLUSA/AID Technical Assistance to the</u> NDDB's Oilseed Grower's Cooperative Project, . Final Evaluation	36
<u>India: A Planning, Monitoring, and Evaluation System for</u> Food-for-Work Programs in India, Evaluation of Progress During the First Stage of Implementation	45
<u>India: The USAID-Assisted ICDS Program in India:</u> Development of a Plan for Management Information Improvements and System Evaluation	48
<u>Nepal: An Assessment of Food Aid as a Development</u> Resource in Nepal (Special Study)	66
<u>Philippines: Reassessment of Proposed PL 480 Title II</u> Program Phaseout for the Philippines (Special Study) . . .	96

ENERGY

<u>India: Alternative Energy Resources Development Project</u> Mid-Project Evaluation	31
<u>Thailand: Managing Energy and Resource Efficient Cities</u> Interim, Mini-Evaluation	158

See also Rural Energy and Electrification section above

URBAN POOR

Philippines: The Rural Service Center Project and the
Feasibility of Its Linkage with the Local Resource
Management Project, Mid-Project Evaluation 99

Thailand: Integrated Improvement for the Urban Poor
Final Evaluation 149

Appendix:

ACRONYMS USED IN THIS REPORT 164

**REGIONAL: ASEAN AGRICULTURAL DEVELOPMENT PLANNING CENTRE,
END-OF-PROJECT EVALUATION**

Problem and Overview. The countries of Southeast Asia are overwhelmingly dependent on agriculture for their economic livelihood. Approximately 70 percent of their populations work in agriculture and about 55 percent of the region's GNP originates in agriculture. Agricultural development in the ASEAN countries has suffered, however, from the lack of sound agricultural policies. This project was predicated on three major assumptions:

1. There are not enough people in Southeast Asia trained in agricultural development planning;
2. The few well-trained planners are hampered by inadequate data; and
3. The consequent poor capabilities in agricultural planning and policy analysis are a major cause of poor performance in agriculture in the ASEAN countries.

U.S. Assistance. This project was first proposed by Thai delegates to a 1977 meeting of the Committee on Food, Agriculture, and Forestry (COFAF) of the Association of South East Asian Nations (ASEAN). In May 1980, A.I.D. authorized a project (498-0258) to establish an institution, the ASEAN Agricultural Development Planning Centre, with the following goals: (1) to strengthen the agricultural development planning capacity of all ASEAN nations; and (2) to ensure that this capacity is applied to meet domestic and international (ASEAN-level) problems. Specifically, the Agricultural Development Planning Centre was to: (1) provide a means to mobilize the best talent in agricultural development planning; (2) provide regional participants with expertise in agricultural development planning; (3) serve as a regional data bank for agricultural development planning information; (4) provide consultancy services to ASEAN governments; (5) develop planning models for selected pilot areas in each member country; and (6) conduct studies on ASEAN agricultural policies to assist decision-makers in harmonizing policies in the ASEAN region. A.I.D. was to provide a \$3-million grant over a 5-year period, subsequently extended one year to May 31, 1986. Thailand, which represents ASEAN as the project host, was to contribute \$725,000 for the center's buildings and for expenditures for counterpart personnel. This project is one of three ASEAN COFAF projects supported by A.I.D. (See also the next summary in this volume, "ASEAN Plant Quarantine Centre and Training Institute.")

Purpose and Methodology of the Evaluation. The evaluation was conducted to assess the impact and effectiveness of the project and provide information for a phase II project. Prior to the team's arrival in Bangkok, the ASEAN representa-

tive interviewed trainees who had returned home and wrote up the results. Conclusions of the evaluation are based on analysis of those interview results, interviews with trainees and officials in Bangkok and Kuala Lumpur, and review of other relevant documentation.

Major Findings

1. The training component was highly successful and cost effective. Numbers of people trained have far exceeded targets in all of the training programs, except one (leader group training) which was discontinued after two years. A total of 209 senior and mid-level officials and professionals have received training, ranging from short-term to master's degree, compared to the project goal of 105.

2. The research and planning component was moderately successful but suffered from a lack of guiding rationale. A small number of technically proficient studies were produced and workshops conducted. But the research rationale was not adequately defined in the project proposal and the center is searching for an identity in a region which already has numerous high-quality research and training institutes. Planning and data-bank activities were well-designed and executed but of limited policy relevance, and the center presently lacks the financial and staff resources to maintain them.

3. Impact. It is too early to tell whether the project has successfully enhanced the agricultural development planning capabilities in ASEAN and its member countries. Long-run success will depend on identifying a definite focus for the center's research activities and increasing its visibility and prestige in ASEAN.

4. Implementation was marred by poor project design. The project proposal was not subjected to the normal A.I.D. project review and approval process, nor did it draw on the store of knowledge in the donor community on establishing an international research and training center. The lack of clarity in the project proposal regarding the relationship among the director of the center, the ASEAN managers of the project (COFAF's Board of Planners), and USAID/Bangkok also led to recurring difficulties.

5. Staffing. Low salary and compensation levels, and the relative anonymity of the center, made it difficult to keep senior staff and impossible to attract and keep a sufficient number of non-Thais in senior positions.

6. Financing. Thailand contributed more than planned (about \$1 million) for the construction and staffing of facilities on the campus of Kasetsart University in Bangkok. However, neither the center nor any ASEAN body has made sufficient efforts to attract outside funding to cover recur-

rent costs.

Project Design and Policy Implications. From conception, the center was intended to be a research/public policy analysis unit for COFAF, but the policy impact of the center's research has been limited. Difficulties are due less to the center's research staff, which is energetic and hardworking, than to flaws in the initial project design. In the first place, the center's research agenda was too broad. Some studies were undertaken which, while well-done, could not be expected to have any immediate policy impact (e.g., benchmark studies), and other research was initiated for which there are not sufficient resources. Secondly, due to the center's low visibility and prestige in ASEAN, it has not been called upon by member governments to advise them or to undertake special policy studies. Reasons for its low visibility include the relatively low salaries and compensation, which are a clear impediment to attracting the caliber of international staff required to establish a center able to influence policy. In sum, the project design did not successfully address the question of what the precise role and comparative advantage of a new center could be in a region already characterized by high-quality research institutions, and it did not provide the essential ingredients for achieving this comparative advantage.

Major Recommendations

1. The center should be institutionalized as an ASEAN entity with legal status in Thailand.

2. The project should be continued with USAID/Bangkok or other donor funding. A phase II project should be designed, based on evaluation findings and recommendations, following A.I.D.'s standard design and approval process in addition to those of COFAF. Unexpended funds from the present project should be used to extend it an additional year to maintain continuity in the training program.

3. Research. A clear rationale for the center's research must be developed; the focus should be on discrete and definable policy issues of concern either to COFAF or a majority of the ASEAN member nations. Major research activities should be contracted out to highly respected researchers in order to enhance the visibility of the center and improve the quality of its research.

Evaluation Team: Michael Rock, (team leader), Bennington College; Edgardo Quisumbing, Ph.D., Philippine Ministry of Food and Agriculture; Sopin Tongpan, Ph.D., Kasetsart University, Thailand; and Husin Anang, Indonesian Ministry of Agriculture. Report dated July 6, 1985.

**REGIONAL: ASEAN PLANT QUARANTINE CENTRE AND TRAINING
INSTITUTE (PLANTI), END-OF-PROJECT EVALUATION**

Problem and Overview. This project consists of the establishment of an ASEAN Plant Quarantine Centre and Training Institute (PLANTI) to meet needs of the member countries of the Association of South East Asian Nations (ASEAN). It is one of 41 projects approved and supervised by ASEAN's Committee on Food, Agriculture, and Forestry (COFAF) and one of three COFAF projects supported by A.I.D. (See also "ASEAN's Agricultural Development Planning Centre Project" in this volume.)

U.S. Assistance. The project grant agreement was signed between the U.S. government and the government of Malaysia in 1980. A 5-year (1980-85) A.I.D. grant of \$5.4 million was to finance commodities, salaries, technical assistance for curricula and program design, and participant training. Malaysia, the host country, was to provide land and build the major PLANTI facilities and provide salaries for lower-level clerical and maintenance staff. The overall purpose of the ASEAN Plant Quarantine Centre and Training Institute, PLANTI, is to provide a focal point and coordinating mechanism for improving plant quarantine activities in Southeast Asia through training, research, and information exchange. Specific objectives were to: (1) complement the plant quarantine activities of the ASEAN member countries with regards to post-entry quarantine, formulation of standardized legislation, and advanced training in plant quarantine; (2) assist ASEAN member countries in exporting primary agricultural produce; (3) act as a repository for information dissemination on plant quarantine and plant protection matters in Southeast Asia; and (4) carry out research on suitable treatment schedules for major pests and diseases.

Purpose and Methodology of the Evaluation. The purpose of the evaluation was to evaluate activities carried out by PLANTI and make recommendations for funding PLANTI after completion of the 1980-85 initial phase. Findings are based on investigation of the physical facilities, publications of PLANTI and its staff, and discussion with staff members of the institute. Because of the urgent need to submit a report to COFAF, only five days were available for the evaluation and team members were not able to meet with the plant quarantine organizations of the ASEAN member countries that the institute serves.

Major Findings

1. PLANTI has achieved significant success and met the overall project objectives. It appears to have been productive and efficient in its research, training, and extension activities, in spite of administrative restrictions and other limitations.

2. The Malaysian government exceeded its obligation with regard to provision of land and construction. The grant agreement called for an input of not less than \$2.64 million; the actual input to date has been \$3.46 million. The complex, on 20 acres of land, consists of administrative and laboratory buildings, lecture halls, audio-visual room, library, and separate laboratories for plant pathology, entomology, microbiology, virology, and nematology. There are also dormitory and dining facilities to accommodate 60 trainees and a guesthouse.

3. Certain administrative constraints limit PLANTI's efficiency. In particular, the salary scale (based by A.I.D. on that of the Malaysian government) is too low to attract and retain highly qualified personnel. Low salary scales and the 2-year appointment norm have resulted in frequent turnover and a high number of vacancies. Consultants have had to be employed to compensate for the lack of scientific staff. The lack of key personnel in certain areas inhibits progress and urgently needs to be resolved. (There are 55 employees at present.)

4. Management is very efficient, despite problems due to the shortage of manpower. With equipment and financial support from A.I.D., the director (Dr. K.G. Singh) is able to maneuver rapidly with impressive results.

5. The training capability and record of PLANTI is commendable. In less than 4 years, over 300 participants have received training (26 in 3 long-term post-graduate diploma courses, 37 in 3 short-term certificate courses, 209 in 15 short-courses, and 28 through 4 study tour/on-the-job training programs). There is a continuing unmet demand for advanced courses and specialized training. Inspector training courses are not sufficiently practical and job-oriented.

Project Design and Policy Implications. The project appears to have been well-designed. Nevertheless, the major problem is apparently due to a project design decision--namely, to base salaries on the host country's civil service pay scale, which means that the institute, PLANTI, continually loses capable personnel to private industry and other employers. This design decision appears to place a permanent cap on the quality of performance that the institute can achieve.

Major Recommendations

1. PLANTI should be recognized as a regional institute with status similar to that of other international institutes.

2. There should be an extension of the project (follow-on project) so that PLANTI can continue its work to benefit not only Southeast Asia but also countries in other regions. PLANTI should explore funding from ASEAN, the Malaysian government, A.I.D., and other donors.

3. COFAF should explore means to improve staff salaries, perhaps by an ASEAN-supplied salary incentive, to enable PLANTI to recruit and retain highly qualified personnel.

4. Institutional relationships. There should be an overall review of the relationships, responsibilities, and lines of communication among PLANTI, COFAF, and the ASEAN Plant Quarantine Services. PLANTI's programs should be extended through a broad relationship with the ASEAN Plant Quarantine Services and training and program support should be provided to resolve common problems. Most training of new personnel could be handled in individual countries, with re-training being handled by PLANTI.

5. PLANTI's relationships with other institutions of higher learning should be improved. Its training should be recognized and transfer of credits accepted by other national and international institutes.

6. Policy guidelines for research should be developed to ensure that PLANTI research supports the training and operational needs of the ASEAN Plant Quarantine Services.

Evaluation Team: Dr. Sutharm Areekul (team leader), Kasetsart University, Bangkok, and ASEAN COFAF; Mr. Hamzah Purakusumah, Indonesian Ministry of Agriculture and PLANTI Board of Directors; and Mr. Thomas Darling, Consultant to AID/Washington. Report dated 12-17 February 1985.

**REGIONAL: ASEAN SCHOLARSHIP FOR TROPICAL MEDICINE AND
PUBLIC HEALTH, MID-PROJECT EVALUATION**

Problem and Overview. The diversity of health problems is increasing in the Southeast Asian countries. Communicable diseases remain a serious problem among the young and lower-income groups, while chronic diseases have become more predominant among the urban and more affluent sectors of the population. Nearly all the Southeast Asian countries also suffer from continuing high birth rates in the face of declining mortality. The numbers of academic and other health personnel are not adequate, however, for staffing the region's training institutions or meeting other health manpower needs.

In 1967, TROPMED, a consortium of tropical medicine centers at national universities in Southeast Asia, was established to promote regional cooperation in the prevention, control, and eradication of endemic tropical and communicable diseases. TROPMED is one of seven region-serving projects under the umbrella of the Southeast Asian Ministers of Education Organization (SEAMEO), which was created in 1965 to promote cooperation in education, science and culture. TROPMED currently consists of tropical medicine centers in five countries with a Central Coordinating Board at the Faculty of Tropical Medicine of Mahidol University in Bangkok. The U.S. government began support to TROPMED in 1970 during the project's first five-year plan by providing funds for new classroom facilities, laboratory equipment, and transport vehicles for field activities. Under the 1975-80 second five-year plan, the U.S. provided 50 percent of operating costs, and in 1975 A.I.D. also funded a Regional Scholarship Program for degree courses, including public health training. In 1980, the Association of Southeast Asian Nations (ASEAN) proposed that the U.S. government establish a health scholarship project with TROPMED to accelerate health manpower development in the region.

U.S. Assistance. In June, 1981, A.I.D. authorized the ASEAN Scholarship for Tropical Medicine and Public Health Project (498-0258) for \$2.5 in grant funds for scholarships over five academic years, 1981/2 through 1985/6. The project completion date is June 30, 1986. The project purpose is to improve the quality of health and nutrition of the rural poor in ASEAN countries by providing training opportunities for health personnel. Programs were to be of relatively short duration and emphasize applied skills. While none of the courses were concerned with the direct training of primary health care paramedics, A.I.D. documentation suggested that course graduates would be prepared to assist with paramedical training at the national level and would fill key posts in the units that serve and support the paramedics. An ASEAN objective was to encourage mutual understanding and regional cooperation among the ASEAN countries.

Purpose and Methodology of the Evaluation. This joint TROPMED -A.I.D. evaluation is the first overall evaluation of the project. Its purposes were to assess progress, identify strengths and weaknesses, and make recommendations for improving the effectiveness of this project and for further external assistance. The team visited the four major TROPMED institutions, interviewed scholarship graduates in Bangkok and Jakarta, reviewed findings of the intensive course evaluation conducted at Mahidol University and follow-up questionnaires returned by 124 recent scholarship recipients, and interviewed faculty, administrators, and USAID staff in Manila, Bangkok, and Jakarta.

Major Findings

1. **This is a successful project.** It appears likely that the target of 500 scholars being supported for diploma and master's degree programs will be exceeded by 5 to 10 percent. It was planned that 500 scholars from the five ASEAN countries would be supported during the five years. At present, 417 scholars have received scholarships for about \$1.75 million, with about \$750,000 remaining for the 1985/6 year. The scholarships are offered for 14 diploma and master's degree courses at five institutions (Mahidol University, Faculty of Tropical Medicine, Bangkok; University of the Philippines, Institute for Public Health; University of Indonesia, Faculty of Medicine; Institute of Medical Research, Kuala Lumpur; and National University of Singapore).

2. **Regional cooperation goals** were well-served by this project.. The ASEAN Governing Body efficiently carried out its responsibility to oversee distribution of the scholarships. Its commitment to sustain regional cooperation over more narrow national and institutional loyalties was an important factor in achieving the project's objectives. Project staff similarly encouraged institutional links beyond those required by the project as part of their commitment to developing strong regional institutions.

3. **Cost effectiveness.** The scholarships provided cost-effective training. The ASEAN training is about 60 percent less costly than U.S. training would have been.

4. **Appropriateness of training.** The TROPMED consortium offers training that is appropriate to the region's health research and health delivery systems.

5. **Post training employment.** Most of the course alumni have returned to their countries to continue public health work, primarily in academic teaching or as administrators in government health programs.

6. **Beneficiaries and impact.** The primary beneficiaries are

the scholarship recipients, who report higher incomes and more job satisfaction. Intermediate beneficiaries are the training institutions as well as the health delivery system line units. The scholarship recipients are too recently graduated, however, to have already made an impact on their countries' health programs and status.

7. Follow-on activities. Elements are in place to support a phase 2 of this project. Improving health and nutrition remains a high priority throughout the ASEAN region.

Project Design and Policy Implications. The project paper had only minimally specific documentation; for example, there was no logframe or detailed implementation plan. This does not seem to have inhibited project effectiveness. In fact, there seems to have been an inverse relationship between specificity of planning and accomplishment of purpose.

Major Recommendations

1. A phase-2 follow-on project should be developed. Input should be solicited from TROPMED national centers and participants. This should begin prior to completion of the present project.

2. The SEAMEO special project status of TROPMED should be retained. TROPMED should not be made an international center. This would almost certainly result in a move of the base of operations from the national centers, thus undermining the intent of working with existing institutions.

3. The approval process for scholarship recipients should be simplified in the follow-on project.

Evaluation Team: Ms. Pamela Edison, USAID; and Ms. Vimolsri Panichyanon, SEAMEO-TROPMED. Report dated September, 1985.

**REGIONAL: SPECIAL STUDY OF AGRICULTURAL RESEARCH IN ASIA,
Bangladesh, India, Indonesia, Pakistan, Thailand, Philippines
FINAL REPORT**

Problem and Overview. After World War II, there was a consensus in the U.S. that we had a responsibility to help overcome world hunger. Motives were largely humanitarian but also involved self-interest in the face of increasing Communist influence. U.S. officials agreed that new technology was essential to increase the productivity of Asian agriculture and decided that sufficient technology was available in the West; what was needed was technology transfer to Asia and then to farmers through extension. In the 1950s, A.I.D.'s primary focus in agriculture in Asia was thus on extension and rural development. By the late 1950s, it was apparent that this extension approach was too simplistic, and so the strategy shifted in the 1960s to the creation of university systems based on the U.S. land grant university model. The new agricultural colleges and universities were to provide better training to extension workers and farmers and do research that would generate new technology. Little research occurred. Acute food shortages in Asia in the mid-1960s dramatized the need for more action to overcome hunger and made it further apparent that agricultural technology was much more location-specific than had been thought. This spurred A.I.D.'s interest in assisting research. In 1968, the U.S. policy that earlier had prohibited AID from supporting research on foodgrains that were in surplus in the U.S. (such as rice and wheat) was eliminated.

By 1970, A.I.D. was funding three types of agricultural research projects in Asia: (1) projects to strengthen government research institutions whose primary goal was to increase food production; (2) projects in small-scale irrigation, reforestation, and support to agricultural universities; and (3) financing of the core budgets of international agricultural research centers (CIMMYT and IRRI). During the 1970s, A.I.D. financed major new research institution building projects in Indonesia, Bangladesh, and the Philippines. At present in Asia, A.I.D. generally funds only agricultural research that is part of an institution-building program. Major foodgrains account for about half the expenditure, other foodcrops almost 40 percent, and the rest is split between forests and fish. A.I.D.'s goal is to assist in the development of self-sustaining national research systems that help increase the productivity of the small producer.

Purpose and Methodology of the Study. The purposes of this study (AID/ASIA-2-1456) were: (1) to find out if A.I.D.'s investment in agricultural research is productive; (2) to find out what the impact has been on income distribution; and (3) to develop ideas on what to do next--different crops, different institutions, different strategies. Data were collected through short study visits to four of the six

countries, by graduate students working in Pakistan and Indonesia, and from materials available in the U.S. Analysis of the productivity and income distribution effects used three tools: the index number approach, the production function approach, and the cost function approach.

Major Findings

1. Agricultural research has been a very productive investment. It has had a large, positive impact in all six countries (with the possible exception of Bangladesh for which the analytic models gave inconsistent results). Single commodity studies show extremely high rates of return from rice research in Indonesia and wheat research in Pakistan.

2. Impacts on income distribution. Agricultural research has generally had a positive impact on the demand for labor. But research has been biased in favor of farm machinery and fertilizer, with the result that both the suppliers of these commodities and landowners (particularly larger landowners) have benefited more from the new technology produced by the research than have small landowners or laborers.

(a) Agricultural research appears to have led to a small increase in the demand for agricultural labor in most countries except the Philippines, where research outputs appear to have led to decreased labor demand. There has been much criticism that the new high-yielding varieties produced through agricultural research have reduced the demand for rural labor and thus been a major cause of the declining incomes of agricultural laborers in many Asian countries during the last 20 years. It now appears that high-yielding varieties have actually increased the demand for labor in most of Asia, but that, because of rapid population growth, the demand for labor has not grown as fast as the supply.

(b) New technology has reduced the cost of producing the major foodgrains (wheat and rice). The amount of the reduction and who benefits, however, depends on government price policies. These commodities are a major portion of the expenditures of poor people and only a small portion of the expenditures of rich people, so, with appropriate policies, this price decline should improve income distribution.

(c) Research has generally been biased in favor of fertilizer and farm machinery and has led to a large increase in demand for inputs. Input supply companies have been major beneficiaries of the growth in research. Benefits have gone both to the government bureaucracy that often runs the input supply business and to private companies that manufacture and distribute fertilizer, pesticides, and other inputs.

3. The impact of A.I.D. support. A.I.D. funding has resulted in an increase in (a) total investment in agricultu-

ral research in these countries, and (b) an increase in the share of resources devoted to foodgrain research. A.I.D. support has also contributed to several institutional changes: (a) the autonomy of research systems from regular civil service rules; (b) the establishment of agricultural research councils; (c) the strengthening of regional research stations and the promotion of farming systems research.

4. Closer links are needed between scientists and farmers to make sure farmers can articulate their needs and that research moves rapidly from scientists to farmers. If the clients, especially the poor clients, have more power the efficiency of the research system should improve, the allocation of resources would change, and scientists might do more useful research.

Project Design and Policy Implications. The net impact of the cost reduction in producing foodgrains and the increases in demand for inputs depends on price and trade policies. For example, a 20-percent reduction in the cost of producing the major foodgrains will have a positive effect on income distribution in the absence of price supports or the possibility of exporting all the increase. If the increase can be exported, income distribution will shift in favor of the wealthier population. The fact that agricultural research has favored landowners and input suppliers is not due to the biases in the technology, which is land-saving, but to the initial distribution of land and to the political process by which government-supplied inputs are rationed.

Major Recommendations

1. **A.I.D. should support agricultural research** through projects that are long-term and as flexible as possible, and should evaluate them on the basis of their success in generating local political support and meeting farmers' needs.

2. **A.I.D. still needs to fund research** on the major foodgrains in Nepal and perhaps Bangladesh and Pakistan. Other areas with potentially high payoffs are food policy research and research on the major inputs--land, water, and fertilizer.

A.I.D. should also: (3) shift funding from facilities and equipment to building human capital and strengthening information flows; (4) provide incentives to research systems to develop stronger ties to farmers; (5) continue to support decentralization of the research systems; (6) continue to invest in the international agricultural research centers; (7) and encourage private companies and commodity organizations to do more research and to provide more support for government-sponsored research.

By: Carl Pray and Vernon Ruttan, University of Minnesota.
Report dated April 1985; titled "Completion Report of the Asian Agricultural Research Project."

**REGIONAL: WINROCK INTERNATIONAL ASSISTANCE TO PVOS
IN ANIMAL AGRICULTURE, MID-TERM EVALUATION**

Problem and Overview. Many small farmers in developing countries raise animals as part of their farming system. Animal husbandry is important to their livelihood: it permits them to use unarable land, converting crop residues and by-products into high quality food and providing income. Major problems are management techniques and very low-quality livestock. Significant improvement is possible if the farmers can gain access to knowledge of improved management practices, but this is difficult. One means is through private voluntary organizations (PVOs) and developing country agencies that are in direct contact with rural households through agriculture, health, and education extension services. But often these organizations do not have access to technical know-how either.

U.S. Assistance. The strategy behind this project, therefore, was to develop ways to transmit such knowledge to PVOs and developing country agencies through computer-based information services, workshops, and on-site technical assistance. The stated purpose was to assist these organizations in their efforts to improve livestock production and thereby increase the incomes of rural people. The project was funded by a matching grant from A.I.D. (PDC-0182-G-SS-1086-00) to Winrock International, an independent, nonprofit, Arkansas corporation (registered with A.I.D. as a PVO), whose goal is to advance animal agriculture for the benefit of people, especially low-income farmers. The grant was awarded on a 50/50 matching fund basis for a 3-year period, starting in August, 1981, and was later extended for one year. The total projected cost was \$1,343,618, of which A.I.D. and Winrock each contribute \$617,609. Under the grant, Winrock was to develop technical, information, and training services for U.S.-based and indigenous PVOs and host country agencies working in rural communities in developing countries.

Purpose and Methodology of the Evaluation. The purpose of this evaluation was to decide whether A.I.D. should continue to support the Winrock program. This is the third evaluation of this grant and covers a three-year period with about half a year left in the grant. Methodology included sending a questionnaire to A.I.D. missions to be forwarded to PVOs, host country agencies, and participants in Winrock-sponsored workshops. Conclusions are based on this questionnaire, on review of other documentation and training materials, on visits to Winrock facilities, and on interviews with Winrock staff and with host country agencies, instructors, and participants using the services provided.

Major Findings

1. The program was well-designed and has created an information network consisting of: (1) a computerized information service; (2) printed and audio-visual training aids; (3) workshops; and (4) technical assistance.

2. The information service is a necessary component in assisting organizations otherwise unable to keep up with scientific developments in animal agriculture. The project has created a workable computerized data base with 12,000 references accessible by country, animal species, and other keyword descriptors. This may be the largest body of references on goats and sheep in the world. A total of 2,022 PVOs, developing country agencies, A.I.D. missions, and Peace Corps offices receive the Bulletin and Technotes as part of the information network.

3. Printed and audio-visual training aids--books, manuals, slide and video-tape presentations--have been published.

4. Workshops. Three 2-week workshops have been conducted in Honduras, Indonesia, and the Philippines with a total of 127 participants. The workshops included practical experiences and demonstrations with live animals.

5. Technical assistance was provided in response to 21 requests in a total of 12 countries (including those where workshops were held). Often Winrock technicians rendered this assistance in conjunction with other Winrock travel.

6. The key to an effective workshop is finding a local person to lead in organizing the workshop, finding local instructors, and arranging field demonstrations.

Project Design and Policy Implications. The activities conducted under this grant support A.I.D. policy on technology transfer. However, training of trainers in technology transfer is slow to produce change. If A.I.D. is to commit to such an undertaking, it must stay in for the long haul. On-site technical assistance is effective in transferring knowledge, but the capacity to provide such assistance is limited.

Major Recommendations

1. Winrock should prepare a proposal to A.I.D. for a follow-on multi-year matching grant. A follow-on matching grant from A.I.D. seems reasonable.

2. Activities undertaken should be given priority as follows: (1) workshops, (2) the information service, (3) technical services, and (4) publication of The Bulletin and

Technotes.

3. A.I.D. (FVA/PVC) should consider interim funding to provide continuity of current and proposed grant periods.

Evaluation Team: Tom Wilson, AID/Washington (ASIA/TR/ARD); John Nystuen, Community Systems Foundations; and Ike Hatchimonji, AID/Washington (AFR/DR/ARD). Report dated March 1985.

BANGLADESH: AGRICULTURAL RESEARCH PROJECT, PHASE II,
1985 EXTERNAL EVALUATION

Problem and Overview. Bangladesh is an overwhelmingly agricultural country, but agricultural production has not kept pace with rapid population growth, which is a major reason for the extreme poverty of Bangladesh today. As a step toward raising agricultural productivity, A.I.D. and the Bangladesh government initiated an agricultural research project in the 1970s. The present Agricultural Research Project-Phase II ("ARP-II") is a follow-on to that activity.

U.S. Assistance. A 5-year grant agreement for Agricultural Research-Phase II (project 388-0051) was signed in June 1981. Its purpose is "to increase the effectiveness of agricultural research necessary for development of appropriate agricultural technologies for Bangladeshi farmers cultivating two acres or less." Initial funding was to total \$30 million. The project was subsequently amended to extend the completion date one year, to June 1987, and to add \$14.5 million for a present total of \$44.5 million (a \$25.5-million U.S. grant, \$18 million from the Bangladesh government, and \$1 million in additional donor support). The project is being implemented through three contracts: (1) a \$21.8-million host-country contract between the Bangladesh Agricultural Research Council (BARC) and the International Agricultural Development Council (IADS); (2) a \$3-million host-country contract between the Bangladesh Rice Research Institute (BRRI) and the International Rice Research Institute (IRRI); and (3) a \$700,000 agreement between the Bangladesh Agricultural Research Institute (BARI) and the Denver Wildlife Center.

Purpose of the Evaluation. The evaluation was conducted to determine: (1) the impact of the project; (2) the performance of the contractors, the Bangladesh government, and A.I.D.; and (3) the draft USAID proposal for continuing support to the agricultural research system after this project.

Major Findings

1. **Impact: The research system supported by the project has made significant accomplishments.** Several high-yielding varieties have been developed, some excellent work is being done to analyze how these fit into traditional cropping systems, and some farmers have adopted the new varieties. The beneficiary impact is unclear, however, as adoption is not yet widespread and it appears that farmers who have planted the new varieties have not been able to afford, or otherwise have not provided, the intended amounts of accompanying inputs (e.g., fertilizer, water).

2. **Objectives of the project were appropriate as conceived, are still valid, but are only partially accomplished.**

3. Performance of organizations involved in the project.

(a) IADS management of the project has improved substantially. With a few additional planned changes, and with high calibre and hard-working personnel now in place, good project management by IADS should become routine. The desired decentralization of research has progressed substantially, in large part because of the IADS production agronomists. Unfortunately, the development-oriented skills the IADS personnel are attempting to transfer have not yet been fully adopted in any area of the research program. This is due to training problems, the lack of counterparts, and the frequent transfer of existing counterparts.

(b) Management by the Bangladesh Agricultural Research Council (BARC) has also improved, but further improvement is hindered by several factors. Scientific staff at BARC is inadequate and BARC does not have sufficient authority to implement its mandate.

(c) The Bangladesh government. Problems have not changed since the 1983 external evaluation, nor is there any indication of inclination to change. Decisions are delayed and there is a general constriction of all management processes. This is particularly evident in such areas as training, commodity procurement, and research project approval, monitoring, and evaluation. The policy of routine, periodic staff transfer is very damaging for the agricultural research system.

A major problem is low manpower productivity due to an imbalance between research personnel and the operating expenses to make them productive. USAID/Dhaka has relieved the problem temporarily with PL 480 funds, but a permanent solution is needed. This will require major changes in the philosophy and regulations of the Bangladesh government--which apparently seeks to relieve unemployment to the maximum extent possible even in the absence of operating expenses.

(d) A.I.D. There is some dissatisfaction with disbursement of USAID-supported contract research funds. The release of funds is slow, honoraria to principal investigators and overhead fees to institutions are inadequate, and the system is generally cumbersome. Partly for these reasons, not even half the funds made available for contract research through BARC has been spent or committed. A.I.D.-supplied equipment is under-utilized due to lack of spare parts and proper maintenance.

4. Another major problem is the shortage of field-level manpower and the inadequacy of their formal education for carrying out field research and data analysis. Candidates for out-of-country training were not identified soon enough and, once identified, were not processed quickly enough. As

a consequence, IADS specialists spend excessive time providing alternative forms of training. This problem has been underestimated in both planning and implementation.

Project Design and Policy Implications. New improved technologies will not benefit small farmers unless they are developed with those farmers' constraints in mind and then properly introduced to the farmers. Through this project, research, extension, and farmer linkages at the farmers' fields have been developed. But not enough attention has been given to monitoring whether farmers adopt the new technologies, to whether their production is increasing, or to other aspects of farmers' reactions to the new technologies. There has been little effort to find and publicize cases in which the new technologies have been adopted. BARC and IADS, mistakenly, have not seen this as a particularly important responsibility of the agricultural research system.

Major Recommendations

1. A.I.D. should continue support until there is an effectively functioning national agricultural research system.

2. A major effort is needed to bring about more widespread adoption of the new varieties and cropping systems. Researchers must "package" their results (in a way that is appropriate for farmers who can afford only moderate inputs) and get them into the national system for delivery to farmers. This will require strengthening of both the research system and the extension delivery system.

3. Document farmer response. BARC/IADS should carry out a systematic study of farmers' responses to improved technologies developed at cropping systems research sites and regional stations. BARC/IADS should also document cases of successful transfer of improved technology and see that this information reaches the hands of appropriate administrators and scientists within the system.

4. Major efforts should be made to solve the manpower problems--including the central-level imbalance between research personnel and operating expenses and shortages of trained field-level personnel. If this is not done, the expanded cropping systems research, farming systems research, and multiple location testing programs will not succeed.

Evaluation Team: Dr. Fletcher Riggs (team leader), A.I.D. (retired); Dr. S.M. Arshad Ali, Bangladesh Agricultural University; Mr. A. Waheed Khan, Bangladesh Ministry of Agriculture; Mr. Latifur Rahman, USAID/Dhaka; and Dr. Kay Calavan, Dr. Reeshon Feuer, and Dr. Maurice Peterson, consultants. Report dated May 25, 1985.

BANGLADESH: RICE RESEARCH AND TRAINING PROJECT, PHASE II
EXTERNAL, BIENNIAL REVIEW

Overview. The Bangladesh Rice Research Institute (BRRI) was established in 1970 as an autonomous body dedicated to the development and spread of rice technology in Bangladesh where rice is central to the diet and economy. The Ford Foundation provided financial support and encouraged a close linkage between BRRI and the International Rice Research Institute (IRRI), headquartered in Manila, for training, technical assistance, scientific support, and equipment procurement. In subsequent projects, IRRI has continued to administer the financial support from additional donors.

U.S. Assistance. The Rice Research and Training Project, Phase II (1981-85) was designed to provide continued support to BRRI totalling \$6.622 million in grants from A.I.D., the Canadian International Development Administration (CIDA), the Australian government, and the Ford Foundation. A.I.D. also provided 4.225 million takas in PL-480 local currency funds. Additional funding comes from the British Overseas Development Authority, the International Development Research Centre (IDRC), and FAO. The purpose of this funding is to improve rice productivity at the farm level.

Purpose and Methodology of the Evaluation. This was the fifth external, biennial review of BRRI. The team leader arrived in Dhaka for preliminary work 10 days before the rest of the team. The full team then spent 11 days in site visits, interviews, documentation analysis, and report preparation. The team visited BRRI's Joydebpur headquarters and all five BRRI regional stations.

Major Findings

1. BRRI is now a large, viable organization with a capable scientific staff and a history of achievement. BRRI has helped increase food production in Bangladesh and is now in a position to make important future contributions. There is an obvious, commendable commitment to improve productivity at the farm level. The Plant Pathology and Entomology Divisions are doing valuable research.

2. Major accomplishments have been the development of:

- (1) high-yielding varieties which have been widely adopted in the boro season and are increasingly accepted in the t.aman (wet season);
- (2) cropping systems that make more intensive use of land without increasing exposure to risk; and

(3) identification of major soil deficiencies and suitable low-cost treatment.

3. Unspent project funds. More than 50 percent of the \$6.622 million provided by the donors remains unspent. This is partly due to regulations beyond the control of BIRRI.

4. Staff development and training is on schedule and commendable, although prolonged absence of staff for overseas training is a disruptive influence on research programs.

5. The most serious problems are related to management and development of research priorities. The present research agenda is not sufficiently coordinated and lacks focus. Task forces and other research management systems used in the past when BIRRI was less mature may no longer be appropriate.

6. Research is not sufficiently oriented to the needs of clearly specified groups of farmers. Commitment to on-farm research is inadequate in almost every division.

7. The regional research stations have not been developed as needed. The project provided funds for two new stations and upgrading of the original five stations. No new stations have been established and progress has been very slow in developing the existing stations. This is a major constraint.

8. The BIRRI-IRRI relationship. BIRRI's research structure was largely modeled after that of IRRI and for many years BIRRI was the dependent "younger sister." BIRRI is now capable of increasing independence, although IRRI can still play an important technical assistance role.

Project Design and Policy Implications. Despite BIRRI's success in developing new high-yielding varieties of rice, many farmers either do not adopt BIRRI varieties or do not follow recommended cultivation practices. The tendency at BIRRI is to blame the government for failing to provide credit and inputs at low prices, landlords for failing to take proper interest in agricultural development, or some other third party. Rarely do the rice scientists take responsibility for learning the limitations of their recommendations for the special circumstances of their farmer clientele, including risks of crop damage and the wide range of ecological conditions (e.g., drought-prone vs. marshy or coastal saline areas or areas subject to flash floods). On-farm research is essential for directing activities to increase actual, not just potential, yields.

Major Recommendations

1. The current project should be extended to June 1986 as proposed, but should give much more emphasis to building up

existing regional stations than is proposed.

2. Management and development of research priorities. The system should be revised or reorganized after thorough review by management specialists.

(a) Financial management should be improved--not simply as an accounting device--but to clarify research priorities and set targets.

(b) Research should become more efficient. Instead of the present proliferation of task forces which spreads resources over too many diverse objectives, research should probably be organized around four key program areas: varietal improvement, cropping systems, fertility and pest management. The "package approach" to farm recommendations should be replaced with a "menu approach" in which BRRI provides a range of improved technologies more likely to bring substantial benefits to different agro-economic groups of farmers. Research in all areas should be increasingly oriented to the diverse needs of the farmer clientele in Bangladesh.

(c) Farming systems research should be expanded. There must be greater emphasis on regional and on-farm research. Field surveys for understanding farmers' circumstances and problem diagnosis must be conducted before and during the research process. Specific client groups of farmers need to be defined and adoption of technology by these specific groups needs to be monitored carefully. In many cases, the possible impact of proposed technology should be studied before the research begins. Monitoring and follow-up studies should be adopted by all work programs in all areas.

3. Improvement of the regional research stations must be made a high priority. Facilities must be improved and means found to attract scientific staff--possibly through incentive schemes and improved training.

4. Training should be modified to support local training institutes and reduce the dependency on overseas training. The type of overseas short-term training should be changed.

5. The BRRI-IRRI relationship should change. BRRI's internal management and administrative capability should be strengthened. Ultimately this will mean less reliance on IRRI.

Evaluation Team: Dr. Len Shebeski (team leader), University of Manitoba; Mr. Kamak Uddin Ahmad, Bangladesh Agricultural Research Council (BARC); Dr. Stephen Biggs, British Overseas Development Group; Dr. Ben Jackson, University of Arkansas; Dr. Laurie G. Lewin, Yanco Agricultural Institute, Australia; Dr. Ken Nielsen, CIDA; and Dr. James Roumasset, East-West Resource System Institute, Honolulu. Report dated November 12-23, 1984.

BURMA: PRIMARY HEALTH CARE I, END-OF-PROJECT EVALUATION

Problem and Overview. Health problems afflicting Burma are similar to those of neighboring countries with low per-capita income, a tropical environment, and poor sanitation. Conditions are not so grave as they appeared earlier when nearly all morbidity and mortality statistics in Burma derived from hospital records, but significant problems still exist. Many of these problems could be prevented through simple primary health care measures. Basic health services (chiefly curative) have been provided by government hospitals and rural health centers, but each rural health center has a service area population of about 22,000 people, leaving many villagers without modern health care. In 1977, the Burmese government adopted a primary health care strategy based on training, deployment, and support of community-based volunteer health workers (VHWs). Three categories of "VHWs" were recruited and trained: community health workers, auxiliary midwives, and traditional birth attendants (let-thes). The tradition of voluntarism in Burmese society, the prestige that was expected to accompany the role of VHWs, and the expectation of in-kind remuneration were considered sufficient to make the VHW approach a viable strategy. UNICEF and WHO provided assistance.

U.S. Assistance. In 1980, A.I.D. agreed to support the ongoing primary health care system as its first project in Burma following resumption of U.S. bilateral support after a hiatus of 15 years. Given political sensitivities, A.I.D. designed the project, Primary Health Care I (482-0002), as a straightforward set of activities that would minimize the imposition of A.I.D. regulations. The overall goal of PHC I was the same as that of the Burmese government's People's Health Programme --namely, to reduce morbidity and mortality among Burma's rural population, particularly among infants and young children. The immediate project purpose was to expand the coverage and quality of primary health care in 147 of Burma's 287 rural townships by 1982. Total projected funding was \$16.588 million. A.I.D. funding (1980-1984) was to be \$6.459 (a \$5-million grant plus \$1.459 million in local currency). Smaller contributions were to come from UNICEF, WHO, the Burmese government, and local communities.

Purpose and Methodology of the Evaluation. The purpose of the evaluation was to examine project accomplishments, make recommendations for follow-on projects, and contribute to A.I.D.'s upcoming health-sector strategy assessment (see the following summary in this volume, "A Review of AID's Health Sector Strategy in Burma"). A modified systems approach was employed that broke the project into subsystems and then analyzed each in two steps: quantitative achievements and qualitative performance. Three weeks were spent in Burma.

Major Findings

1. PHC I was an effective project. It clearly did achieve its purpose of increasing coverage and it appears to have had a positive impact on health, particularly in reducing maternal and infant mortality and morbidity.

2. A.I.D. inputs made a significant contribution. Inputs consisted of commodities (primarily VHW medical kits), a small amount of overseas participant training and technical assistance, and local currency funds for expanding VHW pre-service and in-service training. Most of the expected outputs were achieved, although delays in all categories required the project to be extended for 2 years. The commodities were essential, particularly the VHW kits. Local currency for travel and per diems of trainers and trainees was especially important. Training targets were met in most categories and exceeded in several--most notably the training of traditional birth attendants (4000 trained vs. 1000 planned).

3. VHW performance is impressive, particularly given the constraints under which they work (limited medical supplies, limited time, limited training, and limited supervision, and little or no remuneration). The auxiliary midwives and traditional birth attendants appear to be working very well, especially in perinatal and infant care. The performance of the community health workers is less effective, but still impressive. The VHWS are appreciated by health center staff.

4. Many problems raised in the mid-term evaluation still remain. (Good news is that the Department of Health has taken steps to deal with these problems in PHC II.)

(a) Services are still more curative than preventive. The community health workers still tend to provide more curative than preventive services, although many do engage in health education and environmental sanitation activities. Some community health workers provide services (e.g., injections) they were not trained for and evidence suggests their performance may be declining over time.

(b) Training, though improving, still needs strengthening. The auxiliary midwife and traditional birth attendant training is especially good and training teams at the state/division levels appear to be functioning well, but community health worker training (now 4 weeks) is still inadequate.

(c) Supervision is the weakest link in the project. Technical supervision is infrequent and directive rather than analytic and educational.

(d) Monitoring and evaluation systems are weak. The information system is an elaborate, time-consuming reporting system with virtually no feedback to the field. Fortunately, some local staff do use data gathered at the local level for

identifying health problems, spotting trends, and planning.

Project Design and Policy Implications. Burma's volunteer-based primary health care system appears to be having greater success than in many other countries where volunteers often lose interest in the work and leave it. Why do Burma's volunteers volunteer, and why is attrition so low? Several factors may explain this. First is the spirit of voluntarism that permeates Burmese Buddhist culture. Second is the socio-political structure in which the socialist government demands respect for authority and unquestioning obedience. Third may be the economic structure which limits mobility and economic aspirations. Fourth is the prestige that accrues to VHWs from receiving medical training and possessing valued knowledge and skills. This deserves further study.

Major Recommendations

1. A.I.D. should continue assistance to Burma in primary health care. Priorities for assisting PHC II appear to be:

(a) Commodities. A.I.D. should provide the VHW kits at the beginning of training, increase the medicine supply to one year and help find ways for VHWs to resupply their kits.

(b) Training. Continue to upgrade training through technical assistance and participant training to help the Burmese become self-sufficient in training over the next decade.

(c) Supervision. Provide short-term participant training and technical assistance to help establish a viable system.

(d) Information and evaluation systems need to be carefully structured with a comprehensive framework and appropriate priorities for data collection and utilization. Provide training and technical assistance for this purpose

2. Beyond PHC II, A.I.D. should continue to support the program with the goal being to help the Burmese develop a decentralized, self-sufficient primary health care system. A.I.D. should continue to supply basic medicines and health education and training materials. Long-term insitutional development should be pursued through participant training and support to institutions such as departments of public health and community medicine. Septic abortion (given the enormous expenditure of resources on treatment combined with the government prohibition on "family counseling") deserves special attention, as do anemia and environmental sanitation.

Evaluation Team: Jack Reynolds, Ph.D. (team leader), PRICOR; Huey Mays, M.D., AID/Washington; and Helen O'Brien, R.N, M.A., consultant. Report dated February 1985.

BURMA: A REVIEW OF AID'S HEALTH SECTOR STRATEGY IN BURMA,
(SPECIAL STUDY)

Problem and Overview. On the basis of a WHO-assisted country health programming exercise completed in 1976, the government of Burma initiated a People's Health Plan for the period 1977-1982. Its objectives included establishment of a primary health care system and related basic health services to reduce infant, young child, and maternal morbidity and mortality by:

1. Encouraging communities to recognize their health needs and participate in solving these health problems;
2. Training basic health and special disease control workers to function as multi-purpose workers at the rural health center and sub-center level; and
3. Training volunteer health workers to provide simple curative and preventive care at the community level.

UNICEF and WHO provided financial and technical assistance.

U.S. Assistance. When the United States resumed economic aid to Burma in 1980 after a hiatus of 15 years, A.I.D. created its Primary Health Care I Project (482-0002) to provide additional needed assistance to Burma's ongoing primary health care efforts. Details are presented in the preceding summary in this volume (read "Burma, Primary Health Care I, End-of-Project Evaluation"). A.I.D.'s "PHC I" provided commodities (mostly health worker kits), a small amount of training and technical assistance, and local (kyat) funds for expanded pre-service worker training to speed up extension of primary health care coverage.

Purpose and Methodology of the Review. The purpose of this review was to determine whether A.I.D.'s current health sector goal and strategy in Burma should be modified. Conclusions are based on interviews, observation, and review of the PHC I end-of-project evaluation and other studies and surveys.

Major Findings

1. A.I.D.'s current health sector goal in Burma --to reduce infant, young-child, and maternal mortality and morbidity-- remains valid. This goal is consistent with Burmese and A.I.D. priorities, and most morbidity and mortality in Burma is concentrated within these segments of the population.

2. A.I.D.'s current health sector strategy in Burma is both affordable and potentially effective. A.I.D.'s strategy has been to support the Burmese government's primary health

care program of training and equipping community-based volunteer health workers (VHWs) to diagnose and treat common ailments, carry out preventive and promotive health activities, and make referrals for problems that are beyond their capabilities. The strategy is based on the assumption that a system of essentially lay volunteers, given short-term training and provided with basic equipment and initial supplies of drugs, will be able to provide much of the basic curative and preventive health services needed in the community. This strategy also assumes that the community will play a major role in the non-technical supervision and support of these volunteers. Technical support and supervision is to be provided by the staff of the rural health centers who visit the VHWs on a periodic basis. This strategy has established the critical link between the village and the formal clinic and hospital-based delivery system and should eventually lead to the most efficient use of those resources.

3. The focus has been on quantitative targets and achievement of these has been impressive. Under Burma's 1977-1982 People's Health Plan I (with A.I.D. support through PHC I), the focus was on quantitative targets. A total of 15,205 volunteer health workers (9,418 community health workers, 1,787 auxiliary midwives, and 4,000 traditional birth attendants) were trained and equipped.

4. Quantitative vs. qualitative goals. The second People's Health Plan (PHP II), covering 1983-1986 with continuing support from A.I.D.'s PHC I, gives increased attention to making qualitative improvements in VHW training and performance, but quantitative targets (extending coverage) remain the primary goal. The Department of Health is now finalizing plans for its PHP III to cover the period 1986-1990. Its stated objectives are to further expand primary health care coverage and accessibility and to improve the quality of basic health services. Because all townships are to have been "covered" by 1986, increased emphasis is then to be given to improving the quality of the system. A strategy for this is to develop "model townships" in each state or division to serve as catalysts for introducing changes into other townships.

5. Family planning is not provided by the primary health care system, despite evidence of demand and need, including a high rate of septic abortion. Many Burmese say they want a small family--two or fewer children and three at the most, but government policy prohibits family planning counseling. While contraceptive supplies are available in the market, they are expensive and are not accompanied by well-informed medical advice and service. Thus abortion is common and abortion complications are a major cause of both hospitalization and maternal mortality.

Project Design and Policy Implications. In establishing a nation-wide primary health care system, difficult judgment questions inevitably arise about quality vs. quantity. At the outset, it is not reasonable to expect that all services will be high quality, and it is reasonable to overlook some quality concerns in favor of extending coverage--providing a larger number of people with basic essentials. Gradually, as coverage is extended, there must be increased emphasis on quality. Just when, and how much, to shift the emphasis is an important decision requiring careful case-by-case analysis.

Major Recommendations.

1. A.I.D. should continue support for primary health care in Burma with the same goal as present, but should modify its strategy to focus more on qualitative improvements. Specifically, A.I.D. should:

(a) Decrease the level of support for training and deployment of additional VHWs;

(b) Support activities to upgrade the quality of the broader PHC system, especially training of mid-level health workers, refresher training for VHWs, and support for the "model township" program;

(c) Assist selected PHC services, particularly immunizable diseases (neonatal tetanus and measles), diarrheal disease control, malaria, and possibly tuberculosis and pneumonia; and

(d) Continue assistance for support services, such as health information, health services research, and manpower planning.

2. If the amount of A.I.D. health sector assistance is higher than currently anticipated, A.I.D. should consider funding to expand and strengthen community medicine teaching in medical schools and post-graduate public health training.

3. "Family health counseling" (family planning). A.I.D. should stand ready to assist in this area should the Burmese government request support. The increased availability of "birth spacing" services would have a greater impact on maternal and child welfare than any of the single interventions listed above.

Review Team: David Oot (team leader), AID/Washington; Dr. Timothy Baker, Consulting Public Health Physician; Alan Fairbank, Consulting Health Economist; Dr. John Naponick, Health Officer, AID/Burma; and Richard Nelson, Program Officer, AID/Burma. Report dated March, 1985.

**BURMA: MAIZE AND OILSEEDS PRODUCTION PROJECT,
MID-TERM EVALUATION**

Problem and Overview. Rice is the most important field crop in Burma, but maize and oilseeds contribute significantly to both the diet and the economy of this very poor and largely agricultural country. In recent years, however, population growth has outpaced the production of oilseeds crops (groundnuts, sesame, sunflowers, soybeans, and safflower), forcing the government to use scarce foreign exchange to import edible oil. With adequate extension, supporting research, and good policies, production can be increased. Maize is an important crop in cropping systems associated with oilseeds and maize production also has a great potential for increase.

U.S. Assistance. The Maize and Oilseeds Production Project (482-0005) is the first large-scale effort focused on this problem. The project purpose is to bring about a rapid rate of adoption of high-yielding inputs and tillage practices among farmers growing maize and oilseeds crops in 28 townships. The broader goal is to increase production of oilseed crops and maize, with positive effects on rural income and employment and on national food supply and nutrition. An "auxiliary" goal is to improve Burma's balance of trade by reducing edible oil imports and increasing export of oilcake. The grant agreement was signed in October, 1981, shortly after U.S. assistance to Burma was resumed (in 1980) after a hiatus of 15 years. The 5-year project is scheduled to end September 30, 1986. A.I.D. is providing technical assistance, training, machinery and equipment, and fertilizer to a total value of \$30 million (grant funds). The Burmese government is providing \$21 million, evidence of the high priority it places on maize and oilseed development. The lead agency is the Agriculture Corporation of Burma's Ministry of Agriculture and Forests. A.I.D. designated the project as a Title XII project and contracted with MUCIA (the Midwest University Consortium for International Activities) to provide technical assistance, training, and related services.

Purpose and Methodology of the Evaluation. The evaluation was conducted to assess progress of the project and measure its likely impact, to search for causes of success and failure, and to suggest changes if needed. Findings are based on cross-sectional analysis of a large sample of activities derived from site visits, interviews, meetings, documents, and observations.

Major Findings

1. Overall progress is excellent and the project appears well on its way to success. The project was well-designed and is being implemented by an appropriately placed and caring organization within the government structure.

2. Progress toward meeting specific targets is as follows:

(a) Progress toward meeting institutional development objectives is uneven. In-country training is vigorous and about 40 percent of short-term overseas training is completed, but Ph.D. training has not begun and now cannot contribute directly to the project.

(b) Crop production and edible oil targets. Progress toward specific crop production targets is good (exceeding 50 percent of the target for maize and sunflowers, 73 percent of groundnuts, and 83 percent for sesame), and momentum is increasing. But only about 33 percent of the edible oil target has been produced, due mainly to inefficient oil extraction processes.

(c) Technology is being applied more widely and systematically, especially through about 60 5-acre, high-technology demonstration sites on farmers' fields in 12 "intensive townships." Four seed farms are producing about 7 percent of the project-needed seed, though are not yet fully operational. Fertilizer use has increased significantly.

(d) A farm management information system is slowly evolving. Research capability is increasing and applied research is being conducted.

3. Funding. The Burmese government has already contributed about 52 percent of its share, although construction has been delayed by shortages of needed materials. A.I.D. has contributed about 57 percent of its share, in spite of delays due to customs clearance problems and charges described below.

4. Problems

(a) A.I.D.'s grant agreement contains language that has cost the Agriculture Corporation a large amount in unbudgeted expenses. The particular phrase concerns duties and taxes for project-related goods and services imported into Burma. The problem is onerous, and especially galling since it does not exist in projects supported by some other donors.

(b) Title XII technical assistance assistance provided by MUCIA has been beset with difficulties, although the current staff is now functioning well. Competition for the contract was limited to only two university consortia short-listed by BIFAD and the choice made was inappropriate given the requirements of living and working in Burma and of oil-seeds research and technology.

Project Design and Policy Implications. This project is progressing successfully--in spite of numerous difficulties--in large part because it was desired by the Burmese govern-

ment, meets the needs of Burma, and was jointly developed and implemented with able and dedicated Burmese agriculturalists. To an exceptional degree, it is considered a Burmese project, with AID/Burma providing supplementary inputs. The Burmese implementing organization has invested heavily in making the effort succeed and accepts full responsibility for the proper conduct and completion of the project. A second reason the project is proceeding well is that the purpose and objectives set for it were reasonable and appropriate to Burmese needs and conditions, neither so ambitious as to be unattainable nor so easy as to be readily accomplished. The size and focus of the project are also in line with the Burmese government's ability to marshal necessary inputs. Such success-supporting factors must be carefully considered in project design. Care is needed to insure that a project "belongs" to the host government and that commitment exists to carry the load successfully. Finally, the project is also progressing smoothly because of the energy, commitment, and technical and organizational skills of the Burmese project directors and AID/Burma project manager. Well-trained and dedicated personnel have a strong positive impact on overall achievements.

Major Recommendations

1. Continue project activities essentially as planned, with the same dedication and competence as already shown.

2. Initiate a carefully planned program of applied research for the remainder of the project.

3. Continue, urgently, to develop the seed farms. Establish systematic maintenance (and continuous training) for all project equipment. Develop an operationally useful farm management information system based on existing data.

4. Demand that MUCIA make a greater effort to provide appropriate expertise and thoroughly orient, prepare, and support its contract personnel.

5. Continue efforts to provide for duty-free entry of project commodities and related goods, and to expedite customs clearance.

6. Process candidates for short-term training as soon as possible so their training can be useful during the remainder of the project.

7. The final evaluation should be a joint Burmese government-USAID activity.

Evaluation Team: Douglas Pickett (team leader) and Lloyd Frederick, AID/Washington; Wilfredo DeRafols and Stanley Krause, Development Associates. Report dated February 1, 1985.

**INDIA: ALTERNATIVE ENERGY RESOURCES DEVELOPMENT PROJECT,
MID-PROJECT EVALUATION**

U.S. Assistance. This is a 5-year research-and-development project (386-0474). Its purpose is to expand India's technical capability to exploit alternative energy resources and to develop selected energy technologies to the application stage. The ultimate project goals are: (1) to reduce India's dependence on oil imports; (2) to reduce the rate of deforestation; and (3) to increase energy efficiencies in transport and industrial sectors. Collaborative subprojects between U.S. and Indian organizations are being implemented in four areas to transfer existing technologies to India and develop new ones. The project agreement was signed in FY 1982. Funding is expected to total \$7.285 million, of which \$5 million is from A.I.D.

Purpose and Methodology of the Evaluation. This was a regular process evaluation. Its conclusions are based on review of project files and quarterly reports and interviews with project officers.

Major Findings

1. Start-up has been very slow and a one-year extension is necessary. The Indian government (GOI) has taken a long time to approve subprojects and AID/Washington has been slow in processing requests and contractual arrangements (grants and PASAs) on behalf of USAID/India. Initial delays were also caused by the creation of a new implementing agency, the Department of Non-Conventional Energy Sources (DNES). (When the project was designed, it was intended that the GOI Commission for Additional Sources of Energy would be the primary implementing agency. Three months after the project agreement was signed, however, DNES was created and given responsibility for the project. Like any new organization, DNES required considerable time to become functional.)

2. Implementation is beginning to speed up and 12 subprojects are now under way (out of the 20 specified). Progress in each of the four project components is as follows.

(a) Coal and Biomass Conversion. Three biomass conversion and five coal conversion subprojects have been active since early 1984. A successful workshop was held in November, 1983 and a second workshop is scheduled for November, 1984. This component is being implemented through a PASA with the Pittsburgh Energy Technology Center.

(b) Information Exchange in New and Renewable Energy. Two subprojects are fully under way. One is field testing of

a polymer film collector (by Brookhaven National Laboratory and the Solar Thermal Energy Center). The second is an effort to develop a mini and low-head hybrid hydroelectric system. A PASA was recently signed to develop a national planning model for non-conventional energy in India.

(c) Energy Efficiency in Industry and Transportation. Energy-efficiency workshops are being planned by the National Academy of Sciences and the Association of Indian Engineering Industries. GOI approval of this component took approximately one and a half years, however, and AID/Washington was also slow in processing the grant to the National Academy of Sciences.

(d) Biomass Production. Subproject approval has been delayed by the Indian government since September, 1982. Final approval is expected by November, 1984. A.I.D. anticipates a PASA with the U.S. Forest Service for this component.

Project Design and Policy Implications. The project design was over-optimistic about the ability of USAID/India to get implementation under way. Not anticipated were the creation of a new implementing agency and delays from AID/Washington and the Indian government. In India it is not unusual for the government---even after approving the overall project-- to take two or more years to approve a subproject.

Major Recommendations

1. The project (PACD) should be extended one year.

2. Implementation start-up. Goals during the first few years should not be unrealistic. It should be understood and stated from the outset that implementation may initially be laggard.

3. Coordination with AID/Washington should be tighter. The mission should give AID/Washington clear guidance as to the importance of its requests.

Evaluation Conducted by: Diana Swain, USAID/India Assistant Project Development Officer; and Peter Thorman, USAID/India Evaluation Officer. Report (PES) dated October 16, 1984.

INDIA: CLUSA/INDIA PROGRAM DEVELOPMENT AND SUPPORT GRANT
MID-TERM EVALUATION

Problem and Overview. The Cooperative League of the United States of America (CLUSA) has worked with the cooperative movement in India since 1954. It continues to give important support to Indian cooperatives by drawing on the experience of its member cooperatives in the U.S. for information, technical assistance, and training. CLUSA activities in India are financed by its own resources, the Indian government and, since the mid-1960s, A.I.D.

In 1979, CLUSA became involved in the Oilseed Growers' Cooperative Project (OCGP) of India's National Dairy Development Board (NDDB). (The short supply of edible oils is a major problem in India. The purpose of the Oilseed Growers' Cooperative Project is to restructure the vegetable oil industry by establishing an integrated production, processing, and marketing system within a cooperative organization owned and controlled by the growers themselves. See the following executive summary, "CLUSA/USAID Technical Assistance to the NDDB's Oilseed Growers' Cooperative Project.") CLUSA, as cooperating sponsor of the project, assumed monitoring and reporting responsibilities which, in addition to its ongoing core program, made heavy demands on its staff and facilities.

U.S. Assistance. An operational program grant (OPG 386-3024, or 386-0000-G-00-3024-00) provides \$930,000 over the life of the grant, including \$143,573 to meet dollar costs and \$786,427 for local currency (rupee) expenditures. The grant was initiated in April 1983 and is scheduled to terminate on December 31, 1986. The purpose of this grant is to provide assistance, through CLUSA, to the Indian cooperative sector. The grant seeks to increase CLUSA's ability to support and monitor: (1) the Oilseed Growers' Cooperative Project; and (2) other government and cooperative activities.

Purpose and Methodology of the Evaluation. The purpose of this mid-point evaluation is to assess the effectiveness of (1) CLUSA's assistance to the Oilseed Growers' Cooperative Project, (2) its performance in monitoring and reporting on that project, and (3) its performance in planning and implementing other activities in India, as well as (4) to make recommendations for the balance of the grant period. Findings are based on analysis of project documentation and discussions with CLUSA and USAID officials.

Major Findings

1. Start-up was very slow and use of funds was well below planned levels in the first year of the grant, due largely to delays in recruiting staff. Since recruitment of added staff last summer, expenditures are now approaching planned rates.

2. Support and monitoring of the Oilseed Growers' Cooperative Project is CLUSA's major focus in India. Impacts and benefits to the project through CLUSA cannot yet be determined. USAID/New Delhi states that CLUSA was unable to monitor the project in accord with targets laid down in the multi-year operational plan. A major CLUSA activity has now been extensive revision of the multi-year operational plan.

(a) Monitoring and reporting. CLUSA submits quarterly, semi-annual, and annual reports on the Oilseed Growers' Cooperative Project. These are based largely on information supplied by NDDB from its management information system. CLUSA also conducts regular project reviews with the NDDB and its Oilseeds and Vegetable Wing (OVOW) management staff. Until recently, CLUSA did not have enough professional staff to carry out regular site visits and district review meetings as planned; this has now been corrected. The reports are comprehensive, providing data and analyses of achievements against project targets. USAID/New Delhi, however, has not been satisfied with the form and content of the reports. The problem relates to a difference between CLUSA and USAID views as to the nature of the project and the appropriate roles for CLUSA and USAID. USAID/New Delhi has proposed a new format for simplifying the reports, but it does not address the basic problem of what information A.I.D. needs and why.

(b) CLUSA has been effective in arranging for vegetable oil imports for the project and monitoring their handling after arrival. USAID/New Delhi considers the various commodity reports submitted by CLUSA to be well prepared and reliable, but generally submitted later than desired.

3. Support to other government and cooperative activities

(a) CLUSA has worked with the National Cooperative Development Corporation (NCDC) to develop a proposal for support of cooperative oilseed processing units to be financed by NCDC (the NCDC II Oilseed Processing and Management Project). This is a follow-up to an A.I.D.-financed OPG that terminated in 1982.

(b) Cooperative-to-cooperative trade and investment. CLUSA has prepared papers on cooperative-to-cooperative trade as a basis for discussions with cooperative organizations. A delegation of Indian cooperative and government officials is scheduled to visit the U.S. to discuss trade opportunities with U.S. cooperatives.

(c) Strengthening cooperative planning and management. CLUSA participates in various programs to improve the skills of cooperative personnel in planning, management, and technical operations. At the request of Samakya (an innovative trust established to assist rural cooperatives in Andhra Pradesh), CLUSA designed and conducted a planning seminar for Samakya staff and continues to provide planning

assistance. CLUSA responds to a large volume of requests for information from Indian cooperatives and coordinates travel programs to the U.S. for Indian cooperators.

4. CLUSA is also involved in several initiatives not specified in the OPG which developed from discussions between the NDDB chairman and the A.I.D. administrator in 1983. (1) CLUSA assisted in recruiting consultants to plan a project for cooperative vegetable and fruit production, processing, and marketing based on the "Anand Pattern." Outlets are scheduled to open in Delhi within 4 to 6 weeks. (2) CLUSA arranged for the National Rural Electric Cooperative Association to visit India to initiate a pre-feasibility study for a rural electric cooperative in Gujerat. (3) CLUSA has been designated as cooperating sponsor for a PL 480-Title II donation of non-fat dry milk to the Indian Dairy Corporation.

Project Design and Policy Implications. The grant was appropriately designed. The chief problem now arises from the lack of consensus as to what information A.I.D. needs from CLUSA concerning the Oilseed Growers' Cooperative Project, and for what purposes. A.I.D. does need to know whether donated commodities are properly handled and if the proceeds are used for the agreed-upon project purposes. But further information needs that are not agreed upon appear related to the fact that USAID administrative responsibility for the project (which is one of the mission's largest) is located in the Food-for-Development Office, which is not staffed to manage a program in the standard Development Assistance fashion.

Major Recommendations

1. As soon as possible, CLUSA should draft a plan for future activities. This should go beyond the end of this grant in 1986 and anticipate a need to support the Oilseed Growers' Cooperative Project for several more years.

2. Specific objectives for the balance of the present grant should include:

(a) Intensive review with USAID/New Delhi to establish what information is needed by A.I.D. and for what purposes and then to agree on a satisfactory reporting format.

(b) Using the augmented professional staff for more frequent site visits and regular district project reviews.

(c) Helping NDDB develop a financial self-sufficiency model for federation-level operations.

Evaluation Team: Russell O. Olson (for A.I.D.) and Douglas Broome (for CLUSA). Report dated December 1984.

INDIA: CLUSA/USAID TECHNICAL ASSISTANCE
TO THE NDDB'S OILSEED GROWERS' COOPERATIVE PROJECT
FINAL EVALUATION

Problem and Overview. The major nutritional problem in India today involves the short supply of edible oils, the second most important source of calories, after foodgrains, in the national diet. The bulk of India's vegetable oil comes from five major oilseeds. Hardly more than a decade ago, India was almost self-sufficient in the production of edible oils. Now there is not only a chronic shortfall in production but also market practices which, even in times of relatively high production, lead to artificially high prices and scarcities. Recently, vegetable oil imports have surpassed 1 million tons a year, resulting in a substantial foreign exchange loss. It should be noted also that oilseeds are the most common crop in dry and semi-dry regions of the country where farmers are poor and do not have the benefit of irrigation.

The Oilseed Growers' Cooperative Project (498-0251) was created to relieve this problem. The project purpose is to restructure the vegetable oil industry by integrating production, processing, and marketing of oils within a cooperative organization owned and controlled by the growers themselves. The project was established under a memorandum of agreement between India's National Dairy Development Board (NDDB) and the Cooperative League of the USA (CLUSA). The Oilseeds and Vegetable Oils Wing (OVOW) of the NDDB is responsible for implementation. The "Anand Pattern" of cooperative structure, which had proven successful in the "Operation Flood" dairy development undertaken by NDDB, was adopted as the project strategy. The project is financed by local (rupee) currency generated from commercial sales in India of soybean oil provided under the U.S. Food for Development (P.L. 480-Title II) program. (The overall CLUSA program in India is described in the previous executive summary, "The CLUSA/INDIA Program Development and Support Grant.")

U.S. Assistance. This evaluation focuses on an operational program grant (OPG 386-2144) "CLUSA OPG for Technical Assistance to the NDDB's Oilseed Growers' Cooperative Project." The specific purpose of this OPG is to provide initial technical support to NDDB to help ensure a successful and rapid establishment of the Oilseed Growers' Cooperative Project by taking advantage of the experience and technology of the well-advanced U.S. cooperatives. The grant provided \$374,800, chiefly for: (1) observation/study tours in the U.S. by top-level officers of the NDDB and the State Oilseed Grower's Federations, (2) in-service training for key NDDB officials, and (3) four expatriate short-term consultants and 15 person-months of long-term consultant services. This was to be a 3-year grant, ending in August 1982.

Purpose and Methodology of the Evaluation. The purposes of this final evaluation of this CLUSA OPG were: (1) to assess CLUSA's achievements against objectives and planned activities; (2) to assess the impact on the project of CLUSA-provided assistance; and (3) to make recommendations for possible follow-on technical assistance. Findings are based on 16 days of document analysis, interviews, a one-week visit to the NDDB in Anand, and a visit to the Gujarat Oilseed Growers' Cooperative Federation processing plant.

Major Findings

1. Overview. Implementation of the OPG has been slow but effective. The initial 3-year grant was amended 7 times over 6 years (extending the grant to September 30, 1985). The basic reason for the extensions was the initial low level of activity in the Oilseed Growers' Cooperative Project. This was due to serious misunderstandings between NDDB and A.I.D. over the use of special accounts and an audit report that NDDB/OVOW considered unusually hostile; this in turn required much time of key NDDB officials and created considerable uncertainty among them about future support for the project. This made it advisable to delay some components of the grant. Difficulty in getting Indian government clearances for key personnel and technical consultants contributed further to the slow pace and resulted in problems in filling consultant positions and in planning training programs in the most effective way. Despite these difficulties, the Oilseed Growers' Cooperative Project supported by this OPG, has been effective in initiating a cooperative-sector intervention in oilseed production, which is vital to the Indian economy.

2. Operations research. An ongoing program of operations research is not proceeding as planned. The OR consultants may have arrived prematurely and the OR study did not provide anything approaching the intended "blue print." But it did identify issues that had to be resolved as to plant size, technology, and location and several studies have been commissioned to address program needs as they arise.

3. The familiarization/study tour to the U.S did not meet its intended purpose, but this fact did not adversely affect the project. This study tour was to take place early in the grant in order to help determine how best to use the funds provided for in-service training and consultant services. The study tour was carried out much later, however, because the key NDDB persons who were to go on it were first deeply involved with the operations research study and then slowed by the misunderstandings with A.I.D.

4. The short-term consultancies were converted into a long-term position to take advantage of the availability of a single highly-qualified person with good Indian expertise. This did not follow the OPG plan but served the project well.

5. In-service training was less effective than anticipated for several reasons. One was the fact that it took place much later in the grant period than planned.

6. The contribution of the Standing Advisory Committee is difficult to assess. Given that costs have been minimal, however, it appears a cost-effective way to tap expertise within the U.S. cooperatives.

7. Commodities procured have amounted to only \$675.13--vs. the \$6,300 provided for this purpose.

8. Management and coordination of the grant has been quite satisfactory.

Project Design and Policy Implications. This OPG was appropriately designed but had a very troubled start-up nevertheless. Despite initial difficulties, personnel involved managed to overcome them, and as a result, the OPG ended up accomplishing most of what it set out to do (although less rapidly than planned). Project managers appear to have made correct decisions in amending the grant numerous (7) times and in such a way as to preserve, as much as possible, the proper sequencing of activities funded by the grant, even though they took more than twice as long as intended. (The willingness to extend this grant should be contrasted with the experience of the Land Settlements Project in Thailand, summarized above in this volume.)

Major Recommendations

1. Consultant services of the kind provided under this grant should be provided for the new oilseed processing plants yet to be commissioned. The project has now entered into the very important stage of planning and constructing processing units. Consultants are needed with experience in operations and management to assist in planning, building, and operating the plants during the next 2 to 3 years--and to encourage efficient management from the outset.

2. Consultancies should be for short periods of 3 to 6 weeks at a time, but repeated after appropriate intervals by the same consultants to provide a continuity of services over the 2-to-3-year period.

3. Five key NDDB persons should be selected for training in the U.S.

Evaluation Team: Russell Olson, Christine Adamczyk, and S.C. Mehta. Report dated October 1984.

**INDIA: DEVELOPMENT AND MANAGEMENT TRAINING PROJECT,
MID-PROJECT EVALUATION**

Problem and Overview. The Development Management and Training Project (386-0487) was designed to respond to several apparent opportunities in the U.S.-GOI (government of India) assistance dialogue. AID/Washington was promoting training as an especially effective method of contributing to institution-building, technology transfer, and the overall policy dialogue. Other donors were not financing major training programs. GOI officials, after a period of coolness toward large-scale U.S. training, were favorable to a project that would provide in-service technical and managerial training primarily to mid- and junior-level bureaucrats, and were not adverse to A.I.D.'s suggestion that a modest number of training slots be set aside for private-sector and female participants. Furthermore, USAID/India lacked a generic training project that would permit it to make use of the training opportunities being presented by AID/Washington.

U.S. Assistance. The project was launched therefore with high expectations for rapid success. The project agreement was signed in 1982 with a project completion date of June 30, 1987. The total project cost was to be \$8.2 million (a \$6.1-million grant from A.I.D. and a \$2.1-million in-kind contribution from the Indian government). The project purpose is to strengthen the managerial and technical capabilities of public and private sector personnel in India in areas of GOI and A.I.D. collaboration. The overall project goal is to help increase the institutional capacity of GOI development agencies to plan and implement development activities in sectors of high priority to both the GOI and A.I.D..

The project design had four components, two of them major:

- (1) development of about 25-30 joint U.S.-Indian training teams and establishment, by these teams, of training programs within ministries for their line staff; and
- (2) U.S. or third country short-term, academic training.

Minor components were:

- (3) U.S. long-term academic training; and
- (4) short-term non-academic training at Indian institutions.

Training slots were to be reserved for female participants (15 percent) and private-sector participants.

Purpose of the Evaluation. The purpose of the evaluation was to: (1) measure progress to date, and (2) recommend changes to speed up implementation. The evaluation was part of a broader analysis of all USAID-supported training in India (and, in fact, the chief reason for the overall analysis).

Major Findings

1. This is clearly a "troubled" project. It has fallen far short of expected progress and is only now at the point of development that it should have been two years earlier when it was approved. The first major component has not yet begun and the third component has had to be eliminated. Only two training sessions have been completed in India and only 26 Indians have gone abroad for training. Only 10 percent of planned expenditures for the first two years has been spent.

2. Reasons for the slow implementation derive, to a large extent, from faulty assumptions during project design. Reasons include the following.

(a) USAID misperception of GOI views on training. Having finally reached agreement with the GOI that the U.S. could do large-scale training once again, USAID falsely assumed that the hard part was over and implementation would commence rapidly. The GOI has subsequently directed, for example, that no long-term training will take place under the project.

(b) Misperception of ministerial relationships. Project design assumed USAID/India would work directly with ministries most closely related to A.I.D.'s own program in India (e.g., agriculture, irrigation). In fact, USAID has been required to deal with these sectoral ministries indirectly, through the Ministry of Finance. This has slowed the process, although perhaps less than USAID personnel believe.

(c) Inadequacy of ministry training plans. Another assumption that proved faulty was that the GOI ministries already had, or could readily develop, training plans that would prioritize training needs to be met by the project. In fact, ministries that claimed they had plans presented unacceptable materials; those without plans found it difficult to develop them. (Finally, 15 months after project approval, a contract was let with the Indian Institute of Public Administration to help develop the training plans that were supposed to have existed at the outset.)

(d) Misidentification of Indian training counterparts. The project envisaged that the joint U.S./Indian teams conducting the training in India would relate directly to ministry training "cells." In fact, those ministry units do little training themselves but rely heavily on outside training institutes. (These institutes now appear to offer much more likely counterparts for the joint training teams than the ministries.)

(e) Misjudgment of USAID capacity for selecting U.S. participants. Project design assumed that USAID could easily develop training arrangements with institutions in the U.S., India, and other countries. In fact, selecting U.S. institutions was a lengthy process that resulted in fewer Indians

being sent to the U.S. for short-term training than expected.

(f) Misjudgment of USAID capacity for involvement in project implementation. The project paper specifies an active role for USAID/India in programming the training. In fact, USAID/India clearly does not have enough staff to give major time to the project and thus has taken a basically passive role while waiting for the GOI to work out its plans and procedures. (For example, the Project Paper did not specify the method for contracting with the U.S. training institutions; during the ensuing two years little has been done to identify potential mechanisms.) The project design suggests one person, probably an American, would be required virtually full-time over the next one or two years to permit the project to come into active operation.

3. The project is at a critical point. Problems that have characterized this and other USAID-funded training projects in India are not subject to easy remedy and will likely continue. Without vigorous USAID action to move it forward, further delays and problems are inevitable.

4. This project is perhaps the best illustration available of the problems of doing participant training in India.

Project Design and Policy Implications. The process of designing this project appears to have involved too little institutional analysis and too much wishful thinking. The assumptions underlying the project were sound, in principle, but they did not correspond to the realities of the Indian ministerial bureaucracy, or even USAID/India's own capacities. This should have been discovered during project design through careful institutional analysis and alternative strategies adopted instead. It cannot be assumed that things will happen just because they are logical and desirable.

Major Recommendations

1. The project should be continued, although perhaps re-designed, and work should begin soon on a follow-on project based on lessons learned. Laggard as the project has been, it is nevertheless a breakthrough in USAID/India's efforts to provide American-originated training to Indian participants.

2. USAID/India should accelerate the positive aspects of the project and learn to accept the negative aspects it cannot change. Efforts to find ways around the cumbersome GOI regulations and procedures are not likely to succeed so long as training abroad, especially in the U.S., is invested with the same political significance in India as it is today.

Evaluation Conducted by: Development Associates, Inc. Report titled "USAID-Supported Training in India: An Analysis" (see pp. 19-32). Dated December 21, 1984. Submitted with USAID/India Project Evaluation Summary dated September 24, 1985.

INDIA: TECHNOLOGIES FOR THE RURAL POOR
MID-PROJECT EVALUATION

Problem and Overview. In the early 1970s, Indo-U.S. diplomatic relations reached their lowest point since Indian independence and the A.I.D. program was phased out. In 1974, as an initial step in renewing relations, the two countries established a Joint Commission for Indo-U.S. Cooperation, with a Subcommittee on Scientific and Technological Communication. This subcommittee identified energy and natural resources as a priority area, with emphasis on renewable energy technologies, and submitted proposals to the U.S. Energy Research and Development Administration (ERDA), now the Department of Energy (DOE). ERDA/DOE selected three proposals as technically interesting--but did not have funds to support this proposed research.* The ERDA/DOE manager of the selection process soon moved to AID/Washington to work on A.I.D.'s growing energy portfolio. As one of the first steps in reviving the A.I.D. program in 1978, his three ERDA/DOE selections were then incorporated into an A.I.D. project to foster joint cooperation among U.S. and Indian researchers in the area of solar energy. (*The proposals selected were: [1] from the U.S. Jet Propulsion Laboratory and Bharat Heavy Electrical Inc. of India--to develop a dish concentrator system; [2] University of Houston and Indian Institute of Science, Bangalore--to develop trough collectors; and [3] Colorado State University and India's Annamalai University--to develop solar drying systems.)

U.S. Assistance. The project was approved in August 1978 as Technologies for the Rural Poor (386-0465). Its stated purpose was to support the application of science and technology for rural development. The primary focus was to be on non-conventional energy projects. Approved funding was \$2 million. Seven subprojects were eventually approved for a total of \$1.94 million. Of this, \$1.52 was provided for four energy subprojects (the three selected by ERDA/DOE plus a micro-hydro electronic controllers project). A completion date of December 31, 1986 was established.

Purpose and Methodology of the Evaluation. The evaluation focused only on the four energy projects. Its purpose was to determine: (1) whether the project objectives have been met; (2) whether follow-on activities are warranted; (3) the effectiveness of the U.S. technology transfer; and (4) the effectiveness of management by A.I.D. and the Indian Department of Non-Conventional Energy Sources (DNES). Findings are based on four weeks of interviews, visits to all four subproject sites, and analysis of documentary information during November-December, 1984.

Major Findings

1. Fulfillment of project objectives. The project has not met its stated purpose. Several of the technologies produced were scientifically interesting, but are too expensive and too complex for rural site operation and maintenance. They have only a tenuous connection with cost-effective rural development and appear to have been selected because they were expensive and involved very experimental techniques. Criteria contained in the project paper for subproject selection were adequate but should have been more rigorously applied to avoid what should have been perceived as inappropriate technologies. Economic, social, and technical feasibility studies, when performed at all, were frequently inadequate. Some criteria were completely ignored (for example, the requirement that professional women should be involved in the project selection and implementation process).

2. Subproject status. The complexity of several of the subprojects led to serious implementation delays. Only one of the four subprojects has been completed. This is the solar rice drying system which appears ready for widespread testing and dissemination. The other three subprojects have not yet been tested outside the laboratory and will require an additional 3 to 12 months just to finish installing the technologies at the field-testing sites and another 6 to 12 months of monitoring and data collection to determine the performance of the completed systems under field conditions and their economic feasibility and cost-effectiveness.

3. Technology transfer. The project resulted in significant transfer between the U.S. and Indian scientific and academic institutions in renewable energy utilization. Long-term relationships were established that will facilitate future technology development and information transfer. The project also helped establish India centers of excellence in several areas of renewable energy research and utilization. The quality of the technical research performed was high and the technologies developed were technically sound.

4. Management by A.I.D. and the Indian Department of Non-Conventional Energy Sources (DNES) has been somewhat effective, but inadequate. USAID/New Delhi never had a technically trained energy officer during course of the project, but rather a project officer assigned to make sure that work was done on time. When problems arose and budgets began to rise, there was no scientific expertise in the mission to judge the proposed solutions. The project officers did intercede effectively, however, to block gratuitous travel and unnecessary expenses by the principal investigators.

Project Design and Policy Implications. This project is the victim of a design process that began in one institution, the U.S. Department of Energy, under one set of policies and was

later completed at A.I.D. under a different set of policies (namely, the Congressional mandate that projects should promote appropriate technology and help the rural poor). The project has consequently suffered from a divergence between its initial concept, that of scientific exchange and scholarly research, and its formally stated purpose: to develop technologies for the rural poor. The subprojects were selected on their technical merit and interest to technical specialists, rather than on applicability to the rural poor--a criterion that was added later when USAID/New Delhi decided to fund the overall Energy for the Rural Poor project. The subprojects were designed as research projects, and several remained that. In sum, "Technologies for the Rural Poor" is a failure in terms of its stated purpose because, in essence, this purpose was only tacked on at the end to a package of activities that had been developed for a different purpose. "Technologies for the Rural Poor" has been successful, however, in meeting some of the "higher technology" transfer objectives that originally got the design process going before it was transferred to A.I.D.

Major Recommendations

1. All four subprojects should be extended to allow for the final procurement of all needed equipment, system assembly and debugging, and 6 to 12 months of field testing.

2. U.S. collaborative assistance during the extension period should be restricted to highly focused technical assistance, performance monitoring, and cost-reduction strategies by commercial producers.

3. A.I.D. and DNES should fund follow-up economic analysis of each technology, after field-testing is finished, to determine if broader demonstration or commercialization is warranted.

4. A.I.D. and DNES should consider three follow-up activities:

- (a) Utilization of solar energy and biomass waste in agricultural drying;
- (b) Integrated rural development projects to couple with planned remote micro-hydro installations; and
- (c) Wind monitoring systems for agricultural and community water supply.

Evaluation Team: John Ashworth, Ph.D. and Richard McGowan, Associates in Rural Development, Inc.; and G.D. Sotha, Ph.D., Department of Non-Conventional Energy Sources, Government of India. Report dated January 31, 1985.

**INDIA: A PLANNING, MONITORING, AND EVALUATION SYSTEM FOR
FOOD-FOR-WORK PROGRAMS IN INDIA:,
EVALUATION OF PROGRESS DURING THE FIRST STAGE OF IMPLEMENTATION**

Overview. Catholic Relief Services (CRS) has been conducting Food-for-Work programs in India for over 20 years. Through these programs, CRS has made possible the construction or repair of hundreds of wells, small dams, bunds, roads, and houses. As part of its continuing effort to upgrade its programs, CRS two years ago decided to attempt to develop a planning, monitoring, and evaluation (PM&E) system whose purpose would be to provide prompt information to program managers about the development impact of CRS' Food-for-Work projects and to promote useful dialogue between CRS and those who are implementing development projects. After a year of development and pilot testing, CRS committed itself to implementing the system for a two-year period beginning in October 1984.

Purpose and Methodology of the Evaluation. This evaluation (contract ASB-0219-0-00-5046-00) was conducted to assess the effectiveness of this new system during its first six months of operation. Methodology during the two-week period consisted of an overall progress review at the central New Delhi office followed by a workshop in Bombay with representatives from all four CRS zonal offices. The workshop was innovative in that it brought about participatory review of progress to date at the same time as it served as a training function. Approximately 40 project analyses were reviewed and an exercise in estimating the useful life of a completed project was conducted. Participants were asked to estimate the useful life of each of the major asset categories--wells, small dams, bunds, roads, and houses. Differences in the estimates were discussed with the goal of giving participants a better understanding of factors that could lead to increases in the useful life of the development project.

Major Findings

1. The PM&E system appears to be promoting constructive dialogue about how to improve the developmental impact of Food-for-Work projects. This seems to be happening at all levels of program activity: central, zonal, consignee, and project holder. The fact that change is already occurring is a tribute to the motivation of the CRS staff and project holders.

2. The increasing integration of Food-for-Work with the Targeted Maternal Child Health Education Program (TMCHEP) is a powerful change in CRS programming. Food for Work will become more nutritionally targeted and thus will be used to deal with a basic cause of child nutritional deficiency that

cannot be dealt with under a maternal child health program alone.

3. The system is now past the pilot stage and into sufficiently wide use within CRS to be affecting program activities. Initial feedback from the field indicates the system is having a distinct impact on the way Food-for-Work project implementors are carrying out their work. Changes and mid-course corrections will, of course, continue into the future.

4. CRS has decided both to continue the effort and to expand the domain of the PM&E system to include links with some of its other activities.

5. CRS' plan to have a year-end all-India meeting is sound. This time for communication will assist in motivating participants, which is necessary for successful implementation of the planning, monitoring, and evaluation system. It might be desirable to include TMCHEP personnel for at least some part of the meeting.

6. A strong case can be made for computerizing the PM&E system, especially if computerization is limited in scope and rapidly carried out so that the benefits can begin to be realized within the next year. Use of battery-operated portable hardware and data compatibility with the larger CRS computerized information system soon to be introduced worldwide will enhance the usefulness of the Indian PM&E system.

7. Methodology for project development training and for case studies have been improved.

Project Design and Policy Implications. This appears to be an unusually promising example of a monitoring and evaluation system designed to be useful at the community level. Often such systems require that local-level personnel spend a great deal of time recording data that goes to a central office but is not fed back to them. In contrast, the focus of this system is the community and institutional learning based on analysis of past experiences; it is implemented at the individual project level (local site) with the intent that the most useful results would occur at that level. It was also designed to be capable of utilization without a computer. In the view of its designers, most--if not all--field-level systems should be initiated manually so that a very clear understanding of the steps involved is available to all. The initial design envisaged that computerization might become desirable at some later time, and planned accordingly, but maintained that computerization at the outset would prevent the desired dialogue between CRS and project holders. The experience to date and the developments during the next few years are certain to provide valuable lessons for the design of planning, monitoring, and evaluation systems elsewhere.

Major Recommendations

1. Integration with TMCHEP. CRS should be encouraged to pursue its current plans for integrating its activities with those of Targeted Maternal Child Health Education Program.

2. Training. Rather than provide training to consignees in the hope that they will in turn train project holders, CRS should experiment with providing training directly to project holders.

3. Case studies/situation analysis. The Delhi Food-for-Work evaluator should participate in the case study/situation analyses and otherwise double the time spent in the field during the next six months.

4. Possible impact evaluation. CRS would like to have the option of using results from the PM&E system for an impact evaluation at some time in the future. Given this possibility, time should be devoted now to formulating a possible research design and sample frame

Evaluation Team: Dr. William Drake, Community Systems Foundation; Mr. George Thomas, CRS/New Delhi; and Mr. John Paul Chudy, USAID/New Delhi. Report dated April 1985.

**INDIA: THE USAID-ASSISTED ICDS PROGRAM IN INDIA:
DEVELOPMENT OF A PLAN FOR MANAGEMENT INFORMATION IMPROVEMENTS
AND SYSTEM EVALUATION**

Overview. ICDS is a program being introduced throughout all 22 states and union-territories of India.

U.S. Assistance. A.I.D. is providing support to ICDS in a single district in each of two states: Chandrapur in Maharashtra and Panch Mahals in Gujarat. The project paper prepared in 1983 contained an evaluation plan which is the basis for evaluation activities that have been initiated. The evaluation design initially chosen by USAID/ICDS is a modified quasi-experimental design with reflexive controls--meaning that ICDS participants are to be observed over time (3 to 5 years) as the program is implemented. A baseline survey has recently been completed. For the baseline survey, a sample of 42 blocks out of 1115 anganwadi groups was selected from eight blocks in Chandrapur. A sample of 51 out of 2729 anganwadis was selected from 11 blocks in Panch Mahals. All blocks are to be re-surveyed twice during the project with survey work done in alternate blocks annually.

Purpose and Methodology of the Consultancy. This was a four-week consultancy whose purposes were to provide recommendations on: (1) the evaluation design; (2) the format for the baseline survey report; (3) the design of a computerized data analysis plan; (4) coding and data cleaning. Investigation included three field visits to Gujarat (for meetings with the organizations that have joint responsibility for the baseline survey, visits to 14 anganwadis in both tribal and rural blocks, and meetings with officials at all levels of the government) manual analysis of a small sample of data from the recently completed baseline survey, and review of computational and analysis capabilities at USAID/New Delhi, in Baroda and at the Indian Institute of Management in Ahmedabad.

Major Findings and Recommendations

1. **The baseline impact evaluation study.** The baseline survey, consisting of some 9,000 individual family schedules and 59 anganwadi-level schedules, is currently being keyed and processed by ORG of Baroda. This type of evaluation study, like most study designs that are implemented under actual program conditions, leaves ample opportunity for competing explanations of an observed outcome. In this design, competing explanations include not only secular trends, but also in- and out-migration and non-comparability among comparison groups (for example, tribal versus rural status and differences in proximity to a health facility). Therefore:

- (a) Because of the substantial differences among obser-

vation groups, at least some of the same anganwadis should be observed over time.

(b) Because there are no clear dichotomies among treatment groups and time intervals, the analysis of successive surveys should treat most of the variables as continuous rather than dichotomous.

(c) To keep the task of interpretation manageable, no further tabular formats should be added to the baseline impact evaluation analysis at this time.

(d) The source program code for error detection in the baseline survey should be included in the report annex to facilitate corrections in future survey rounds.

2. The data analysis plan. M.S. University, USAID/Delhi, ORG, and the Ministry of Social Welfare should all have the same (or compatible) analysis capability, so that not only information but also analysis can be shared and worked on together.

3. The management information system (MIS)

(a) This information system is so massive that the task of offering suggestions for improvement must be bounded. Without such bounding, a limited effort such as this could be diluted to the point of negligible gain. Three criteria are useful in helping to decide where to focus improvement activities: (1) the current stage of system implementation and consequent usefulness of new feedback information; (2) improvement in reliability; and (3) improvement in validity.

(b) Emphasis has been on process indicators, so there is now opportunity to expand feedback capability for impact indicators. The feedback gap at the mukhya sevika and anganwadi worker level should be filled in a way that improves reliability and validity.

(c) Potential exists for a uniformly high degree of reliability in the growth card data and summaries forwarded by the anganwadi workers. The less reliable anganwadis should be brought up to the level of precision of the reliable ones.

(d) A substantial proportion of an anganwadi's daily activity is spent in data gathering. Alternative MIS implementation schemes should be measured for the effect they have on anganwadi work load and learning and how much they improve reliability and validity in the system.

(e) Because the new ICDS information system is just now being implemented, it may be best to devote most of the first year to developing and testing alternatives on a small scale. Only later would controlled experiments begin, followed by

formal testing on a larger scale.

Project Design and Policy Implications. ICDS is being introduced throughout India at an extremely ambitious rate. There are now more than 100,000 anganwadis throughout all 22 states and union-territories, and the goal is more than 200,000 by 1990. The Indian government has quite properly placed initial emphasis on expansion of coverage, leaving systems improvements until later. It is important to recognize, therefore, that the MIS that exists now is intended to evolve and improve over time and that the MIS component of the USAID-assisted ICDS is but one small part of this overall development effort.

Report Prepared by: William Drake, Community Systems Foundation. Report dated May 1985.

INDONESIA: AID'S ROLE IN INDONESIAN FAMILY PLANNING, 1980-1984
END-OF-PROJECT EVALUATION

Problem and Overview. In Indonesia, as in most developing countries, rapid population growth threatens to cancel out development gains and efforts to overcome poverty. Unlike many other countries, however, Indonesia has made great progress in curbing its rate of population growth and its family planning program is widely recognized as one of the most successful in the world. Evidence of this success is the steadily increasing prevalence of contraceptive use (about 60 percent at present) and the declining birth rate (now 29 per 1000). Success can also be measured by the growing number of outlets for family planning information and contraceptive services (about 200,000 at present) and by the increasing awareness among all political, religious, and cultural groups regarding the high costs of rapid population growth and the consequent shift--especially in the inner islands of Java and Bali--in sociocultural norms.

Well-recognized factors contributing to the success of the program include: high-level political commitment, steady economic growth, and a well-organized, capably staffed and adequately funded National Family Planning Coordinating Board (BKKBN). Other factors, specifically related to BKKBN, have included: organizational commitment, flexibility, innovative approaches to program planning and implementation, an open management system, and widespread community participation.

U.S. Assistance. Since 1968, A.I.D. has provided nearly \$175 million in grants and loans to BKKBN for local program costs, technical assistance, domestic and overseas training, and contraceptives and other commodities. A.I.D. currently supports two family planning projects. The Family Planning Development and Services Project (497-0270), funded since 1978 for \$27.92 million, and the recently concluded Oral Contraceptive Loan (497-0271) of \$56.1 million. These are followed by a \$23.4-million continuation project, Family Planning Development and Services II (497-0327). It is also widely acknowledged that A.I.D. support has been a major factor in the success of Indonesian family planning to date.

Purpose and Methodology of the Evaluation. This evaluation was conducted to provide an end-of-project analysis of USAID/Jakarta assistance and to identify lessons for improving family planning assistance both in Indonesia and elsewhere. The evaluation builds on--and reaffirms the conclusions of--the 1979 evaluation titled "AID's Role in Family Planning: A Case Study with General Lessons for Foreign Assistance." Methodologically, this was a carefully executed two-stage review conducted over a six-month period. The first phase involved largely "desk analysis" of the voluminous existing data and statistics on demographic impact and public expenditure impact, and the writing of report sections on these

topics. The second phase was the more customary four-week field visit and interviewing, this by a team of three persons all fluent in Indonesian.

Major Findings: The Indonesian Family Planning Program

1. BKKBN has successfully institutionalized several critical management processes and procedures previously dependant on USAID initiative and technical support. These include contraceptive supply, logistics, information systems, and the management of its manpower development program.

2. The "village family planning" strategy has continued to provide a successful and flexible framework for program extension in Java, Bali, and the more developed outer islands. The strategy is less successful and cost-effective in remote, thinly-populated outer island areas.

3. BKKBN has yet to find a viable urban strategy, despite innovative experiments in Jakarta and other cities. This becomes increasingly important as Indonesia's urban population continues to grow faster (up recently from about 20 to 30 percent) than the rural population.

4. The rapid growth of BKKBN and the proliferation of local activities in which it is involved put BKKBN's attributes of flexibility, innovation, and action-based goal orientation at severe risk.

Major Findings: USAID Assistance

1. By most indicators of success, the Family Planning Development and Services Project has met or, in many cases, exceeded its stated goals and objectives.

2. USAID/Jakarta's strategy for providing fast, flexible funding ("local-cost programming," advances of USAID grant and loan funds for specific local activities) remains the key factor supporting innovation, learning, local adaptation, and effective implementation of high-priority local initiatives. This has had, and should continue to have, a major impact in reducing population growth.

3. USAID support to village family planning has clearly been a major facilitating force in developing and spreading this highly effective strategy throughout the most populated areas of Indonesia. USAID support has been prompt and strategically targeted in ways that have facilitated institutionalization of successful innovations.

4. USAID/Jakarta also plays a major facilitating role in BKKBN decentralization by providing selective supplementary funding for local activities and by helping finance meetings for coordination and information sharing at early stages of

innovative program development.

5. A.I.D.-assisted participant training, domestic and overseas, has had a significant beneficial impact on the quality of BKKBN staff and on implementation of field activities. Some returning trainees, unfortunately, have little opportunity to use their new skills.

Project Design and Policy Implications. Despite past successes, more difficult challenges now loom large as BKKBN strives to maintain momentum and improve quality. Future fertility decline will come with difficulty, due to an unfortunate age distribution; the large number of young couples soon to be in need of contraceptive services threatens to overwhelm ongoing programs on Java and Bali at the same time is there is need to find a more effective means to provide services in the outer islands.

Major Recommendations

1. High-level policy coordination is needed to assure that BKKBN and other involved departments have a shared view of responsibilities for achieving Indonesia's small, prosperous, happy family concept. BKKBN's roles as coordinator vs. implementor need better clarification.

2. A.I.D. should continue to give high priority to support for Indonesian family planning.

3. A.I.D. should expand its commitment to two key lessons from its effective support for Indonesia family planning: the contribution of fast, flexible local-cost programming, and the importance of effective, collaborative staff relations with Indonesia counterparts (which requires a high level of technical competence and cultural sensitivity).

4. Urban strategy. BKKBN should create an urban task force to develop a comprehensive urban strategy and effective provincial task forces in areas with major cities.

5. Voluntary sterilization should be more available for couples who clearly want no more children.

6. Outer island strategy. USAID and BKKBN should more carefully analyze the cost-effectiveness factor in extending family planning to the outer islands.

Evaluation Team: Jerry Van Sant, MBA; Benson Hausman MD, MPH; Sri Pamoedjo Rahardjo, PhD; John Ross, PhD; and Dennis Chao, PhD. Introduction by David Piet, MA. Report dated June 1985.

INDONESIA: RURAL ELECTRIFICATION, INTERIM EVALUATION OF SOCIAL AND ECONOMIC EFFECTS IN CENTRAL JAVA

Overview. Providing electricity to rural populations to stimulate decentralized economic development and improve the quality of rural life has been a priority of the Indonesia government. Two agencies are involved in the provision of electricity to rural areas: Indonesia's National Electric Company (Perusahaan Umum Listrik Negara, PLN) and the Directorate General of Cooperatives (DGC).

U.S. Assistance. The A.I.D.-supported Rural Electrification I Project (497-0267) began in FY 1977 and concluded in December 1984. Total funding was approximately \$71 million--\$41 million from A.I.D. (a \$30-million loan and an \$11-million grant) and about \$30 million from the Indonesian government. The project purposes were: (1) to demonstrate that electricity can be provided to rural areas of Indonesia at a price the majority of people can afford through systems that are technically sound and financially viable; and (2) to train a cadre of Indonesian experts in all phases of rural electrification in order to manage and expand their rural electric systems. The ultimate project goal was to improve the standard of living and increase productivity of the rural population in the project areas. It is estimated that 676 villages, with a combined population of over two million, will eventually be electrified through this project. Some 486 villages are in Central Java and will be served from the existing PLN power grid, while about 190 villages are in the outer islands where they will be served by member-owned and managed electric cooperatives under the DGC.

This study is one of a series initiated in the late 1970s when AID/Washington considered it especially important to evaluate the impact projects actually have on beneficiaries, in addition to the more customary focus on implementation. Desiring also to find an evaluation methodology capable of producing more precise findings than the customary 3-5 week evaluation, A.I.D. contracted with the Evaluative Studies Branch of the U.S. Census Bureau for longitudinal evaluation of several large-scale projects in Asia. This was one of them.

Purpose and Methodology of the Evaluation. The purposes of this study were: (1) to provide a base for measuring the immediate and future social and economic effects, and impact, of providing electricity to villages in Central Java; (2) to identify the beneficiaries of the project; and (3) to build the capacity within the PLN for conducting this type of research. This study documents "baseline" measures in six villages in two of the seven A.I.D.-funded project areas in Central Java--Klaten and Banyuwangi. Members or representatives of all 5021 households and all 203 businesses and 65 public facilities (schools, mosques, etc.) in the six villages were interviewed between January and March 1984. The PLN plans

to conduct follow-up surveys in all six villages to measure changes due to electrification over a several-year period.

Major Findings (as of the time surveyed)

1. General. The socioeconomic status of the three Banyumas villages, which are predominantly agricultural, is average compared to the rest of Indonesia. The three Klaten villages, located in an industrial area, are somewhat above average. At the time of the survey, PLN electrification had begun in only three of the villages; it was scheduled to begin in the other three later in 1984. About 20 percent of the households and 50 percent of the businesses had electricity.

2. Household Electrification

(a) Socioeconomic characteristics. The first households to obtain electrical connections were generally better-off economically. Almost 60 percent of the highest income households have electricity, in contrast to less than 10 percent of the lowest income households. (Households were divided into four income groups, quartiles, for analysis.) The higher income households also consume nearly twice as much electricity as the lower income households.

(b) Use of electricity. The major benefit is improved lighting. All the electrified households use electricity for lighting and 30 to 42 percent use it for radios, televisions, phonographs, and irons. These items are used by even the lowest income group, although fewer people in that group can afford the appliances. No household reported using electricity for cooking.

(c) Use of electricity in home businesses. Twenty-four percent of the households have home businesses, but only 8 percent of these have electricity. Among the electrified businesses, most of which process agricultural goods or sell retail products, 72 percent use electricity lighting for an average of 4 hours per day to accomplish more work, 50 percent use it for security lights, 10 percent use it for tools and equipment, and 4 percent use it for refrigeration.

(d) Costs of electricity. Households pay Rp. 55,000 (about \$55) for connecting and an average of Rp. 6221 (about \$6.00) per month thereafter. Electrified lower income households spend about 25 percent of their income on electricity, while households in the highest income group spend only 12 percent of their income on electricity.

(e) The main beneficiaries within the household appear to be adult men. Electrification reduces the time spent gathering firewood, 60% to 80% of which is done by men. Relative to men, women may actually incur a small additional work burden.

3. The business sector. In Klaten, where the vast majority of businesses are factories, 21 out of 111 businesses have electricity, most having received their connection only in the year prior to the interviews. In Banyumas, where most of the businesses are small retail stores or restaurants, the vast majority of these 90 businesses are electrified, having obtained connections over several years.

(a) Use of electricity. The primary use is for lighting (security lighting and for lighting work areas). Some businesses also use it for water pumps, fans, and sound systems.

(b) Effects on business. Electrified businesses report positive benefits from electricity: increases in working hours, numbers of employees, and production, sales or service --all leading to increases in profits. A larger proportion of the Klaten businesses, relative to Banyumas, report positive benefits from electricity. For example, 71 percent report an increase in profits.

4. Quality of service is generally rated "fair."

5. Demand for PLN electricity. Household: Overall, 78 percent of the non-electrified households said they want electricity but far fewer are able to pay for it. In the Banyumas area, half the households said they would not even be able to pay a monthly bill of Rp. 1500 (\$1.50) or, even if granted credit, the Rp. 55,000 (\$55) connection fee. Businesses: In Klaten, 71 percent of the 84 non-electrified businesses said they wanted electricity (and some complained because connections were not yet possible), and 20 percent of the currently electrified businesses desire a larger connection; in Banyumas, 5 of the 11 said they wanted electricity.

Project Design and Policy Implications. Beneficiaries: The first households to benefit are the wealthier ones, since they can afford the Rp. 55,000 (\$55) connection fee. It is reasonable to assume that a larger percentage of lower-income households will eventually connect to the system. This could mean that income has less impact on whether a household becomes connected over time. But many questions remain. How many lower income households will benefit? And how soon?

Recommendations. None are included in the report. Abundant carefully collected data are presented, but there is little higher-level analysis of the data in terms of their implications for A.I.D. programming. A.I.D. would benefit from taking this data one step further to extract programmatic and policy-related recommendations and lessons learned.

Report Prepared by: Steven Tourkin, U.S. Census Bureau, with participation of PLN and Census Bureau researchers.

INDONESIA: SEDERHANA ASSESSMENT STUDY IN FOUR PROVINCES
West Java, West Sumatera, North Sumatera, and South Sulawesi
(EX-POST EVALUATION)

Problem and Overview. Initiation of the Sederhana Irrigation and Reclamation Program by the government of Indonesia in 1974 signaled a new focus to long-standing efforts to increase rice production. Sederhana was designed to rehabilitate or construct small, technically simple irrigation systems, each serving fewer than 2,000 hectares. The program was to be implemented rapidly throughout the vast Indonesian archipelago with a minimum of detailed planning. With improved systems to increase the supply, reliability, and coverage of irrigation water, it was intended that farmers would increase their rice production and incomes, and the country would benefit from a decline in rice imports.

U.S. Assistance. Between 1974 and 1984, A.I.D. provided about \$60 million in support to the Sederhana program. A.I.D.'s Sederhana I (1974-79) provided a \$23.7-million loan. Its primary purpose was to improve the institutional capacities of Indonesian agencies responsible for implementing the Sederhana program. A.I.D. followed this in 1979-85 with Sederhana Irrigation II (497-0252), under which 885 small-scale irrigation subprojects were completed. The subprojects, located in most provinces of Indonesia, were designed with the purpose of improving and rehabilitating existing irrigation systems. Under Sederhana II, experimental water users associations were also established to improve irrigation management and thereby contribute to increased crop production. The Sederhana II construction component was completed in December 1983; the water users' association component continues to December 1985. Total funding for Sederhana II is \$59.845 million, of which A.I.D. provides \$35.345 million (a \$24.045-million loan and a \$11.3-million grant) and the Indonesian government \$24.5 million.

Purpose and Methodology of the Evaluation. The objectives of this study were: (1) to assess the effectiveness of the A.I.D.-sponsored Sederhana subprojects; and (2) to develop a cost-effective methodology for planning new small-scale irrigation projects and monitoring the performance of existing projects. The study focused on the construction component completed in December 1983. Methodology involved a four-phase 15-month process. (1) A sample of 30 subprojects was selected in four provinces, which is about 10 percent of the subprojects in those provinces. (2) A field survey team examined the actual physical condition of the irrigation works, land use and the extent of irrigated and non-irrigated land and interviewed farmers in the subproject areas. (3) In the mapping and data analysis phase, irrigation networks, land use, and irrigated land were mapped and data from interviews with 40 to 50 farmers in each subproject were analyzed along with irrigation water requirements. (4) The draft

master report and "project profiles" on each project were reviewed with provincial and local officials, field checks made, and then finalized.

Major Findings

1. Of the sample of 30 subprojects, 23 were were operating without major problems. Four were non-operational--due to clearly identifiable flaws in site selection of structures--and 3 are operating but with major problems.

2. The effectiveness of the subprojects varies considerably. (The primary criterion for assessing effectiveness was the actual irrigated area in the wet season as a percentage of the "designed irrigated area"--that is, the area that was intended to be irrigated in the wet season at the time the proposal for the subproject was prepared). About half of the 30 projects rank "good" to "excellent" with the other half "fair" to "poor." South Sulawesi had the highest frequency of both excellent and poor projects. Some average results are as follows:

(a) Eighty-six percent of the physical structures and 80 percent of the canals are in good condition;

(b) The projects irrigate 72 percent of the intended area) (their "designed irrigated areas") in the wet season;

(c) The projects irrigate 142 percent of the intended area (their "designed irrigated areas") in all seasons;

(d) The increase in padi yields from before to after the project was only 26 percent in the wet season and 17 percent in the second season over an average period of four years.

(e) The increase in the actual irrigated area, from before the project to after, was only 16 percent in the wet season and 43 percent for all seasons.

3. The major technical problems have to do with site selection and project design. They include:

(a) Irrigation of areas that were already being well irrigated before the project.

(b) Selection of poor sites in terms of crop systems and farmers' preferences. This led, for example, to attempts to irrigate non-irrigated crops that farmers do not want to irrigate.

(c) Apparent over-emphasis on rehabilitating the existing physical system, in contrast to creating new and different diversion and conveyance systems to serve new areas.

4. Impact. In summary, while the average performance of

the systems is quite good in terms of after-project irrigated area and crop yield, improvements over the before-project state were rather low. The reason is that most of the subprojects were on areas that were already being irrigated reasonably well--and the project made very little difference in those areas that were not. This is true also of the impact of the project of yields.

5. Methodologically in this study, it has been difficult to arrive at totally precise results. This is because no baseline studies were done and the "designed irrigated area" was never adequately described at the outset. Nevertheless, the study was more rigorous than most evaluations are able to be and its findings should be considered reliable.

Project Design and Policy Implications. Returns to the project were rather low. The lesson seems clear. Irrigation projects should be designed to irrigate unirrigated land, in dry areas, where high returns can be expected. Projects to improve and rehabilitate existing irrigated areas should not be undertaken unless: (1) there is clear evidence that these systems are not performing well in terms of irrigated area and yields; and (2) there is a proven technique (technology and management) for effectively increasing their performance. Operationally, this means, first, that before rehabilitation of an existing subproject is initiated, the actual performance of the subproject must be carefully assessed. "If it works, don't fix it." Second, even if it is not working, it should not be assumed that effective techniques are available for improving the subproject without careful study first of cases where such improvements have been tried. The neglect of these facts is not unique to Sederhana. It appears universal among all irrigation projects.

Major Recommendations

1. For high returns, irrigation projects should be based on careful pre-project assessment of actual irrigated area by seasons and specifically targeted to non-irrigated areas. It is also possible that large increases in performance could be gained simply by dividing large subprojects into two or three smaller subprojects. The "designed irrigated area" should probably be less than 300 hectares.

2. The methodology for future studies should follow the rigorous random sample and step process used in this study. Where surveillance-level observations show that a project is either performing very well or is non-operational, no further survey work is needed. The much more labor-intensive mapping process and second stratified sampling would be used only for projects requiring remedial action.

Evaluation Conducted By: P.T. Exsa International Co. Ltd., Jakarta. Report dated March 1985. With attachment, "Summary of the Sederhana Assessment Study" by Dr. David Seckler.

**INDONESIA: TIMOR MALARIA CONTROL PROJECT,
MID-TERM ASSESSMENT**

Problem and Overview. The island of Timor, lying East of Bali, is on the periphery of Indonesia, both geographically and in terms of the still tenuous nature of the central government's control over the island, especially East Timor. The island is also highly malarious. It has a population of about 3.4 million-- about 2.85 million in the more developed province of West Timor and about 555,350 in the less developed East Timor. The health and other infrastructure in East Timor is minimal. The health infrastructure is better in West Timor, where anti-malaria activities began earlier (1975), but malaria is still one of the two most common diseases in that province.

U.S. Assistance. In September 1980, A.I.D. approved the Timor Malaria Control project to help build a malaria control program for the island. The specific project purpose is to reduce the prevalence of malaria in priority areas of Timor from an average of 40 percent to 2 percent or below by the end of five years. Planned funding was \$5.546 million (a \$3.6 million A.I.D. loan and \$1.946 million from the Indonesian government). WHO is providing technical assistance. The project was to cover about 250,000 people in each East and West Timor; this is about 40 percent of the population of East Timor and about 30 percent of the West Timor population. The project was scheduled to begin in 1981, but only managed to get under way in April 1982 (at which time the project completion date was consequently extended).

Purpose and Methodology of the Evaluation. The purpose of this evaluation, which is taking place in the fourth year of this five-year project, was to analyze progress, make recommendations for the remainder of the project, and make recommendations for the scope and methodology of the final evaluation.

Major Findings

1. Malaria prevalence has gone down appreciably in the areas where house spraying has been carried out, but there no way that the project objective (reduction of prevalence to 2 percent or below) can be achieved within the year remaining.

2. Major constraints are the following:

(a) Delayed release of funds. Delays in the release of funds are slowing down the reduction of malaria and have led to an increase in malaria in some communities. Only about 36 percent of the \$5.546 million budgeted for the project has been spent. The delays are apparently due to the fact that

information sent from the field to the provincial headquarters is often improperly prepared and must be returned for corrections. Thus this problem is in large part a consequence of the next problem below.

(b) Personnel problems. It has been extremely difficult to recruit, train, and retain an adequate number of local personnel--especially in East Timor. A total of 125 persons were trained in East Timor between 1981-84 to run the project, but only 77 are left, the others having been transferred back to Java and Bali. This is a high turnover rate of almost 40 percent, and is partly due to the generally low level of education and literacy in East Timor. West Timor is doing better but, even so, has lost 30 percent of the 84 persons trained by the project. The problem is compounded because the experienced technical and supervisory personnel who come from Java and Bali to help develop the local cadre of malaria workers are restricted (by BAPPENAS in Jakarta) to only two weeks of per diem payments; most of the tasks they are needed for, however, require one to three months' time.

(c) Lack of entomological information. There is not adequate entomological data (on seasonal mosquito densities, vector status of the individual species, susceptibility status of each vector species, and resting and biting habits of each species) for planning and evaluating the program.

(d) Lack of transport. Not enough vehicles are available to meet field needs, in part because the few malaria vehicles that exist are often used for other purposes.

3. In West Timor, progress has been quite satisfactory. Two entomological catching stations have been maintained; achievement in case treatment, passive case detection, and malarimetric surveys has been more than planned; and indoor house spraying has been satisfactory. It has not been possible, however, to start any biological or chemical control of vector breeding places.

4. In East Timor, obstacles are greater and progress, as predicted, has been much slower. Project start-up was delayed a year, but since then progress in case treatment has been more than targeted and progress in passive case detection has been satisfactory. House spraying did not meet the first- and second-year targets, but has now covered more than 95 percent of targeted houses. Neither of the two entomological catching stations could be established, and none will be in the near future without staff from Jakarta. Too many malarimetric surveys were carried out.

5. Transmigration and resettlements projects in East Timor are located in highly malarious areas. Since people who will move into these areas are from relatively non-malarious areas, there is considerable risk of malaria outbreaks. Appropriate malaria control measures appear to have been planned.

Project Design and Policy Implications. It was anticipated during project design that a malaria control project in East Timor would face significant obstacles because of the "security problems" in East Timor, the low educational levels on that part of the island, and the very rudimentary status of government-sponsored development activities. The project planners nevertheless adopted an objective (the reduction of prevalence in target areas to 2 percent or less) that time has shown to have been unrealistic in view of the existing constraints, which were envisioned at the outset. The project paper correctly recognized that full-time and part-time technical supervisory malaria staff would need to be recruited from Java and Bali to provide training to local Timor personnel recruited for the project, but this has not occurred as planned.

Major Recommendations

1. The project should be revised and extended. A project revised according to the recommendations of this report and extended for 2 to 3 years may be able to achieve the present project objectives in terms of reeducation of malaria and population covered. These objectives must be reanalyzed, however, in light of experience to date. It may well be there is more malaria than was envisaged in 1980, and that restricting project coverage to the 40 percent and 30 percent respectively of the population in East and West Timor could lead to a quick return to the former hyper- and holo[total]-endemicity.

2. A revised project should include:

- (a) A feasible training plan for both East and West Timor;
- (b) Assignment of a well-qualified malariologist to provide technical assistance to both East and West Timor, particularly in training;
- (c) Up-grading of the quality of the examination of malaria slides;
- (d) Provisions for remedying the transport problem;

3. Transmigration. There must be close coordination with the transmigratin officials to ensure that the proposed anti-malaria activities for the transmigration areas are carried out on schedule.

Evaluation Team: Mr. Muharyoto and Mr. Suyud Tarkojosopuro, Malaria Control Programme; Mr. Edgar Smith, USAID consultant; and Dr. R.K. Jung, WHO. Report dated 21 October-25 November 1984.

MALDIVES: IHAP RAA ATOLL INTEGRATED DEVELOPMENT PROJECT
END-OF-PROJECT EVALUATION

Problem and Overview. The Republic of Maldives is an archipelago in the Indian Ocean southwest of the tip of India and one of the poorest of all "island developing countries." Its population of approximately 160,000 lives on about 200 widely dispersed islands and atolls. (Atoll: A ring of closely-spaced small islands enclosing a shallow lagoon.) About one-quarter of the population lives in Male, the national capital, where political power, wealth, and social services have been concentrated. At least until 1977, formal schooling was almost entirely confined to Male and modern health services and safe drinking water were almost non-existent in the other atolls. The economy centers on fishing and tourism, with tourism concentrated on Male Atoll. Agricultural production (essentially tree and horticultural crops, primarily in the hands of women) has received little government attention. Most food is imported. It is probable that the Maldives could achieve self-sufficiency in food grains, despite its limited arable land, but only if the government is willing to promote infrastructure and improve incentives to producers. Since the late 1970s, the government has expressed the desire to narrow the social and economic gap between Male and the other atolls.

U.S. Assistance. This project was launched to supplement government efforts to improve social services and generate income in the atolls outside of Male. The site chosen was Raa Atoll where a population of about 11,000 lives on 16 islands. The project purpose was to provide financial support for a three-year rural integrated development program in Raa Atoll. The ultimate project goal was to improve the standard of living of people living in Raa Atoll. This was to be achieved through activities in health, education, and agriculture. Agricultural activities were to contribute to income generation and improved health and nutrition. The basic approach was to stimulate community participation in decision-making regarding development initiatives. The project (498-0251) was implemented through a \$600,000 operational program grant (OPG no. ASB-0251-G-SS-1056-00) from A.I.D. to the International Human Assistance Programs (IHAP). The grant was signed in September 1981. Field activities took place from February 1982 to April 1985.

Purpose and Methodology of the Evaluation. The evaluation was conducted to determine whether the project succeeded in meeting its objectives and to analyze reasons for its level of performance. Findings are based on 34 days of briefings in Colombo, interviewing, site visits, and document review in Male and Raa, and analysis during report preparation.

Major Findings

1. **The project has been cost-effective and successful in**

many regards. Through community participation, it constructed a small hospital, schools, water tanks, and latrines at a lower cost than similar structures elsewhere in the country. It is likely that these structures, and the related training and experience gained by community members, will contribute to better health and educational levels in the islands.

2. The project design (proposal) was both too ambitious and too vague. It was vague about the meaning and implications of the "self-help" development envisioned and gave inadequate guidance regarding priorities and sequencing of activities. The logic of the project and the linkages from inputs to goals was not adequately articulated.

2. Project start-up. The project managers took the correct approach to an inadequate project (design) document. First, they conducted a baseline survey, then established priorities with the islanders, and finally put on paper their own clear interpretation of the project. In this they explicitly stated their view of the importance of training and working with community organizations. The approach they selected to self-help development was very appropriate.

3. Activities. Out of the range of activities referred to in the project proposal, the project managers made health the chief focus. This was followed by School construction and related training (the first priority on 11 of the 16 islands), a loan program and, last, agriculture. The project managers allocated their time as follows: (1) health--60 percent; (2) education (school construction, training, and promotion of community decision-making)--15 percent; (3) loan program--15 percent; and (4) agriculture and general management--10 percent. The project managers' allocation of time was a tactical choice and also reflected their greater personal expertise in engineering and health.

4. Accomplishments

(a) Health. A small hospital (a government priority) was constructed. Water tanks (a clear desire of many of the islanders) were constructed, and were an excellent means of involving community members in planning a community development activity. There was a significant change in sanitation habits--specifically, a measurable increase in construction and use of the Maldivian ash toilet. The project managers dedicated a great deal of effort to improving the skills of construction workers (for the hospital, tanks, and latrines), health workers (family health workers and traditional birth attendants), and island committees (in decision-making).

(b) Education. School construction and assistance in staffing schools with trained teachers involved the island development committees and communities and gave them understanding of and confidence in the principle of self-help.

(c) The loan program. Loans were approved for a total value of \$51,000 (the sum budgeted for the loan fund). About 35 applicants received loans. Repayment began in December 1984 and there has been 100 percent repayment of debts due. Primarily wealthier islanders have benefitted, however.

(d) Agriculture. New rat control measures resulted in a 60-percent reduction of coconut losses due to rats. Further work was not undertaken, primarily because the priorities expressed by the islanders (essentially the more vocal men) lay elsewhere, but partly too because of the project managers' relative lack of experience in agriculture and the fact that the Ministry of Agriculture is one of the weakest and resource-poor ministries.

5. Participation of women. Initial efforts to stimulate women's participation were not successful and therefore not pursued. Lack of success was due to the project managers' inexperience with stimulating women's initiatives, their inability to recruit a female Maldivian assistant, and the relative weakness of the National Women's Committee. Nevertheless, women did participate in, and expressed satisfaction with, school building and water tank construction as well as with baby weighing and traditional birth attendant training.

Project Design and Policy Implications. The success of the project owed a great deal to the enthusiasm and technical competence of the project managers. The same project, under the responsibility of less capable individuals, could easily have floundered. A more carefully designed project, drawing on the experience of this project, should be implementable by moderately competent managers. Project designers in general must avoid presenting project documents for implementation that are too vague for the host-country implementors to comprehend easily.

Major Recommendations

1. The government and island communities should allocate budgets and adopt policies to build on or continue selected initiatives of this project.

2. Future activities to promote agricultural production should include a careful study of the island farming system and women's roles in and out of agriculture.

3. Given the many valuable lessons the project presents, A.I.D. should earmark funds (\$34,200) for a follow-up impact evaluation in approximately three years.

Evaluation Team: Mr. Abdul Hameed, Government of the Republic of the Maldives; Gladys Nott, A.I.D.; and Dr. Reid Whitlock, IHAP. Report dated February 1985.

NEPAL: AN ASSESSMENT OF FOOD AID AS A DEVELOPMENT RESOURCE IN NEPAL (SPECIAL STUDY)

Problem and Overview. Nepal is one of the poorest countries of the world and one where over 90 percent of the economically active population still earn their livelihood in agricultural occupations. Economic productivity is being dramatically out-paced by population increase, however, and food production is not keeping up with food needs. (To illustrate, the per capita GDP grew at an annual rate of only 0.2 percent between 1960 and 1979, while the population has been growing at an annual rate of about 2.7 percent.) Possibilities for accelerating agricultural development are severely limited by the narrow resource base of this land-locked country. Nepal is quickly approaching its cultivation frontier and suffers increasingly from widespread soil erosion and loss of soil fertility. Life expectancy at birth is still only 44 years and protein-energy malnutrition is common. The problem is further exacerbated by uncontrolled immigration from India.

Faced with this plight, the government of Nepal in 1984 requested USAID/Nepal to initiate a bilateral food aid program. Current development doctrine regards food aid as a potentially valuable development resource when it is additional to assistance that would otherwise be available to a recipient country, and when it can be effectively used to achieve positive socioeconomic benefits and avoid negative disincentive effects at the macroeconomic and agricultural sector levels. Some (and the only) food aid activities in Nepal at present are carried out by the World Food Programme.

Purpose and Methodology of the Study. The impetus for this study was A.I.D.'s need to respond to the request from the government of Nepal. The specific objectives were to determine: (1) whether food aid (specifically, through PL 480) would be an appropriate form of development assistance, under current policies, for increasing the pace of agricultural development in Nepal; and (2) the implications of food aid in terms of the government of Nepal's national development strategy, including the potential impact of food aid and its cost effectiveness. The World Food Programme activities were examined, not in the sense of evaluation, but simply to understand better the overall of food aid in Nepal.

Major Findings

1. Nepal fulfills the essential preconditions for food aid assistance, much more so than in many other countries, especially in the form of food-for-work projects. Seasonal underemployment is prevalent in the remote hills and mountains, which are not well integrated into the national economy and which suffer chronic food deficits. Food scarcity

is manifested in serious health and nutrition problems, especially in those large areas of the country where there is very little transportation infrastructure.

2. The faltering agricultural economy in Nepal is largely due to policies that are implicitly biased against farmers. The factors identified above exist in a policy context that does not adequately provide the incentives and security needed for producers to adopt new agricultural technology and use purchased inputs (e.g., fertilizer). Possible policy reforms have been identified but have not yet been translated into implementable approaches.

3. In such an environment, the provision of food assistance would be, at worst, supporting misguided policies, and, at best, less constructive than it should be.

Project Design and Policy Implications. Existing government food pricing and subsidized distribution policies have serious negative consequences for agricultural development in Nepal. Despite good intent, government policies do not assure producers of remunerative and secure prices. As a result, diffusion of technology and use of inputs are discouraged, and instability in export markets is intensified. Subsidy costs are high, but neither subsidized inputs nor food gets to those areas and population groups most in need. Rather than initiate a PL 480 program, USAID/Nepal can, through its policy dialogue and technical assistance, help the government of Nepal to design and implement improved policies and programs within a coherent long-term strategy. This will increase USAID/Nepal's own chances for success in its overall program of support for area development, technology generation, and irrigation.

Major Recommendations

1. A.I.D. should not initiate a bilateral PL 480 program. The time is not right, and any such step in the future should be taken with the utmost caution and consideration. There are four main reasons.

(a) Difficulties of designing, managing, and executing food aid activities are enormous. Food-for-work is never a neutral undertaking. It is only as effective as the design, management, and execution of the projects in which it is employed.

(b) Financial burdens imposed on the Nepal government would be great. Food aid never stands alone. It must always be accompanied by significant budgetary outlays that usually need to exceed the food aid itself. These financial resources are necessary to supplement food rations with cash wages, to purchase equipment,

and to pay skilled workers and managers. Planning and management expertise is also costly, especially in a country like Nepal where food deficit areas are remote. Costs of food transport, handling, and storage alone are often two to five times the value of the food itself. Thus, even if A.I.D. were to initiate a free food program, the Nepal government does not have the resources to use it effectively. It is already struggling with the costs of moving and using effectively the food provided by the World Food Programme.

- (c) Monitoring the use of food aid in Nepal would be a major administrative burden for A.I.D., and A.I.D. would also have to find a PVO interested in using food as part of their activities.
- (d) The World Food Programme has ample food resources available for programming in Nepal which could be used to complement USAID/Nepal's capital and technical assistance.

2. USAID/Nepal should explore direct cooperation with the World Food Programme on projects for which a food aid component might be appropriate.

3. USAID/Nepal should increase its efforts to help the government of Nepal design and implement improved agricultural policies and programs.

Additional recommendations concern:

- (1) the choice of location for food-for-work projects,
- (2) integration of food aid with other foreign economic assistance,
- (3) partial payment of wages in cash,
- (4) subsidized sale of food to workers and programming of funds thereby generated,
- (5) relation of food-for-work wages to local wage levels,
- (6) incorporation of WFP food resources into USAID area development activities,
- (7) selection of commodities for food aid programs, and
- (8) local procurement of food for food aid projects.

Study Conducted By: Lehman Fletcher and David Sahn,
Community Systems Foundation. Report dated December 1984.

**NEPAL: INTEGRATED RURAL HEALTH AND FAMILY PLANNING SERVICES
PROJECT, MID-PROJECT EVALUATION**

Problem and Overview. Nepal faces a crisis caused by an exploding population competing for scarce resources on increasingly limited arable land. Despite poor health conditions, Nepal's population is growing at the high rate of 2.66 percent per year and will do so for many years to come (only a tiny 7 percent of Nepali couples of reproductive age practice contraception). The increasing pressures of this population on wood for fuel has led to destructive deforestation and erosion throughout the country. Reforestation efforts are not able to keep up with this process and the government of Nepal (HMG, His Majesty's Government) is becoming irrevocably dependent on outside resources to sustain itself.

Nepal has long had single-focus "vertical" programs, such as malaria control and family planning. Recently the Ministry of Health has adopted a policy to integrate the administration and services of the vertical programs and to deploy multi-purpose village-level health and family planning workers.

U.S. Assistance. The Integrated Rural Health and Family Planning Services (IRH/FPS) Project (367-0135) was created to assist the integration process. It was authorized in August, 1980, with a completion date (PACD) of September 30, 1985. A.I.D.'s planned contribution was a \$34.2-million grant and HMG is to contribute a \$70.1-million equivalent for a total of \$104.3 million. The project purpose is to improve and expand rural health and family planning services by means of an integrated management system.

Purpose and Methodology of the Evaluation. The evaluation was conducted as initially specified in the Project Paper. Its basic purpose was to: (1) assess the impact of the project to date; and (2) determine how USAID/Nepal might better assist HMG in improving its health and population programs. Data were collected through interviews, field visits, and review of the very extensive project documentation.

Major Findings

1. Goal achievement. Project goals have been partially met and the project has achieved some substantial gains, although progress has been less impressive in integrating services and improving management. Technical assistance (through John Snow Inc.) and participant training have been major and effective parts of the project. The innovative, non-governmental Contraceptive Retail Sales social marketing project financed by AID/W and USAID/Nepal has been a genuine success.

2. Integration and service delivery. Integration is progressing, although poor services and inadequate coverage continue to be the norm. Twenty-six districts are now under

fully or partially-integrated management. Community participation (a community health leader program and 2,600 ward health committees) has been initiated in half of the fully or partially-integrated districts. An additional 200 health posts have been established --although 20 to 45 percent of supervisor positions are empty. Contraceptive distribution has increased and there has been a dramatic increase in voluntary surgical contraception. However, prenatal care, immunization, and prevention and treatment of infant diarrhea, and rural sanitation work all remain unsatisfactory. Malaria remains a problem, although control has improved in some integrated districts.

3. Nepal's demographic crisis has not abated, nor is it likely to in this century without drastic intervention. Without population stabilization, there will be little chance of improving health status, and virtually all other development efforts are likely to be fruitless as well. HMG awareness of the importance of population stabilization has increased and the National Commission on Population has, since 1982, been vigorous in setting appropriate national targets. Lower levels of government, however, and most Nepali citizens do not recognize the peril of the present situation.

4. A.I.D.'s project design was over-ambitious and clearly over-optimistic in expecting the project to absorb and effectively use \$34.2 million in A.I.D. funds in only 5 years. As of September 30, 1984, only 69 percent of this had been obligated, and USAID/Nepal has no intention of spending the full amount by the project completion date. The implementation schedule condensed too many activities into too little time, expected events to follow a tightly-timed sequence and simply did not fit the real-world circumstances of A.I.D. and Nepal.

Project Design and Policy Implications. Where health and family planning services were initiated as vertical programs, obstacles to integration of services are multiple. Paramount are attitudinal resistance and concerns about "loss of turf" by directors of the vertical programs. Perhaps the greatest barrier in this Nepal effort lies in the fact that responsibility for carrying out integration was given to a "project group" (the Integrated Community Health Service Delivery Project, ICHSDP) that had no real authority over the services to be integrated. As a result, personnel in the vertical programs saw the integration effort as "someone else's project"--one not involving their collaboration. But integration is an organizational concept and cannot be regarded as just an additional project to function alongside existing vertical projects and programs. Without commitment from and involvement of the vertical programs in the process of integration --which obviously was not present-- the ICHSDP staff never had a chance. It is also questionable as to whether integration of services can or should be organized from the top down. Experience indicates that integration of service delivery may have a greater chance of success if planning deci-

sions take place much closer to the local service-delivery level, rather than at the ministerial level.

Major Recommendations

1. A.I.D. should continue to support HMG's health and family planning activities. HMG financial inputs have more than doubled between 1978-79 and 1982-83. But the service delivery system, while improving, is fragile and any cut-back in donor funding now is very apt to lead to severe regression with dire consequences. A.I.D. should anticipate the need for a sustained contribution over several decades and not expect a cheap "quick fix." A.I.D. should expect that the cost of its efforts in Nepal are going to be relatively higher than in many other developing countries, that outputs will be less cost effective, and that the impact will be less dramatic.

2. Population control must be A.I.D.'s number one priority in Nepal. All projects of USAID/Nepal must support this goal.

3. Health planning and policy. Limit investment in curative care. Focus on: (1) controlling population growth; (2) environmental disease control; and (3) immunization. Absolutely essential in all HMG health planning must be an aggressive population control program which includes: (1) active promotion of family planning and distribution of materials for spacing births; (2) intensive measures for about 8 to 10 years to increase acceptance of voluntary surgical contraception after two or three children; (3) examining all possible means to restrict immigration from India; and (4) considering use of rewards and sanctions for influencing family size.

4. The Integrated Community Health Service Delivery Project should be terminated. There should be no central staff or identification as a project. The secretary of health should delegate authority for implementing the proposed integration to the district level.

5. The quality of services must be improved through improved supervision, motivation, and incentives for service providers. Family planning motivation and client follow-up should be improved to both increase and retain acceptors. More women should be included in providing services. Immunization must have better support from other parts of the Ministry of Health. There should be a vigorous campaign to build latrines and educate Nepalis in basic sanitation. USAID/Nepal should support completion of the National Malaria Research and Training Center.

Evaluation Team: James Banta, MD, MPH, team leader (Tulane University); Dana Copp, MD, MPH (US Public Health Service); David Allen, MD, MPH (consultant); Bimala Shrestha, MBBS, MPH (Institute of Medicine, Nepal); Aychut Acharya, MBBS, MPH (HMG Ministry of Health); and Richard Handler, (USAID/Nepal). Report dated November 1984.

**NEPAL: STRENGTHENING INSTITUTIONAL CAPACITY
IN THE FOOD AND AGRICULTURAL SECTOR IN NEPAL,
MID-TERM EVALUATION OF THE HMG-USAID-GTZ-A/D/C PROJECT**

Problem and Overview. The people and economy of Nepal depend to a great extent on agriculture, but agricultural production has been out-paced by population growth and the government's ability to stimulate improvements in agriculture is still limited. To understand the problem this project addresses, see "An Assessment of Food Aid as a Development Resource in Nepal" in the PL 480 section below.

Between 1972 and 1982, the Agricultural Development Council (A/D/C) provided training fellowships through which 45 Nepalese received graduate degrees (chiefly at the master's level); most of the 45 fellows, remarkably, have returned to Nepal. The current project builds on that earlier training.

U.S. Assistance. A.I.D. provides funding through a five-year grant to the Agricultural Development Council; this began in 1982 and now has a completion date of August, 1987. The project purpose is to strengthen institutional capacity in the food and agricultural sector in Nepal. Specifically, the grant calls for the Agricultural Development Council to: (1) help improve the ability of the government of Nepal to make more effective policy decisions affecting the food and agricultural sector; and (2) help the Ministry of Agriculture improve its social science research, economic analysis, and information management skills. There are three components to the project: training, research, and policy--also stated as:

- * human resource development through training;
- * developing research and knowledge generation capability; and
- * facilitating a policy dialogue while strengthening the decision-making process.

Major Findings

1. The logic behind the project (the training-research-policy approach) is sound, and the work of the Agricultural Development Council has been satisfactory given the complexity of the task. The Agricultural Development Council has been quite successful in the first two components (training and research), but not in the policy component, which is essential for meeting the project's objectives.

2. Training has been generally successful. A total of 43 person-months of non-degree training has been provided and 20 Nepalese have been awarded graduate fellowships (16 at the master's and 4 at the Ph.D.level). The fellows selected have been of high quality and the training appears to have been

rigorous and well-suited to the special needs of Nepal. There is general agreement that the education of well-trained Nepalese social scientists (agricultural economists and others) to work in the Ministry of Agriculture and affiliated agencies is a major contribution to improving the government's ability to undertake policy analysis and, ultimately, improve decisions relating to resource allocation. Many returned fellows, however, feel frustrated at not being able to use their new skills in their daily work.

3. Research. A strong research capacity has been successfully developed. The project has funded three major seminars and provided more than 40 research grants, including five to returned fellows. Most of the small grants relate to participatory approaches to natural resources management, but more than a dozen larger grants deal with agricultural policy issues. The 30 publications and papers produced appear to focus on appropriate food and agricultural issues.

4. Unfortunately, neither research findings nor the trained manpower are being properly utilized.

5. Policy and decision-making. Whether the project can achieve its policy objective is doubtful.

6. Institutional support has been weak. Lack of coordinated functioning in this regard has limited the success of other parts of the project.

Project Design and Policy Implications. Crucial to the success of this project is a desire at top government levels to seek and use policy analysis in addressing Nepal's critical agricultural problems. Progress that has been achieved in training and research, both of which are essential elements in developing a stronger institutional capacity within the Nepalese government, will not be of much worth unless there is strong commitment to utilize the trained manpower and the research findings for formulating policies to support agricultural development. At this time there is no concrete evidence within the Ministry of Agriculture of a will to develop realistic policy options based upon research and analysis. One ministry official has said that a research planning and utilization unit is to be established early in Nepal's Seventh Plan period (1985/86-1989-90), but formal sanction is still pending.

Major Recommendations

1. The donors should consider an extension of the project but only if they see evidence that the Nepalese government is genuinely committed to internally strengthening Ministry of Agriculture policy analysis and management decision-making. Such an extension will require both supplementary funding

and, probably, greater responsibilities on the part of the Agricultural Development Council staff. Without an extension, it will not be possible to continue to offer fellowships for graduate education.

2. The policy objective. If the Agricultural Development Council decides it cannot meet the policy goals of the project, project documentation should be amended. If there does exist a will within the Ministry of Agriculture to make more effective use of social science research and economic analysis for improving policy formulation, one approach would be to strengthen existing units that are already responsible for providing performance data and related information. Other steps might involve strengthening the Planning Division, the Evaluation and Monitoring Division, and the Project Analysis Unit within the Ministry of Agriculture. Assistance from the Agricultural Development Council would be helpful, provided the Nepal government indicates a serious desire to use such assistance. Efforts should be made to identify an appropriate high-level official within the ministry who shows both interest in the Agricultural Development Council activities and is serious, committed, and competent to work with the Council in helping improve the policy formulation process.

3. Training should not be considered an end in itself but must be justified in relation to actual development needs. Continued training should focus on needs that cannot be met by the pool of Nepalese already educated through this or other programs. Training should be continued with a broadening of academic specialties to include management, all areas of resource management, and rural social sciences. Candidates should be sought from a broader range of organizations, especially from major policy formulating bodies such as the National Planning Commission, the Finance Ministry, and agencies concerned with natural resource management. Continued effort should be made to recruit women and candidates from remote and rural areas.

4. Research. The project should support efforts to circulate relevant information related to policy decisions to ensure that those who need it have it. There should be close coordination with the National Planning Commission and the Ministries of Agriculture and Finance to interpret and relate research activities and current information to realistic policy options. Opportunities for independent research should be created. Some new initiatives might be used to involve the academic and private sector. Research grants in the form of selective graduate thesis support should be increased.

Evaluation Team: Mr. Joe Toner (team leader), consultant; Mr. Wolf Scheffer-Biochorst, GTZ; Dr. Ramesh Munankami, No-Frills Development Consultants; and Dr. Burt Levenson, USAID. Report dated March 1985.

PAKISTAN: IRRIGATION SYSTEMS MANAGEMENT PROJECT
INTERIM EVALUATION

Problem and Overview. Pakistan's population and economy are heavily dependent on agriculture and agriculture in this arid land depends heavily on irrigation. Pakistan has the world's largest contiguous irrigation system, one dating back several hundred years. Irrigated lands account for about 75 percent of total cropped acreage and 90 percent of the production of major crops. Irrigation brings water to many lands that otherwise would not be cultivable, but crop yields, even in irrigated areas are low, measuring less than half of estimated potential yields. The main problem is ineffective and inefficient water management. In large part, this is a result of management practices established under the British colonial government when the emphasis was on "water spreading" --spreading available water over a large area but thereby providing a relatively sparse supply to the areas served. The canals and drains that are the lifeblood of Pakistan are now badly deteriorated due to the absence of adequate maintenance in the face of continual stress from water flow, wind and rain erosion, and human and animal abuse.

U.S. Assistance. The Irrigations Systems Management ("ISM") Project (391-0467) is funded by an ESF (Economic Support Fund) grant signed in June 1983 to help the government of Pakistan rehabilitate currently deteriorated surface irrigation and drainage systems and thereafter to operate and maintain them more effectively. The project purpose is stated as "to increase the capabilities of institutions involved in irrigation planning, design, research, operation and maintenance, and to bring about policy changes needed for proper irrigation water management." The ultimate project goal is to increase agricultural production and farmer income by improving the management of irrigation water resources. The project is intimately linked to the World Bank-supported Irrigation Systems Rehabilitation ("ISR") Project. The World Bank project focuses almost exclusively on rehabilitation work, while the A.I.D.-supported project has four components: rehabilitation; institutional and technical skills improvement; planning, policy implementation, and research; and command water management (a pilot effort aimed at the long-term goal of integrating water, land, and farmer resources). Both "ISM" and "ISR," however, contain the same covenants which aim at ensuring that adequate financing of operation and maintenance (O&M) costs is available to prevent the deterioration of rehabilitated canals and drains. Most of the A.I.D.-provided equipment is being provided under A.I.D.'s Agricultural Commodities and Equipment Project (391-0468).

Purpose and Methodology of the Evaluation. The purposes of this evaluation, 18 months since the project agreement was signed, were: (1) to assess progress to date; (2) to identify

activities that were to be initiated or completed during the first 18 months that have not yet been launched; (3) to test whether implementation is adequately oriented toward achievement of project purposes; and (4) to recommend changes. Findings are based on visits to all four provinces (including site visits to five of the six workshops included for rehabilitation) and on interviews, document review, and analysis of this project in light of A.I.D.'s previous work in irrigation.

Major Findings

1. Progress is satisfactory. As in all projects, minor setbacks occurred that could not readily be foreseen in the design phase. Nevertheless, implementation has adhered to the project intent and purpose in a satisfactory manner with the flexibility necessary to meet day-to-day problems and make adjustments without deviating from long-term objectives.

2. Rehabilitation work (physical rehabilitation of canals and drains) began in late 1983 and is well underway. Heavy equipment has been procured, services of the primary contractor (PRC/Checchi) became available in April 1984, and the majority of expatriate advisors arrived soon thereafter. Unfortunately, rehabilitation tends to be regarded as an end in itself, rather than as a step to meeting the larger project objective--helping the government to develop an effective O&M program. Rehabilitation work could serve as a major (and low-cost) entry point for many of the other activities that are planned for the project.

3. Many farmers do not comprehend the O&M process and the benefits to them because of it. They do not understand the value of adequate drains or show the sense of responsibility they should toward maintaining the canals and drains once rehabilitated. Instead, they increase the need for O&M work by cutting the banks and allowing their buffalo to use the canals and drains as wallows. This must be tackled as an educational part of O&M work, not as an enforcement procedure.

4. Planning of research activities has begun. A short-term Research Definition Team has completed its initial study. Contracting with the University of Idaho Research Team is in process with arrival estimated for mid-1985.

5. Progress in training, especially external (overseas) training, is almost nil. The need for training is not fully accepted. The mere availability of resources does not create a demand nor contribute to institution-building--a mistake often made by donor agencies and technicians. Recent interest in establishing an in-country or inservice training program, however, while late in coming, is encouraging.

7. Project components have, improperly, been viewed by many as separate activities rather than integral parts of the

whole. This appears to have been a reason for the problems experienced in procuring technical assistance.

Project Design and Policy Implications. Inadequate maintenance is due chiefly to the lack of financial resources for this purpose. Funds for operation and maintenance have not been adequate to keep up with the needs dictated by time and use. Nor is revenue generated by the system earmarked for direct use by the irrigation departments. This strongly points to deficiencies in current water policies and management practices, many of which were established early on (during the 1850-1950 period) and are still followed today. Formulation of water policy and operational responsibilities are shared by a large, diverse array of federal and provincial bodies (and private sector interests), all of which by bureaucratic nature desire to maintain and, if at all possible, expand their spheres of influence. At the field level, water rights too are a product of historical accident determined over the years by piecemeal allocation as each canal came on stream and bear little relationship to water requirements. Such obstacles to the development of policies for ensuring adequate O&M appear to have been anticipated during project design (thus the inclusion of a policy-oriented component), but overcoming them will require more attention than has been shown during implementation to date.

Major Recommendations

1. Physical rehabilitation work should be better utilized to meet the larger objectives of the project. Greater efforts must be made to educate operational personnel of the Provincial Irrigation Departments as to the project concept.

2. Irrigation personnel must learn how to create a sense of responsibility and participation by the farmers in O&M efforts. Attempts to determine the impact of canal and drain rehabilitation on farmers should be accelerated and expanded.

3. Project components should be presented by the project management as intimately related parts of the project. Scopes of work for technical services should be more explicit as to how the services fit into the integrated project.

4. Expansion of in-country training, and reduction of funding for external training, should be considered. In-country training should perhaps be established on a permanent basis. High priority should be given to the training of trainers.

Evaluation Team: Mr. C. Blair Allen (team leader), Agriculture and Rural Development Consultant, USA; and Mr. S.N.H. Mashhadi and Mr. M.A.H. Enver, National Development Consultants, Lahore. Report dated February-March 1985.

PAKISTAN: POPULATION WELFARE PLANNING PROJECT
MID-PROJECT EVALUATION

Problem and Overview. Pakistan has one of the highest population growth rates (2.9 percent) in the world. The government of Pakistan (GOP) has long recognized the problems this presents, but has not had much success in promoting family planning. (Contraceptive prevalence rates are still only 7 to 10 percent of married couples of reproductive age.) Following suspension of GOP-sponsored family planning field activities in the late 1970s, the GOP in 1982 created a new Population Welfare Division within the Ministry of Planning and Development (the purpose being to coordinate more effectively with other ministries and to integrate population activities with other development programs). The new national "population welfare program" seeks to reach a large part of the population through a network of Family Welfare Centers, Reproductive Health Units (for surgical contraception), authorized contraceptives distribution agents, and a social marketing project.

U.S. Assistance. A.I.D.'s Population Welfare Planning Project (391-0469) was authorized in March, 1982, to assist this new GOP program. The project provides \$25.6 million in grant (ESF) funds plus 21 million rupees in local currency. About 80 percent of the grant funds were planned for purchasing contraceptives; minor portions were designated for technical assistance, training, research, provision of warehouse and computer equipment, and the local currency funds were earmarked for constructing a warehouse and research institute. The completion date (PACD) is September 30, 1987.

Purpose and Methodology of the Evaluation. Purposes of this evaluation were: (1) to assess GOP progress in implementing its Population Welfare Plan, particularly the A.I.D.-financed activities; (2) to recommend changes for improvement, including possible redesign of the A.I.D. project; and (3) to provide an analytic base for a possible increase in A.I.D. funding in FY 1985. Methodology consisted of one month of interviewing, document review, and field visits.

Major Findings: Funds for contraceptive procurement will be expended ahead of schedule; all other project components are far behind schedule. The status of each of the four project components is as follows.

1. **Commodities (contraceptive supplies) and logistics:** Initial contraceptive purchase plans misjudged local demand, but the logistics system has compensated fairly well. There has been a chronic shortage of condoms, which account for about 60 percent of all contraceptives used. Nevertheless, and despite very poor facilities, the logistics system has functioned well and the central warehouse, through careful rationing, has avoided extreme shortages at local distribu-

tion points. An additional \$14.4 million is needed to meet commodity demands of the current project. There is also demand for a broader range of oral contraceptives and for the Copper-T IUD.

2. Management information, research, and evaluation. The goal of carrying out the much-needed research and evaluation has been overshadowed by preoccupation with establishing a high-level research institute. The project was to provide \$2.88 million for surveys, seminars and workshops, evaluation studies, training, publications, technical assistance, service statistics, and data processing but has been unable to do so. The reason is bureaucratic (GOP) turf battles over the power and influence (size, autonomy, scope of work, and rank of the executive director) of the institution being created to receive the A.I.D. assistance and carry out the work. Tentative approval was given in 1981 for a semi-autonomous research institute (the Population Development Center), which was ambitiously re-conceptualized in 1984 as the National Institute of Population Studies (NIPS), but has not yet become operational.

3. Biomedical and sociomedical research. Due to bureaucratic debate over the relative status of two organizations both engaging in biomedical and sociomedical research, no progress was made until 1984. The deadlock has finally been resolved, but neither construction of the research institute (NRIFC) nor training and technical assistance has yet begun.

4. Professional and personal awareness and motivation. Complex social, religious, political, and economic factors present severe obstacles to promoting family planning. To help overcome them, the project was to send up to 50 Pakistani community, provincial, and national leaders on short educational visits to other developing countries or the U.S. and 15 U.S. experts to Pakistan. Only 5 visits have been made because of the delays in other parts of the project and failure to develop annual training and technical assistance plans.

5. Lack of public information, education, and communication about family planning and population. There is no clear communications (IE&C) strategy. Debates have persisted at the central level for over three years about population communications. Meanwhile, local officials responsible for service delivery are eager for educational materials but have neither the materials nor money to produce them.

Project Design and Policy Implications. The project has succeeded in providing contraceptive supplies to meet much of the existing demand, but it appears to have accomplished little in the way of progress. The obstacles to increasing contraceptive practice in Pakistan are well-documented: inadequate political commitment, real or potential religious opposition, the low status of women, non-involvement of the

Ministry of Health, frequent changes in program strategy, and bureaucratic difficulties. The components in which the project has made little headway are precisely those which depend on resolution of bureaucratic difficulties. The project planners appear to have grossly underestimated the deadlocks that would arise because of competition for influence among the parts of the bureaucracy with which the project planned to work.

Major Recommendations. The completion date (PACD) should be extended to September 30, 1989, so that the project's training, technical assistance, and research and evaluation activities can be undertaken. To provide commodities through this period will require an additional \$18.5 million.

1. **Commodities and logistics.** Figures from the field regarding monthly condom offtake should be used as a basis for projecting need, and the "USAID [Boni] Estimate" of condom needs should be used for re-ordering. The central warehouse in Karachi should be strengthened and provincial warehouses strongly discouraged.

2. **Management information, research, and evaluation.** Funds allocated for NIPS should be reprogrammed so that some training and research can be started now. Resources should be made available to the Monitoring and Statistics Wing of the Population Welfare Division to initiate monitoring, evaluation and operations research projects. NIPS should be approved in a scaled-down version and a realistic implementation plan promptly developed. The third contraceptive prevalence survey should be delayed until at least late 1988 or early 1989, since the first survey is only now starting and there is no evidence that prevalence is increasing sufficiently to warrant two more large-scale surveys.

3. **Biomedical and sociomedical research.** At the soonest possible, candidates for training should be processed, equipment and long-term technical assistance provided, and a clear delineation of responsibilities must be established between the two research institutes (the NRIFC and the NRIRP).

4. **Professional and personal awareness and motivation.** This component, requiring a large number of brief visits, should be abandoned. Instead, the Population Welfare Division and the research institutes should concentrate on the institutional technical assistance components of the project.

5. **Public communications (IE&C).** Decide on a communications strategy immediately. Decentralize part of the IE&C activities, with funding, to the provinces and districts.

Evaluation Team: John Crowley, PhD, AID/Washington; Anthony Hudgins, M.A.S., Center for Disease Control; Charles N. Johnson, M.A., M.P.H., AID/Washington; and Noel McIntosh, M.D., John Snow Inc. Report dated November 14, 1984.

PHILIPPINES: BARANGAY WATER PROJECT II, PROCESS EVALUATION

Problem and Overview. About 20 million people in the Philippines have no access to piped water but depend on traditional and often unsafe water sources. In 1978, the Philippine government established the Barangay Water Program, an agency in the Ministry of Local Government, in order to provide low-cost water systems to rural areas of the Philippines.

U.S. Assistance. Also in 1978, A.I.D. initiated the Barangay Water Project (BWP) to support the Barangay Water Program. BWP-Phase I provided \$6 million in loan funds. Phase II, begun in 1981, provides \$22.1 million (a \$2.5-million grant and \$19.6 million in loan funds). A.I.D.'s total loan and grant contribution is \$28.1 million. The project is a spin-off of the A.I.D.-supported Provincial Development Assistance Program (PDAP), a decentralization strategy initiated in 1968.

The project purposes are: (1) to provide safe, reliable, low-cost water systems to selected small rural communities [barangays]; and (2) to develop national and local government capacity to plan, finance, and install barangay cooperative water systems as well as community organizations [called Rural Water and Sanitation Associations] able to maintain and manage the system. Water is to be provided through public faucets or individual house connections; all systems are to be owned, maintained, and managed by their users. The ultimate **project goal** is to improve the general health of the residents in the service area of the project. The intent was that within three years after installation of the systems there would be: (1) no cholera or typhoid outbreaks directly traceable to the project water supply; and (2) a 50-percent decrease in gastroenteritis and reported skin diseases.

Purpose and Methodology of the Evaluation. The purpose of this evaluation was to: (1) determine progress to date; and (2) recommend changes for trying to solve problems identified. Methodology consisted of two months of interviews, document analysis and visits to 37 sites, including completed water systems (some that had failed and others that were functioning reasonably well) and systems under construction.

Major Findings

1. **The project is headed for failure.** There is no evidence of progress toward the goal of improved health. Nor are the two project purposes being met. Even many of the minimal outputs to date are not likely to be sustained.

2. **The project definitely has not met its original targets.** Of the 507 systems planned, only 96 have been completed. Even this number, 96, gives an inflated view of the number of people who have actually benefited. For example, of the completed systems visited, 17 percent have

stopped functioning altogether and 31 percent operate less than 4 hours a day. Of systems visited where information was available, only 2 were serving the 90 percent of the service area population which was a pre-requisite for site selection.

3. Most of the Rural Water and Sanitation Associations are not yet operating their water system on a financially sustainable basis. None are maintaining their systems regularly. Few residents feel any sense of ownership or responsibility for their water system. Where the association is successful, it is not due to anything from the BWP central staff.

4. Reasons for this unsatisfactory outcome include:

(1) Two basic weaknesses in the project design.

(a) Project planners underestimated the amount and quality of training and logistic and other support required for provincial governments to render them capable of building rural water systems and, in turn, providing the training, financial, and other technical assistance rural water-users' associations need in order to function successfully. Only 11 of the 80 local governments that signed agreements with the project have completed at least three water systems.

(b) Community participation was recognized as essential to the success of the project, but no mechanisms for achieving it were built into the project.

(2) The central program management staff (BWP/PMS) is, in essence, not functioning. Few, if any, of the management staff have the qualifications required for their positions; nor have they received professional training on the job. Only the project manager has authority to make decisions; other staff seem unclear as to what actions they can take on their own. Their lack of knowledge, skills, confidence, and motivation have filtered down to the provincial and barangay levels, jeopardizing the entire program. Further, financial management is lacking and subproject approval is slow, sometimes held up more than a year. Central staff do not visit the provinces regularly to provide either the training or monitoring and evaluation required. Contractors are actually performing the duties of the central staff.

(3) Late financial disbursements by the Philippine government. The FAR (fixed amount reimbursement) process, combined with the limited financial resources local governments have experienced since 1983, has made the start up of new projects almost impossible in some provinces and caused many local governments to lose interest in the project. A.I.D. is getting a negative image for not getting the needed funding and vehicles to the local governments.

(4) Substandard design and construction of the systems. About one-third of the sites visited suffered from design

flaws, poor construction, and substandard materials.

(5) A.I.D. management has been poor. For seven years, built-in flaws have been compounded by poor management by the BWP central project staff in Manila. Most of the problems, and a strong possibility of failure, were described in a 1980 "Lessons Learned" special study, a 1981 evaluation, and a 1984 audit, but these were not heeded by A.I.D.

5. A.I.D. has not focused on health issues, or sought to involve the Ministry of Health (which co-signed the project), despite the fact that the project goal is to improve health.

Project Design and Policy Implications. Perhaps the greatest benefit of the project are the many lessons learned for future policy and program formulation. Among them:

1. The philosophy behind the project is sound. Despite the somnolent bureaucracy of the BWP central office which holds the key to subproject approval and release of funds, the project has shown that small-scale water systems can be developed by local government personnel and managed by community residents. This is demonstrated in the few highly successful Rural Water and Sanitation Associations where memberships are growing and amortization rates are being paid.

2. A.I.D. managment. What appears as a laissez-faire approach by USAID/Manila to this project may be due in part to Phase I having been designed for institution building and management by USAID's Office of Rural and Agricultural Development, and then Phase II being reassigned to the Office of Capital Development, where the focus shifted to construction rather than institutional development.

Major Recommendations

1. The project should be terminated on December 31, 1985. There is no advantage to continuing it any longer.

2. A new project should be designed based on the lessons learned from this project. It should not be continued within the Ministry of Local Government.

3. A.I.D. must decide clearly what kind of a water project it desires. The decision should probably be to develop water systems as a strategy for local government and community development (the original institution-building intent). A strong case can also be made for a project whose primary aim is to meet a basic need--water--in which case the emphasis is on construction. But the two approaches are different and A.I.D. cannot continue to oscillate between them.

Evaluation Team: Donna Flanagan, team leader; Diana Talbert; Helen Espinar; and Edgardo Tolones. Report dated March, 1985.

PHILIPPINES: BICOL RIVER BASIN DEVELOPMENT PROGRAM **IMPACT EVALUATION**

Problem and Overview. The Bicol River Basin Development Program (BRBDP) is one of the most well-known development programs in the Philippines and has attracted international attention as an experiment in integrated area development. The Bicol region itself is one of the poorest regions in the Philippines. It consists of six provinces, two of which are separate islands, and has a population of about 3.5 million. In the early 1970s, when this program was initiated, it was the lowest or among the lowest-ranking regions in the country in terms of basic socioeconomic indicators--for example: a declining per capita income, averaging only half the national mean; serious income maldistribution; inadequate employment opportunities; and high rates of malnutrition, morbidity, and mortality. Among chief obstacles to development were: poor transportation and communication; strong susceptibility to natural hazards (volcanic eruptions, typhoons, and flooding); unequal access to productive assets; a rapid rate of crude population growth; and ineffective government institutions.

Strategy. "Integrated area development" meant a multi-sectoral, multi-agency, and systems approach to problem identification and planning. A river basin, a hydrologically-defined rather than administratively-determined area, was to serve as the boundary for the "system." The assumption was that if integrated development was successfully concentrated in an area with high growth potential, that realized potential would set in motion functional economic relationships and positive economic development throughout the region.

U.S. Assistance. The major objective of the program is to increase the per capita income of rural families. Secondary objectives are to: increase agricultural productivity, increase employment opportunities for the farm population, provide for more equitable distribution of wealth, and promote agri-industrial and industrial development in the area. A.I.D. has assisted the program through several projects, including Bicol Integrated Area Development I, II, and III (with agriculture, irrigation, flood control, and roads components) and the Bicol Integrated Health, Nutrition, and Population Project (summarized below in this volume). This assistance, which has totalled almost \$29 million over more than ten years, is now terminating. Other major contributors have been the Asian Development Bank, the European Economic Community, and the Philippines government.

Purpose and Methodology of the Evaluation. Purposes of this evaluation were to: (1) examine the impact of A.I.D. assistance on the economic and social development of the Bicol River Basin; (2) assess the role of the Bicol River Basin Development Program Office (BRBDPO); and (3) evaluate the integrated area development strategy as a model for

regional development. The evaluation occurs at a time when U.S. assistance is terminating and when economic difficulties in the Philippines are provoking a fundamental re-examination of development strategies that has occurred in many years. Methodologically, the evaluation used an important model: the two-stage evaluation. The preparatory phase assembled and screened vast quantitative and textual material, including the Eicol Multipurpose Survey data sets from 1978 and 1983, and conducted preliminary interviews and field visits to ensure that the final scope of work would provide the answers needed. In the formal evaluation phase, two subteams were created--one to focus on impact and one to focus on management issues. The evaluation was conducted through a Limited Scope Grant Agreement between USAID/Manila and NEDA with the National Council on Integrated Area Development (NACIAD).

Major Findings

1. Regional development. The Bicol is still one of the poorest of the 13 regions in the country. Progress has been made but not enough for the Bicol to pull itself out of the depressed region category. Its per capita Gross Regional Domestic Product is still one of the lowest in the country and, in 1982 and 1983, even registered negative growth rates.

2. Agricultural production and productivity. Impacts at the project level have been promising, but advances have not occurred on a scale large enough to influence region-wide performance indicators. It may take some time for program impacts on agricultural productivity to be fully noticed. Productivity has risen to over 3 tons per hectare in the project influence areas, but failed to meet the project target of 4.5 tons per hectare. Irrigation projects in the province of Camarines Sur have resulted in an increase in the effective crop area, with an increase in total production. Many rice producers have adopted high yielding varieties, but the provision and use of fertilizers and credit are declining.

3. Household income. Significant increases in average household income have been reported. These appear attributable, at least in part, to the program. Average household income levels were higher in the integrated development areas where more projects were concentrated.

4. Income distribution became more unequal from 1978 to 1983. Higher-income households experienced the greatest increases in income between the two survey years.

5. Employment. Underemployment and low productivity remain serious problems. The composition of the labor force changed somewhat from 1978 to 1983 in terms of skills classification by sex. The most notable change was that more females entered the labor force, both in agriculture and other occupations. Children constitute a large portion of the labor force.

6. Health and population. Infant and maternal mortality rates have declined significantly, but the crude birth rate has continued to rise. The failure to reverse this trend means the population will grow at continuously high rates thereby putting additional stress on the region's resources. There have been decreases in 2nd and 3rd-degree malnutrition.

7. Prospects for the future. The real challenge of integrated area development is only now beginning. This challenge is to facilitate full productive use of core infrastructure through a pattern of public and private investment that realizes the potential the infrastructure offers.

Project Design and Policy Implications. The program has failed to meet its goals, but the evaluators do not call the program a failure. Instead they say: "It is only with continuing support, particularly in maintenance and management, that full benefits can be attained from such capital-intensive infrastructure development" and "Since projects like irrigation, flood control, and roads have long gestation periods, positive effects are only beginning to trickle in." This suggests miscalculations in project design: either the objectives were unrealistic (e.g., too ambitious to be achieved during a single decade), or assumptions were made about commitment and abilities on the part of the Philippine government that did not exist under Marcos.

Major Recommendations

1. The BRBDP needs to redirect its management and programming to more directly address "second-generation" problems now characterizing the region. This includes increasing attention to family planning.

2. Problems of inter-agency participation must be solved.

3. There must be clearer and stronger commitment from the national government. Relationships between integrated area development programs like the BRBDP and the national planning, programming, and budgeting processes must be clarified.

4. The BRBDP and other regional and sub-regional area development programs need to engage in a more substantive sharing of experiences and lessons learned.

Evaluation Team: Dr. Bruce Koppel (team leader), East-West Center; Ms. Zenaida Manalo, Dr. Pedro Sandoval, Atty. Asteya Santiago, and Dr. Serafin Talisayon University of the Philippines; Dr. Emeline Navera, National Cottage Industries Development Authority. Assisted by: Mr. Leonardo Dayao and Mr. Sulpicio Roco, USAID/Manila; Ms. Ma. Teresa Javier, BRBDPO; and Ms. Loreta Paz, NACIAD. Report dated May 1985.

**PHILIPPINES: BICOL INTEGRATED HEALTH, NUTRITION, AND
POPULATION PROJECT, PROJECT COMPLETION REPORT**

Problem and Overview. Poor health, nutrition, and too many children continue to be problems throughout much of the Philippines, despite many years of efforts to remedy the situation. Filipinos and foreign donors alike are struggling to find strategies to achieve the needed improvements.

U.S. Assistance. This is a pilot project (492-0319) being implemented in the Bicol region of the Philippines where A.I.D., for many years, has been supporting an ambitious integrated area development program. (See "Bicol River Basin Development Program" above.) The purposes of the Bicol Integrated Health, Nutrition, and Population Project are to:

- (1) provide effective health, nutrition, and family planning services to selected barangays (rural communities);
- (2) improve the sanitary environment and household water supplies;
- (3) increase local government financial support for health, nutrition, and family planning activities; and
- (4) increase the participation of both community (barangay) health workers and residents in health, nutrition, and family planning activities.

Planned funding for the project was to be \$7.037 million (\$2.5 million in loan funds from A.I.D. and \$4.537 from the Philippine government). The project completion date (PACD) was December 31, 1984.

Major Findings

1. From a technical and administrative point of view, the Bicol Integrated Health, Nutrition, and Population Project has been a successful experiment in providing primary health care. Specific achievements, in terms of the four purposes listed above, are:

(a) Health, nutrition, and family planning services have improved as a result of increased service coverage.

(b) Sanitation and water supply facilities or systems have been built and show evidence of use. Water facilities were constructed for 320 barangays and 32,000 rural household sanitary toilets were constructed.

(c) Local governments (provincial and municipal) are currently paying the stipends for the barangay health workers. This is a considerable outlay.

(d) Participation of barangay health workers and residents in community public health activities has increased as a result of this project and programs introduced by the Ministry of Health during the past several years. Under the institutional development component of the project, it was planned that:

- * 400 trained barangay health aides ("BHAs") would be deployed (469 were deployed); and
- * community organizations would be established in 400 barangays to assist with community development work (400 were established).

2. Sustainability of the services established, however, is still a major question. The outcome will depend on whether or not the local governments involved are able to bear the burden of recurrent costs, including the stipends for the barangay health aides, over the next several years. Another issue is whether the community organizations established will actually be (or become) functional over time.

3. The project was completed on schedule, having spent only about 30 percent of its planned budget. (Actual expenditures were about half of A.I.D.'s planned contribution and about one-quarter of the Philippine government's planned contribution.) The Bicol Regional Health Director had requested a one-year extension in order to utilize remaining funds, but USAID/Manila decided against this since most of the project outputs had been accomplished.

4. Village drug stores and household water chlorination were not carried out as planned. Only 12 of the planned 400 village drug stores were established. It was planned that chemicals for chlorination would be distributed to 64,000 households; none were distributed.

5. Formal evaluations of the project are ongoing and planned. A final project evaluation is in progress, and a comparative evaluation of this and the Panay Unified Services for Health (PUSH) projects is planned.

Project Design and Policy Implications. The major lessons learned are summarized as follows:

1. Community health workers must be properly compensated for their work if they are expected to be accountable for this work. The answer is not necessarily to give them government salaries, but they must be compensated or the majority will not remain in their jobs performing substantive

work. This conclusion is reinforced by findings from the PUSH and other primary health care efforts in the Phillipines.

2. Long-term recurrent cost financing is not given sufficiently serious consideration during project design. During the design of this project, assumptions were made about the local governments' ability to assume the responsibility for paying the salaries and continued training costs of the health workers deployed through the project. Many of the local government officials (mayors and the two governors) would like to continue paying the salaries and even expand the program to other underserved areas, but they have very limited funds with which to do so.

3. There must be some personnel working on project implementation on a full-time basis--even for pilot projects as this. This project suffered in its early years from having only part-time attention from otherwise fully-employed Ministry of Health staff. The situation improved a great deal when a full-time project manager position was established.

4. USAID/Manila will continue to monitor outcomes of this project to see: (a) how long local governments will continue to pay the salaries of the barangay health aides; and (b) whether the Ministry of Health's regional office will provide the in-service training and other support functions necessary to sustain the enthusiasm and interest of the barangay health aides. USAID/Manila's Primary Health Care Financing Project will also provide answers to some of these crucial questions over the next three years.

Major Recommendations

1. Compensation (pay) for community health workers must be given more serious attention.

2. Sustainability and long-term recurrent cost financing. A.I.D. must plan better, and more realistically, during project design for the financing of long-term recurrent costs. Future projects will have to seek other ways of including user fees for the more popular services, or in some other way recover some of the costs, in order to assure sustainability of the project.

Report Submitted by: R. Rhoda and A.M. Spathopoulos, USAID/Manila; dated September 30, 1985.

**PHILIPPINES: BPI (MAF-IRRI) SMALL-FARM MACHINE
INDUSTRIAL EXTENSION PROGRAM, MID-PROJECT EVALUATION**

Problem and Overview. In most developing countries, mechanization for agriculture was available initially only on the larger landholdings. For example, in the Philippines before 1970, agricultural mechanization was concentrated on large plantations, such as sugar estates, and not generally available to small farmers. In 1965, the International Rice Research Institute (IRRI), located in the Philippines, began developing small-scale agricultural equipment that could be produced in small workshops using locally available materials. This R&D effort is generally considered a success, but there was only limited success in promoting the equipment, particularly outside the Philippines.

U.S. Assistance. In response, A.I.D., in 1975, funded a multi-country Industrial Extension of Small Agricultural Equipment Project at a cost of \$839,000, which was later extended for 2 years with a grant of \$1.4 million. IRRI provided the engineering assistance. In 1980, A.I.D. approved a 5-year \$4.35-million continuation project, the A.I.D.-IRRI Extension of Small Agricultural Equipment Project. Its ultimate goal was to increase small farm productivity, small farm income, rural manufacturing jobs and foreign exchange savings. The immediate project purpose was to increase the number of fabricators, level of production, number of local designs or adaptations, and value added per machine. The project was to be implemented in the Philippines, Indonesia, Thailand, India, Pakistan, and Nepal.

The BPI (MAF-IRRI) Small Farm Machinery Industrial Extension Program was established as an industrial outreach component of the larger A.I.D.-IRRI Extension of Small Agricultural Equipment Project. The "BPI (MAF-IRRI) Program" is implemented by the Bureau of Plant Industry (BPI [Engineering Division]) of the Ministry of Agriculture and Food (MAF) and by IRRI. A.I.D. funds the BPI (MAF-IRRI) Program through its \$4.35-million grant to IRRI. The government of the Philippines (GOP) provides additional support. The explicit objective of the BPI (MAF-IRRI) program is to develop the ability of small farm equipment fabricators to design, adapt, and produce farm machinery and implements for small farms. Program sustainability is a critical issue at this time since the A.I.D. grant to IRRI is due to end in September 1985.

Purpose and Methodology of the Evaluation. The purpose of this evaluation was to: (1) assess the progress of the BPI (MAF-IRRI) Program and (2) make recommendations for its improvement and long-term sustainability. Conclusions are based on a short, five-day assessment which included interviews with key personnel, visits to six cooperators, and brief discussions with machinery end users and dealers.

Major Findings

1. Farm machinery in Philippine agricultural development. There is a need to continue support for the current GOP (BPI) farm machinery industrial extension program, but substantial expansion is not required for either accelerated short-term agricultural growth or short-term increases in small-farmer production or income. Data indicate that: (1) farm mechanization by itself does not increase production (but rather is used as a labor-substituting factor as farms improve water control and increase use of chemical inputs); and (2) the farm machinery industry in the Philippines has developed to the point where it can meet normal increases in demand.

2. Many GOP policies and programs have had a net neutral or perhaps slightly negative impact on domestic production and use of farm machinery. This wide variety of policies and programs includes pricing of agricultural products and inputs as well as tariffs, credit, exchange rates, and direct purchases of farm machinery.

3. Benefits of the BPI (MAF-IRRI) Program definitely outweigh the costs. Start-up was slow, but the program gained real momentum during the past year in moving toward meeting the new machinery needs of both the Ministry of Agriculture and Food's promotion of new crops as well as longer term agricultural development. The program appears generally well-balanced with resources wisely allocated among the various functions--extension, training, and equipment development and testing.

4. Given the severe GOP budget crisis, additional external assistance will probably be needed to maintain the recently acquired momentum of the program. Without continued external assistance after September 1985, staff, budget, and expertise will not be adequate for meeting the program's objectives.

Project Design and Policy Implications. In the longer term, accelerated agricultural development will require a greater use of agricultural machinery both in terms of kinds of operations mechanized and the range of agroeconomic regions for which farm machinery is appropriate. To meet this longer-term need, farm machinery research and testing should continue as a joint public-private sector effort. Thus an effective government program is needed.

Major Recommendations

1. A.I.D. should grant a 2-year, no-cost extension to the current IRRI project so that the BPI (MAF-IRRI) Program can maintain its momentum during the current GOP budget crisis and develop the needed additional institutional capability.

2. BPI should attempt to obtain continued external funding either from private sources, from A.I.D. or from other donors.

3. GOP policy-makers should give more attention to the farm mechanization requirements of their recent policy shift to accelerated agricultural development and new priority crops.

4. The Permanent Inter-Agency Committee for Agricultural Mechanization (PICAM) should be officially constituted. This has already been delayed 4 years.

5. MAF activities should be better integrated with the business extension efforts of other agencies, especially as concerns BPI field extension efforts.

Evaluation Team: Richard Rhoda (Team Leader), USAID/Manila; Leosa Nanette Agdepa, GOP Ministry of Trade and Industry; Ernesto Flores, Consultant; Jon Halpern, USAID/Manila; and Josue Maestrado, GOP Ministry of Agriculture and Food. Report dated October 1984.

PHILIPPINES: FARMING SYSTEMS DEVELOPMENT PROJECT,
EASTERN VISAYAS, MID-PROJECT EVALUATION

Problem and Overview. The purpose of this project is stated as (1) to establish a proven mechanism for adapting rainfed agricultural technologies to the resource conditions of Region VIII (the Eastern Visayas), and (2) to disseminate such technologies found appropriate. The broader goal of the project is to improve the livelihood of the small farmers in selected rainfed areas in Region VIII. The implementing organizations are the Philippine Ministry of Agriculture and Food (MAF) Region VIII in Tacloban City and the Visayas State College of Agriculture. The planned direct beneficiaries of the project are some 360 small farm households in Region VIII who raise such products as corn, cassava, and cocount.

Expected outputs of the project were to be: (1) six functioning field research and demonstration sites (called site research management units, or "SRMUs"); (2) an increased ability of the MAF regional staff to undertake farming systems research and disseminate improved technologies; and (3) an improved capacity of the Visayas State Agricultural College to support farming system development in Region VIII.

U.S. Assistance. This is a five-year project which began in 1982. Planned funding totals \$5.81 million--\$3 million from A.I.D. (a \$1.6-million loan and a \$1.4-million grant) and \$2.81 million from the Philippine government. Cornell University is providing technical assistance.

Purpose and Methodology of the Evaluation. The evaluation was conducted to: (1) identify changes needed to improve the impact of the project during its remaining two years; and (2) identify follow-on activities needed to attain the project goals. Methodology consisted of three weeks of document and literature review, interviews with project personnel and with both participating (cooperating) and non-participating farmers using carefully prepared issues-and-objectives checklists, visits to all six SRMU sites, and feedback sessions with the project implementors.

Major Findings

1. **Implementation.** Most of the target outputs have been completed quite satisfactorily. All planned facilities have been constructed and equipment acquired. Degree-level and short-term training programs for both the Visayas State College and MAF staffs have been completed as planned. Technical assistance has been obtained largely as scheduled. Six SRMUs are in operation and field research is being carried out. Successes have included introduction of new technologies in the form of improved crop varieties and management practices.

2. Beneficiary perceptions of the project. Farmers perceive that the purpose of the project is "to give advice to farmers." When asked how they have benefited, they refer to the inputs they have received for cropping patterns trials and to livestock they have been given. Farmers who are not participating in the project know little about it. The project will not have succeeded, if it has only provided inputs and advice to a small, select group of farmers.

3. Overall strategy. The project began with a rather limited, top-down, cropping systems approach that focused on improvements in the major commodities through cropping patterns and varietal trials; fortunately, it is now evolving very positively toward a broader farming systems approach. Field research at most sites has not progressed beyond researcher-managed trials, and the researchers still do not understand the diversity and dynamics at the local level well enough. But the project has started to emphasize farmer participation and the researchers are developing an appropriate interdisciplinary, problem-solving approach in which problems are specific, local, and farmer-identified. This expanded approach includes research on: livestock; marketing; land access and land use systems; variability in farmer resources, knowledge, and innovation; risk, uncertainty, and farmer decision-making; and soil erosion, pests, and disease.

5. Organization and management. Institutional linkages, especially between the MAF and Visayas State College of Agriculture, have improved considerably.

6. Follow-on activities. Support is needed for three more years after the end of this project in order to derive full institutional benefits from the farming systems approach to agricultural and rural development.

Project Design and Policy Implications. During project design, the MAF strategy was strongly oriented toward improving yields of major commodities. Both the MAF and A.I.D. wanted to use a farming systems approach, but may not have fully understood the concepts and corresponding implementation requirements. The project objective was to meet needs of upland farmers. To accomplish this, the project management pre-determined a focus on particular cropping patterns in order to make sure that research was done on crops grown by upland farmers, rather than on lowland rice. While this top-down approach was effective in directing research to previously neglected crops, it eliminated problem identification as the first step in the farming systems approach at the site level. The research and development process began, inappropriately, with extending "research station technology" to farmers, rather than with indigenous technology as the starting point. It is appropriate for the project to have departed from its initial mandated focus and narrow approach. A broad, farmer-centered, holistic approach and flexibility to respond to complexities encountered at the field level and

are key to success in farming systems research.

Major Recommendations.

1. Overall strategy. The project should generally continue in the new direction in which it has recently been moving. The SRMUs, however, need to maintain a balance between extension and basic research, especially since technologies still need further testing and refinement under very different local conditions. By the second or third year a farmer has participated in a cropping patterns trial, all management and implementation should be left to the farmer and no further inputs (including planning assistance) provided.

2. Research. More attention needs to be given to research methodology. A smaller share of project resources should go to cropping patterns trials and more to problem identification and to targeting research and development. The SRMUs should better use locally-based knowledge and their own experience to prioritize research. Informal exploratory survey procedures should be used more often, including prior to initiating formal studies and, to understand farmers' perceptions of their major problems, in communities where there are few or no participating farmers. The nature of farmer participation needs to be changed and back-up research needs to be more closely related to problems of resource-poor farmers. The Visayas State College technical group should be better used to reorient the project toward an interdisciplinary approach to the multifaceted real-life farmer problems that can be addressed only by interdisciplinary efforts.

4. Organization and management. Linkages need to be strengthened both within the Visayas State College and between it and the MAF, as well as with the Bureau of Lands and Bureau of Forest Development. The project should be incorporated into the regular structure of the MAF and its RIARS system by August 1985.

5. Follow-on activities. A.I.D. and the Philippine government should provide funding for an additional three years after the present project. A.I.D. support is needed for training, technical assistance, and research. The follow-on activities should be designed by a team from the project director's office, the MAF, and the Visayas State College of Agriculture. Emphasis should be on local training. Long-term technical assistance should be provided for agricultural economics/agricultural anthropology.

Evaluation Team: Percy Sajise (team leader), Sam Fujisaka, and Enrique Pacardo, University of Los Banos; Doyle Baker, USAID/Botswana; David Hitchcock, PADAP; Inocencio Bolo, Ministry of Agriculture and Food; and Charito Medina. Report dated May 1985.

**PHILIPPINES: REASSESSMENT OF
PROPOSED PL 480 TITLE II PROGRAM PHASEOUT**

Problem and Overview. Malnutrition is a persistent problem in the Philippines. About 20 percent of the preschool population is moderately to severely malnourished. One-third of the school-age children in grades one through four are stunted and/or have low weight for age. The Philippine government adopted a national nutrition policy in 1979 that called for increased food production per capita, nutrition-related income-generating programs, and effective delivery of food to vulnerable groups. Food assistance programs using domestic and foreign donated foods are a part of these efforts.

U.S. Assistance. In the past 30 years, \$375 million in PL 480-Title II food has been donated to the Philippines. CARE (Cooperative American Relief Everywhere) administers the Targeted Food Assistance Program, which reached 74,000 recipients in 1984, and a School Feeding Program, which reached 1.07 million recipients in 1984. The Catholic Relief Services (CRS) conducts a Targeted Maternal and Child Health Program in which 550,000 recipients were served in 1984. CRS also provides day care centers with food assistance for 200,000 recipients. In total, the U.S. food assistance programs reached just under 2 million recipients in the Philippines in 1984. A total of 6 million Filipinos receive food through U.S. and other food assistance programs. The proportion receiving Title II foods has declined from over 80 percent in 1974 to 31 percent in 1984.

The Title II program is scheduled to be phased out by the end of FY 1987. This decision was adopted as a result of the Blumenfeld et al. evaluation of August 1982 ("P.L. 480 Title II: A Study of the Impact of a Food Assistance Program in the Philippines"). That study found that the Maternal and Child Health Programs and Day Care Programs were effective in reaching the most vulnerable groups and in reducing the proportion of malnourished children, but that the school feeding programs were less effective in reducing malnutrition. It was recommended that the MCH and Day Care programs be continued through 1987, but that there be a 20-percent phase-out per year of the school feeding program. All food donations would cease by the end of FY 1987.

Purpose and Methodology of the Evaluation. Since that 1982 decision to phase out U.S. food assistance in 1987, the Philippine economy and political situation have worsened significantly. The purpose of this evaluation, therefore, is to reassess the 1982 decision in light of changes since that time. Methodology consisted of document review and analysis, interviews, and site visits. Unfortunately, only fragmentary data on nutritional status beyond 1982 were available in documents or reports.

Major Findings and Considerations

1. The Philippine economy is in trouble. In 1984, the GNP declined 5.5 percent while population growth was near 2.5 percent. Inflation in 1984 and 1985 was close to 50 percent. All short-term indicators reflect the severe conditions. Estimates are that it would take five years to restore the conditions that existed in 1982.

2. Political instability has exacerbated the economic decline. In the aftermath of the assassination of Senator Aquino, there has been a dramatic flight of domestic capital from the country, a drying up of foreign investment, and a debt and credit crisis. Low-income families suffered increased unemployment and effects of heavy inflation.

3. Nutritional status has deteriorated, although sharp declines have not been evident and nutritional indicators performed better than economic indicators during this period. This may be due to data problems, to lag effects, or perhaps effects of the effort of the Philippine government to improve the nutritional status of Filipinos.

4. Philippine government agencies are not in a position to replace the U.S. food assistance program. New funds would be needed and the social service ministries are operating under reduced or frozen funding levels. New government revenues are not likely to be available until the economy recovers. That will not be soon.

Project Design and Policy Implications

1. The social service ministries have, as part of their portfolios, the responsibility to improve the nutritional status of Filipinos. They have personnel and plans for carrying out this task, but they lack financing.

2. The Philippine government policy of self-reliance is interpreted by central government officials as almost complete reliance on local sources of funding, even down to individual poor families. Local outcomes of this self-reliance policy will vary with differing local capacities, resources, and circumstances.

3. More complete and intense surveillance of nutritional status is needed to identify localities not able to respond to the policy of self-reliance and to detect any sudden downturn in nutritional status as a possible delayed effect of the adverse economic conditions.

Major Recommendations. Given the worsened economic conditions, and the consequent inability of government agencies at present to carry out the programs for which they are responsible, A.I.D. should:

1. **Extend the Title II phaseout to FY 1990;**
2. Continue to hold the Philippine government responsible for in-country transportation of the Title II foods;
3. Support the Philippine government in increased nutritional surveillance as a means for more effective targeting;
4. Provide resources to voluntary agency (CARE and CRS) programs to introduce nutritionally-related development schemes to local communities not able to help themselves under the current government policy of self-reliance; and
5. Deal with charitable emergency aid as a separate issue from nutritionally-related efforts to improve local quality of life.

Evaluation Team: Dr. John Nystuen (team leader), Community Systems Foundation; Dr. Phillip Foster, Development Research; Dr. Cecilia Florencio, University of the Philippines; Mr. Lowell Lynch, USAID/Dhaka; and Dr. Aida Monares, AID/Washington. Report dated August 1985.

PHILIPPINES: THE RURAL SERVICE CENTER PROJECT
AND THE FEASIBILITY OF ITS LINKAGE WITH
THE LOCAL RESOURCE MANAGEMENT PROJECT,
MID-PROJECT EVALUATION

Overview. The Rural Service Center Project and the Local Resource Management Project are similar "basic needs" learning projects, both designed to encourage local (municipal and provincial) governments throughout the Philippines to design and implement subprojects to benefit directly the "poorest of the poor." Both projects were designed to establish a planning-from-below, people's participation process. The intent was to, first, develop and test approaches to improve the ability of local government units to address the developmental needs of the disadvantaged segments of their populations through processes that involve meaningful participation of beneficiaries and, then, once the initial learning process was substantially over, to replicate the most successful approaches nationwide.

U.S. Assistance. The Rural Service Center Project began in 1978, has had its project agreement amended at least seven times (including two extensions of the completion date), and is now in its seventh year. AID/Washington has recently advised USAID/Manila that additional assistance will be considered only "under the funding umbrella" of the Local Resource Management program.

Purpose of the Evaluation. The purpose of this evaluation, therefore, was: (1) to evaluate the performance of the Rural Service Center Project to date; (2) to analyze factors relevant to a linking of the two projects; and (3) to make recommendations for further action.

Major Findings

1. **Potential for overall impact.** The Rural Service Center Project has significant potential for addressing development needs of the most disadvantaged segments of Philippine society through a people's participation approach.

(a) **Subproject impact.** Some of the more than 200 subprojects have already had a clear, positive impact on the incomes of individual participants as well as on the development of group-consciousness in beneficiary associations. Subprojects are of two types: group-implemented (e.g., furniture, garment, or boat manufacture) which require cooperative labor from a group of beneficiaries; and individually-implemented (e.g., sewing, ginger raising, and pedicab operation) in which several individuals carry out the same type of activity, but independently. Individually-implemented subprojects tend to have the greatest impact, with benefits distributed more evenly and more directly to participants.

(b) Training and technical assistance for building up the development skills of the City Planning and Development Staffs appear to have been effective in many locations.

(c) A promising financial management system has been developed and enabled some local officials to take early anticipatory action in response to emerging financial difficulties (resulting from central government problems and USAID delays in providing planned funding to the local level).

(d) Possibilities for mobilizing private sector support are encouraging, based on pilot efforts in four cities.

2. Linkage between the two projects is desirable. Both are learning projects with common goals. The main differences that are significant in finding a strategy for linkage are:

(a) Intended beneficiaries. The Rural Service Center Project (RSC) aims at improving the quality of life of target households in poverty areas, specifically in depressed communities (barangays). The Local Resource Management (LRM) is directed at upliftment of target households within identified poverty groups (upland farmers, artisanal fishermen, and landless agricultural workers).

(b) Geographic focus. The RSC focuses on secondary cities nationwide, currently 27, and has begun expansion to 7 market towns and municipalities. The LRM focuses on provinces (8) and through them municipalities.

(c) Responsibility for community organizing. In the RSC city government staff are to organize intended beneficiaries into associations and guide them through the process of subproject identification, preparation, and implementation. In the LRM, this is done by private sector groups.

(d) Implementing agencies. The RSC is being implemented by the Ministry of Local Government (MLG) while the LRM is under the National Economic and Development Authority (NEDA).

3. Causes for concern:

(a) Deviations from the prescribed processes and procedures set forth for the project are numerous. This is not wrong per se, but it is long past time to scrutinize these departures to determine whether they are the result of poor implementation or whether modifications in the project design are called for.

(b) Budgetary difficulties continue to hamper project operations. There has been a virtual standstill in subproject authorization since 1983. Due to the national budgetary crisis (and delays in A.I.D. funding), several million pesos in reimbursements are owed to participating cities, including

for subprojects completed as far back as 1980.

(c) Community organization work requires more staff time than many local governments have been willing or able to devote. Without careful community preparatory work, followed by adequate monitoring and provision of advice as needed, projects are not likely to succeed.

Project Design and Policy Implications. The project was sound in design but the virtual standstill in subproject authorization could have far-reaching implications for this type of project. Despite funding constraints, local governments continue to the process of organizing beneficiaries into associations and preparing proposals for the subprojects to assist them. The danger lies in the fact that, where the approach has been effective, the collective consciousness of communities has been raised. They have been made aware of the fact that, as a group, they represent a force that can articulate views to their government, and they have been made to believe that their government will be responsive to their legitimate demands. If the subproject proposals are left hanging much longer, this project that started out with the laudable goal of awakening in communities a sense of control over their destinies could end up with pockets of disillusionment and effective forces for destabilization.

Major Recommendations

1. The project should be extended for another three years. There should be no further expansion, however, until items 2 and 3 below have been satisfactorily completed.

2. The first year of extension should be devoted mainly to full-scale evaluation and subsequent modification, refinement, and discarding of processes and procedures that have been developed and pilot-tested as of June 1985.

3. A program monitoring and evaluation system should be developed and made operational at the soonest possible. This would enable the early detection and scrutiny of departures from prescribed processes and procedures and permit early corrective action. This was urged as early as 1980, and in evaluations since, but has not been acted upon.

5. Financial management. Local experiences with the financial management system should be evaluated to build on strengths and eliminate weaknesses. Given the national budget crisis, there should be increased efforts to generate local funds and to use funds more efficiently.

Evaluation Team: Harry Pasimio, team leader; Jaime Madri-dano, MLG; Cho Roco, USAID/Manila; and Edwin Sangoyo, NEDA. Report dated January 18, 1985.

SOUTH PACIFIC: PVO CO-FINANCING PROJECT -- Summer Institute of Linguistics, Non-Formal Education and Leadership Training
ANNUAL EVALUATION

The Problem. Throughout Papua New Guinea and much of the South Pacific, illiteracy remains widespread. Many people are unable to read and write in their own vernacular (local language) or to use basic numbers. Attempts to improve literacy are difficult, in part because of the large number of local languages involved.

U.S. Assistance. The South Pacific PVO Co-Financing Project (879-0251) is also known as the Summer Institute of Linguistics Non-Formal Education and Leadership Training Project. Its purpose is to develop leadership and organizational capability for continuing village-level non-formal education by: (1) increasing functional literacy and community development activities in 50 ethnic groups; and (2) training adults in professions and trades for direct employment and income-producing opportunities. The project was funded through a \$1.496-million operational program grant to the Summer Institute of Linguistics (OPG II, 879-0251-G-00-1008-00), dated January 5, 1981. This sum includes a subgrant of \$218,540 to Pacific Ministries Development, Inc. of Palo Alto California.

In April, 1984, the grant was amended to reduce funding to \$999,100--a reduction of almost 50 percent in the amount going to the Summer Institute of Linguistics--and to extend the project one year (to December 31, 1985). The change was made because implementation was far behind schedule (due to Summer Institute of Linguistics internal management shortcomings, notably financial management and the inadequacy of personnel administering the grant). These problems have subsequently been remedied and the Summer Institute of Linguistics is now in a much better position to implement both the remainder of the current grant and future projects.

Purpose and Methodology of the Evaluation. The purpose of this evaluation, specified in the grant, is to determine if the project is achieving its planned targets. Findings are based on two and a half weeks of field visits to 12 tribal locations so dispersed as to require travel by helicopter, small airplanes, a four-wheel drive vehicle, boat, and foot. Methodology consisted of examination of baseline data, project goals and assumptions, post-project expectations, project financing, accomplishments to date, and beneficiary impacts. The evaluation also covered the subgrant to Pacific Ministries Development.

Major Findings

1. Goals are being met in most of the subprojects, although many had to eliminate or curtail activities because of the near 50-percent reduction in funding to the Summer Institute of Linguistics. After a slow start, most of the subprojects were just well under way when they had to cut back because projected funds were no longer available.

2. Most of the grant funds have been spent, with about 8 months remaining in the project.

3. The main beneficiaries are young children who are learning to do basic numbers and to read and write in their own mother languages. Children who have completed the project's preschool vernacular classes have been so far ahead of other children beginning the government community schools that the government is studying the schools sponsored by the Summer Institute of Linguistics in order to replicate or adapt the model elsewhere.

4. The goal of increasing functional literacy and community development activities in 50 ethnic groups is being met. In nearly each community (subproject), children, adults, or both are being taught to read and write in their own local language and some community development activity has been undertaken to generate funds for supporting this literacy training. The development activities include sawmills and a bakery to provide jobs for school dropouts and to help pay salaries of the literacy teachers, construction of a literacy building with a water supply system, and provision of solar lighting for community activities. Some of the development activities have not been successful because they were premised on Western commercial models rather than the local kinship system. Others have been successful but may need continuing external assistance.

5. The goal of training adults in professions and trades for direct employment and income-producing opportunities. An apprenticeship program has been established and, although small, is considered highly successful. The Summer Institute of Linguistics Center at Ukarumpa, recognized by the government of Papua New Guinea as an official training center, currently provides training to 14 interns in such areas as accounting, construction management, printing facilities management, radio and communication engineering, and automotive maintenance. It also provides much appreciated training in appropriate technology and teachers training for mother-tongue translators and national literacy teachers from many language groups.

6. The subgrant to Pacific Ministries Development appears quite successful. People of the Upper Sepik Basin rely on the Sepik River for drinking water, but this is contaminated. The goal of this subgrant was to install 25 rain-water catch-

ment systems in villages serving several thousand people along the Sepik River. To date, 19 systems have been installed benefitting about 3,000 people. Much of the labor has been contributed by the villagers themselves and two men in each village have been chosen by the villagers to be responsible for maintenance and have received some training in maintenance.

Project Design and Policy Implications. A project that sets out, as this did, to assist people belonging to many different and quite dispersed cultural and linguistic groups, must design its activities in terms of the local cultural patterns as well as local needs. The subprojects that have been least successful appear to be those that were premised on Western models inappropriate for the local culture--for example, establishment of a small bakery (to generate funds for helping pay teachers' salaries) when, in fact, people usually get bread through the kinship system without paying for it, or establishing a sawmill (again to help pay teachers' salaries) on the assumption workers would work according to Western employer/employee relationships, when in fact, other kinship patterns prevail.

Recommendations are not provided.

Evaluation Team: Leon Schanley (Grants Officer), Morris Carney (Associate Director), and Harriett Carney (Executive Secretary), Summer Institute of Linguistics, Pacific Area Office. Report dated April 16, 1985.

SOUTH PACIFIC: FIJI COUNCIL OF SOCIAL SERVICES
ANNUAL INTERIM EVALUATION

Overview. Many non-governmental social service organizations are working in Fiji with goals of improving the quality of life for less advantaged islanders. Each organization has its own source of funding, but this funding is minimal. The Fiji Council of Social Services was established in 1979, through Peace Corps assistance, as a coordinating body to support these organizations. It now has 37 member organizations.

U.S. Assistance. The purpose of this project is to provide additional support to non-governmental social service organizations in Fiji so that they can have a greater impact on people at the lowest socioeconomic levels. The amount of the grant is \$76,422 for the calendar year 1984, which is about 22 percent of the total the total program cost of \$334,393. (This is grant 879-1009, or project 879-0251.)

Purpose and Methodology of the Evaluation. This is an interim report on projects in progress sponsored by member organizations of the Fiji Council of Social Services during calendar year 1984. This is a self-assessment report consisting of a brief summary followed by brief reports from each of 7 subgrantee organizations. Each subgrantee describes its projects, their direct and indirect beneficiaries, funds advanced, successes and difficulties, and income generated.

Major Findings

1. The Fiji Council of Social Services has become the focus within the social services community for coordinating and institutionalizing a social services network in Fiji.

2. The Council has helped bring about more efficient use of development funds by close coordination with its member organizations on types of projects and which organization is involved in what work. This reduces duplication and encourages collaboration on similar programs.

3. The Council is encouraging non-members to participate in its activities in order to reach out to people at the grassroots level where needs are most acute. The Council has amended its Constitution for this purpose.

4. All positions with the Council will be occupied by local Fijian personnel by February 1985. This was the goal in 1979 when the first Peace Corps Volunteer was posted to set up the Council. The term of service of the Peace Corps Volunteer assigned to set up the Council's accounting system will end in February 1985. A local person has now been in

training for three months to assume this position.

5. The Council is respected not only locally, but internationally in the South Pacific as well. Already it has received a request from the Solomon Islands asking for support in establishing a similar kind of institution.

6. The Council's achievements are a result of Peace Corps Volunteer efforts from early on and of the support from A.I.D.

7. Subgrantee projects range from about \$500 to \$16,000 in Council-provided support. Many were designed to benefit village women. Projects summarized are the following:

(a) Methodist Social Services: projects in fishing, agriculture, rural water, goat farming, and handicrafts.

(b) Housing Assistance and Relief Trust: hurricane repairs, electrification of community halls.

(c) YMCA: goat farming, housing, fishing, agriculture, rural water, footpath improvement, rural training, and "Learning to Live" girl school dropouts program.

(d) Seventh Day Adventist Church of Fiji: housing, fishing, footpaths, farming extension, educational aids, a multicraft center, and a kindergarten.

(e) St. John College: goat farming and an ambulance project

(f) Muslim League: garment manufacturing.

(g) Salvation Army: a school hurricane-relief dining hall and a girls' home.

Project Design and Policy Implications. This project funds a considerable number of relatively small subprojects. Unlike many larger projects, most of the subprojects have a concrete, immediately visible outcome that clearly makes people feel they have directly benefited from the project. For example: "Since the light was brought to the halls a few months ago, tenants felt as if the Holy Ghost has descended on them. The Trustees, staff, and tenants are most grateful to USAID funding through Fiji Council of Social Services which enabled the electrification of the community halls this year."

Recommendations (are not provided).

Report Submitted by: Fiji Council of Social Services.
Report dated January 1985.

**SOUTH PACIFIC: NON-FORMAL EDUCATION AND
VILLAGE DEVELOPMENT PROJECT, KADAVU, FIJI,**
ASIA FOUNDATION END-OF-PROJECT INTERNAL EVALUATION

Problem and Overview. Kadavu is an isolated province of Fiji where life depends on traditional subsistence use of land and sea resources, supplemented by cash support from relatives who have migrated elsewhere, and communities are frequently wracked by destructive hurricanes. This project was prompted in fact by a severe hurricane in 1979, and by recognition that economic development prospects in Kadavu were not as bright as in other parts of Fiji.

U.S. Assistance. The Non-Formal Education and Village Development Project (879-0251) was funded by an A.I.D. grant to the Asia Foundation which implemented the project in partnership with the Methodist Church in Fiji during the period October, 1981 to June, 1984. The project purpose was to improve the general quality of life in Kadavu by: (1) training villagers in needed practical skills; and (2) giving financial and technical assistance to village and community organizations for self-help projects.

Purpose and Methodology of the Evaluation. This was an internal evaluation conducted by the Asia Foundation as its end-of-project report to A.I.D. A socioeconomic survey of a sample of six villages was conducted to provide data to be compared with baseline data gathered earlier. Results were mixed, however, due largely to the complete disruption of life caused by a disastrous hurricane in 1983.

Major Findings

1. **Impact.** The project provided substantial social and economic benefits, despite the setback of the 1983 hurricane. It established 10 non-formal education subprojects at schools in the province and assisted 27 village and community organizations with self-help projects. A large portion of these resulted in observable positive impacts, which will be followed by longer-term impact.

2. **The non-formal education subprojects:** These provided training to 1220 persons at a cost per student of \$3 to \$300. The subprojects ranged in duration from 5 to 30 months; the number of trainees per subproject ranged from 15 to 280. The subprojects ranged in complexity from: (a) very low-cost participatory training at primary schools (e.g., the Ratu Nacagilevu subproject) concentrating on basic food-production (farming and fishing) skills; and (b) more comprehensive and costly vocational skill training at selected high schools (e.g. the Richmond subproject) applicable to subsistence farming or salaried employment. Both types were successful.

a. Impact. Non-formal education projects have both immediate and long-term impacts. The immediate impact included improvements in the diets of trainees and acquisition of skills that increased individual, family, or institutional welfare. For instance, carpentry skills were applied immediately to homes and boats. The subproject with the most immediate impact was the very low cost farming and fishing project at the Ratu Nacagilevu primary school. Long-term impacts will be observable over the coming months and years as project participants apply their knowledge to daily life.

b. Requirements for success. Successful non-formal education projects require supportive school personnel and community cooperation. Enthusiasm remains high if participation in the training activity produces income in kind, if not cash. The most popular subprojects were those in which participants could realize a cash gain within a relatively short period of time.

4. The village development (self-help) projects:

a. Impact. Beneficial impacts of the successful village self-help projects may take time for realization, especially in the case of reforestation and some agriculture activities.

b. Requirements for success. Success in the village self-help projects required cooperation of local government, traditional community leaders, and villagers. Most of the successful village self-help activities succeeded in large part due to a project manager (a former Peace Corps volunteer who had served in Kavadu) who could identify village grassroots support, arrange funds for equipment and supplies, and provide access to expertise or appropriate training facilities. Some of the most successful projects were those that included training.

5. Problems. The most serious difficulties were caused by weather and delays in arrival of needed equipment and supplies shipped from outside for the self-help projects. (Few commercial ships find it profitable to stop at Kavadu.)

6. Skills learned increased the ability of local people to recover from hurricane damage. The 1983 hurricane destroyed some of the gardens, houses, and boats established by the project. However, skills acquired in both the non-formal education and village self-help subprojects enabled the local people to repair and rebuild their homes and farms with greater efficiency and confidence.

7. Fishing is likely to remain one of the most profitable enterprises in Kadavu. Improved fishing techniques and equipment can greatly improve yields. Increased fish harvest can substitute for purchase of canned foods or be sold for cash.

8. The Asia Foundation's local project manager (Neil

Jorgensen) contributed significantly to project success and was highly appreciated by the Fijians with whom he worked.

Project Design and Policy Implications.

1. Impact and training. Project impact and benefits are greater when training is provided. Activities that villagers themselves recognize as important, if assisted with cash and equipment, can result in improved efficiency. If appropriate training is added, the positive impact is likely to be much greater. Without training, funds and equipment can only support traditionally practiced techniques.

2. Enthusiasm for non-formal education is closely related to the benefits realized from participation. Most of the non-formal education opportunities provided by this project were successful because they provided information and skills villagers wanted and because they resulted in some observable improvement in the well-being of the participating villagers.

3. The necessity of grass-roots support. Success in village self-help projects requires cooperation of: (a) local government, (b) traditional community leaders, and (c) villagers. Worthwhile projects that are proposed by a chief or government official, but lack grass roots support from the villagers, have a high failure rate.

4. Distribution of income is best achieved through cooperatives in which individual members receive compensation in proportion to their contribution.

Major Recommendations

1. Lessons learned in this project should be studied for other projects in Fiji.

2. Non-formal education. Future programs should include both: (a) low-cost participatory training at primary schools concentrating on basic food-production skills; and (b) more comprehensive vocational skill training at selected high schools applicable to subsistence farming or salaried employment. All training should result in an observable beneficial impact on the well-being of the trainees.

3. Housing and agriculture in Kadavu must become hurricane proof, to the extent possible, or long-term improvements in the standard of living will be impossible.

4. Purchase and operation of a ship by the province or the Cooperative Association should be considered.

Report Submitted by: Doris Bebb (Asia Foundation), dated November, 1984. With attachment "Methodist Church in Fiji, Final Report - The Asia Foundation," dated 25 September 1984.

**SOUTH PACIFIC: COMMUNITY-BASED INTEGRATED ISLAND DEVELOPMENT
PROGRAM IN THE REPUBLIC OF KIRIBATI**
Implemented by Save the Children Federation
THREE-YEAR (1982-1985) EVALUATION

Problem and Overview. Kiribati, formerly known as the Gilbert Islands, became an independent nation in July 1979. It consists of three groups of vastly dispersed islands on which lives a population of about 56,000 people. The capital island, Tarawa, is the only distinct city and contains almost one third (17,000) of the total population. Perhaps the greatest problem facing Kiribati is how to deal with its growing trade deficit and dependency on other nations for financial aid. Until 1979, the largest single source of revenue was phosphate mining, but this resource was depleted by the time of independence. Since independence, the government has emphasized support for decentralized development throughout the islands and the need for Kiribati to become more self-sufficient. Equitable development of the islands is a major challenge, however, especially since transportation between islands is difficult, costly, and irregular.

U.S. Assistance. In 1981, Save the Children Federation (SCF) USA signed an agreement with the government of Kiribati to establish a community development program with the goal of helping the new nation meet its goals of self-reliance and decentralization in social and economic development at the island level. A project (879-0251) was approved by A.I.D. to be carried out through a three-year grant (879-0251-G-1007). Its purpose was to help the Republic of Kiribati establish a community development program on four outer islands. Total funding is \$494,000 (a \$394,000 grant from A.I.D. and \$100,000 from SCF private sources). In addition, it was expected that in-kind donations would amount to another \$100,000 during the first phase of operations (this initial 3-year period). The project was to last through February 1985 and has since been extended to June 1985.

Purpose and Methodology of the Evaluation. The purposes of this near end-of-project evaluation were to assess activities in terms of SCF's original objectives and the impact of these activities on the quality of life, the transfer of skills (technical and process), and the promotion of a self-help process. During the two-week period, each of the four Kiribati team members visited one of the four islands to survey activities and interview key personnel. The team leader was responsible for central-level interviews and document analysis. At the end of the two-week period, the team reviewed and synthesized activities on each of the islands. Findings are based on this process.

Major Findings

1. Overview. Save the Children began in the four outer islands in September 1982 and is now working competently on a wide range of community development activities. These include demonstration and training activities on water tank and home construction, health and nutrition, handicraft production, vegetable gardening, and support for small businesses. SCF-Kiribati has established good relations with governmental and non-governmental agencies. It has promoted ideas of self-sufficiency and self-reliance among outer island villages. Leadership development has been a special focus of SCF's projects. A solid base of support and experience now exists for future SCF work in Kiribati. The most common problem, not surprisingly, has been transportation.

2. Activities as related to the initial objectives. SCF has carried out an impressive array of activities which effectively address the four objectives described in the original grant proposal.

(a) Village and island-wide projects have been initiated that have helped to develop the planning abilities of Island Councils and village groups. In most villages, a problem identification process is now in place.

(b) Living conditions have been improved in a number of villages through SCF work on problems such as water systems, nutrition, and income-generation.

(c) SCF workers are effectively helping village groups to coordinate their work and needs with the services offered by centralized government agencies.

(d) SCF has generated interest in self-help concepts among residents of the four islands. Successful completion of the several key projects that are now under way should advance public understanding of the importance of community development work carried out through self-help activities.

While not all activities have been successful, SCF staff have developed and demonstrated the ability to initiate projects on a village level on each of the four islands.

3. Relations with most government and non-government agencies are good. SCF-Kiribati staff have done an excellent job of informing government officials and colleagues about work currently under way. Many other agencies share SCF's interest in community development. While there are overlapping areas of interest and work, and some competition over ideas and approaches, there does not appear to be a duplication of services in local communities. Both officials and island leaders increasingly recognize the need for more sharing of skills and knowledge at the village level.

4. Administration is without major problems. Current accounting practices seem adequate. Commendably, most staff members have been I-Kiribati (native Kiribati) citizens. As outer island programs develop, SCF will probably need new staff members with additional skills.

5. Initial activities have primarily improved the skills of men; little attention has been paid to development needs of women. While village projects have clearly focused on activities that have potential for improving the general quality of village life, the transfer of new skills has occurred in activities traditionally carried out by men. Kiribati's male-dominated culture systematically enforces this pattern.

Project Design and Policy Implications. A good beginning has been established by this American PVO working in this small Pacific island nation. But difficult decisions lie ahead. SCF cannot be all things to all people. What it faces now is a period of consolidation during which current projects need to be finished and careful decisions made for the "second phase." Already many island groups are approaching SCF with a wide range of proposals for future work. But with limited resources and staff, SCF must consider these requests based on a judgment of where it can have the greatest impact.

Major Recommendations

1. Gradual expansion into new islands should be considered in late 1985-early 1986. It should be undertaken only if: (a) current projects prove successful; (b) expansion does not detract from work already begun and maintenance of current projects; and (c) SCF has adequate staff and resources.

2. Administration. SCF staff should continue to be made up chiefly of I-Kiribati citizens. SCF should also continue efforts to provide ongoing training for field staff.

3. Exchange visits among people involved in projects on the different islands should be carried out.

4. SCF should explore with women's groups the possibility of offering support services on a village level (to complement those already provided by AMAK). SCF should also continue pursuing possibilities of work with pre-school children.

Evaluation Team: Michael Clark (team leader) with four I-Kiribati team members. Report dated January 1985.

SOUTH PACIFIC: IHAP SOLOMON ISLANDS
DEVELOPMENT BY THE PEOPLE AT THE VILLAGE LEVEL
FOURTH ANNUAL REPORT AND EVALUATION

Overview. The Solomon Islands is one of the least developed nations in the South Pacific. The economy is still largely a traditional subsistence (non-cash) economy. Only 9 percent of the population is literate. The population is growing rapidly and is also very young, which means that rapid population growth will continue for many years to come. The country has the highest population growth rate (over 2.5 percent) found among South Pacific countries and the highest fertility rate (7.3). More Solomon Islanders are under age 15 than in any other country in the South Pacific, and the dependency ratio (at 105.2) is higher than that of any of the larger nations. Even now, however, there is only enough space and teachers for slightly less than half the primary school-age children. The picture is thus of a traditional island population that is not very developed but that will face increasing problems as population pressures on very limited resources become greater.

U.S. Assistance. The "Solomon Islands Development by the People at the Village Level" program is a five-and-a-half-year program launched in 1979 by the International Human Assistance Programs, Inc. More colloquially, it is known simply as the "Community Self-Help Program." Its primary purpose is to support village-level self-help development activities in the following areas: sanitation and primary health, crop diversification and marketing, income generation, and training for women and out-of-school youth. A secondary purpose is to strengthen local capabilities for this kind of development (including planning, implementation, financial accounting, technical assistance, and evaluation. Total support is valued at slightly more than \$2.2 million. Primary support is provided by an operational program grant (OPG 492-165?) of more than \$1.1 million from A.I.D. Additional funding comes from IHAP private sources, the Solomon Islands national and provincial governments, and rural villagers; the total value of these inputs is slightly more than the support given by A.I.D.

Purpose and Methodology of the Evaluation. This is an annual self-evaluation prepared by analyzing data from the overall program and from the individual projects funded by it.

Major Findings

1. **Overall.** The fourth year of IHAP's Community Self-Help Program was the busiest yet. IHAP provided over \$550,000 in assistance to 132 village-level, self-help, training, and material assistance projects. Twenty-nine new projects were initiated during the year, bringing total program assistance to date to over \$1.1 million. The 132 projects include:

- * 41 crop diversification or marketing projects,
- * 32 health and sanitation projects,
- * 9 income-generation projects, and
- * 50 projects for training or involvement of women, out-of-school youth, and Peace Corps Volunteer counterparts.

2. Beneficiaries. The 132 projects affected over 73,000 villagers--25,000 more than the previous year. This grass-roots impact is a major element of the program philosophy. An additional 180,000 people have been affected by IHAP's five material support projects.

3. Self-help development

(a) The largest self-help development project initiated during the past year was a 2-year project to help the YMCA improve its programming, extension and income-raising skills.

(b) IHAP helped the Bambanakira Community Development Council initiate the first area or district-level self-help program in the Solomon Islands. This will assist two to three dozen separate community-level projects.

(c) IHAP has assisted 11 women-in-development projects, and 25 percent of all ongoing projects at least highlight women. This is less than planned, but not bad.

(d) Project development. Proposals are developed by village groups or their supporters in consultation with extension workers or other technical experts. If the provincial government judges the proposal suited to its development plans, it recommends it to IHAP. IHAP is usually able to assist approved projects within 3 to 12 weeks.

(e) To strengthen villagers' abilities to successfully undertake small-scale self-help development, IHAP is also assisting with: (a) training and support of the SIDT rural development teams; (b) training of some counterparts of Peace Corps Volunteers, and (c) support for two rural area organizations that are assisting member communities.

4. Other IHAP support includes:

- * assistance in training provincial planning office staff members,
- * assistance in training provincial extension staff, and
- * ongoing development of two new projects directed at increasing the capabilities of provincial governments.

5. Financing. Program income is well above projections. Cash and in-kind inputs committed to date total well over \$1.5 million. IHAP commitment and expenditure of OPG funds since the beginning of the grant have been slower than origi-

nally projected, but IHAP has now caught up to planned targets. There was a significant increase in program funds during the past year due to favorable dollar exchange rates. (One U.S. dollar converted to 0.8 Solomon Island dollars when the program began but now converts to 1.33 Solomon dollars.)

6. The largest single project undertaken by IHAP in the past year was an IHAP-funded material assistance project worth over \$300,000. This was carried out with the Ministry of Health and Medical Services and Helena Goldie Hospital. A second large health project will show videotapes at town clinics--the first attempt of this sort in the South Pacific.

7. Program activity was fragmented during the past year due to: (1) inadequate staffing and organization of the government's Provincial Development Units, and (2) IHAP staff leaves, a medical evacuation, and staff changes. The resulting strains revealed several program weaknesses.

8. Evaluation. Impact is extremely difficult to measure in a country like this where basic health and economic data for the population do not exist, or are highly unreliable. IHAP activities have been directed toward very low (or zero) income earning people. Most communities where IHAP works have few literate members; there are no health records, no crop records, and usually no birth or death records.

Project Design and Policy Implications. IHAP expenditure of OPG funds has not adhered to what was set forth in the OPG. Expenditures were below the planned levels during the first years of the grant and only now have caught up to planned targets. The fault lies with the original grant design, not implementation. The OPG projected a constant rate of expenditure. It did not provide for--but should have--a period of low expenditure while the program was being initiated.

Major Recommendations include:

1. Assistance for training provincial and other staff in project design, review, selection, implementation, monitoring and evaluation should be increased.

2. Funding approval should be as close to the village-level as possible to maximize local priorities and minimize local priorities.

3. More effort should be made to increase the gifts-in-kind to reduce the need to spend locally-raised funds and to supplement activities that are inadequately funded.

4. IHAP should be more active in identifying and assisting women's groups.

Report Submitted by IHAP. Dated 1 August 1983 - 31 July 1984; prepared January 1985.

SOUTH PACIFIC: HA'APAI (TONGA) WATER SUPPLY PROJECT,
FINAL EVALUATION

Problem and Overview. Tonga's Ha'apai Island group consists of many tiny islands where there is very little fresh ground water. The people of these islands must therefore rely almost entirely on rain water for their supply of fresh water, but severe droughts are also common, often lasting 6 to 9 months.

U.S. Assistance. This was a 3-1/2-year project (June, 1981 to May 1985) funded by an operational program grant (879-0251-G-SS-1005-00) to the Foundation for the Peoples of the South Pacific (FSP). Total funding from A.I.D. was \$317,724. The project goal was to improve the health, sanitation, and general well-being of the people of the Ha'apai islands by providing a safe and adequate water supply. The effort was actually initiated in 1979, through A.I.D.'s Accelerated Impact Program (AIP), as a joint project of the Peace Corps and the government of Tonga. In June, 1981, A.I.D. asked the Foundation for the Peoples of the South Pacific (FSP) to take over the management and made a one-year grant to FSP for this purpose. Three no-cost amendments extended the length of the project.

Purpose and Methodology of the Evaluation. The purpose of the evaluation was to visit as many as practical of the widely-dispersed project sites and make a summative judgment about the outcome of the project. Site visits were made to 21 villages on 18 islands; all but 10 of the 786 water tanks installed by the project were examined and nearly all of their owners were interviewed. A WHO sanitary engineer joined the evaluation team for part of its analysis.

Major Findings

1. This was a successful project; it both helped meet a basic need--water--and it did so with appropriate technology and community participation in such a way that the benefits are likely to be sustained. The villages and people of Ha'apai appear cleaner and tidier than in 1981.

2. The fresh water storage capacity was increased far beyond the project's target objective. The target was to construct 520 tanks of 1000-gallons capacity each. In fact, 786 tanks were constructed with a total capacity of more than twice the planned amount. Even though 80 percent of the water storage tanks have minor leaks and 20 percent of the gutters (connected to the tanks for handling run-off) are inadequate, fresh water supply has been tremendously improved and sanitary levels as well.

3. A pumped water system was also constructed and is being successfully managed by a village water committee.

4. Beneficiaries are approximately 5,600 people in 22 villages. The cost-benefit ratio for the project was \$US 56.74 per beneficiary.

5. Collaboration among the implementing organizations--the Tonga government (ministries of health and works, the Peace Corps, and FSP--has been good. The quantity and quality of work carried out by the project staff were excellent.

6. Community participation has been exemplary. What began as a construction project ended up as a very real village-oriented development project. In the last year of the project, 473 tanks were constructed by the tank (home) owners, village families, under supervision of a local women's organization.

7. The project benefited from experimentation and flexibility in adapting to local circumstances.

* The initial objective, in 1981, was to construct a well-water pumping system in one village (Fangale'ounga) and, in other villages, 5,000-gallon-capacity water storage tanks (of ferro-cement) together with adjacent roof-top catchment areas for filling the tanks.

* In 1982, the project managers fully revised the project after a cyclone damaged or totally destroyed 90 percent of all buildings in the Ha'apai islands. The grant was extended two years and its objective changed to construction of 520 smaller (1,000-gallon) water storage tanks (of ferro-cement) which would be built at individual residences in conjunction with the Tonga government's hurricane housing reconstruction program, scheduled to construct approximately 700 new houses in the Ha'apai islands. The new target was to increase the fresh water tank-storage capacity by 520,000 gallons.

* When a 9-month drought immediately followed the cyclone, the project managers decided to build metal water storage tanks instead of the initially-proposed, traditional ferro-cement tanks, since metal tanks could be constructed much more quickly. A total of 297 metal (zincalume) tanks were constructed by crews from the Ministry of Works.

* At about the same time, the Peace Corps manager of the project experimented with construction of 5 WHO-designed ferro-cement tanks (square, with 1,000-gallon capacity). These proved more costly and inappropriate for the Ha'apai islands (they required sophisticated equipment for construction at a central place and were too heavy to transport to the outer islands). This tank type was promptly abandoned.

* An evaluation in January, 1984 revealed that an unusually large number of the metal tanks were leaking and criticized the lack of community participation. The evaluators recommended that ferro-cement tanks be built and that villagers become actively involved. Consequently, in April, 1984, the Niuola Women-in-Development Association, a local NGO, began training Ha'apai villagers to construct their own ferro-cement water tanks. A work crew from the Niuola Women-in-Development Association visited one village after another to conduct initial training sessions during which one or two water tanks would be constructed. Then each home would be given the necessary materials to construct its own tanks. An impressive 473 tanks of 2,250-gallon capacity were built in less than 11 months at a unit cost about half that of the metal tanks.

Project Design and Policy Implications. This project succeeded in large part because its managers experimented with alternative technologies, evaluated outcomes early on, and made good decisions as to what would truly be most appropriate for the local situation. This included abandoning an initially-proposed relatively sophisticated design and adopting instead a simpler, more appropriate technology that involved genuine beneficiary participation.

Major Recommendations

1. The project should be extended for a minimum of one year to repair the leaking tanks so that they are as near 100 percent watertight as possible. Gutters should be upgraded at the same time.

2. As an integral part of the repair process, villagers (tank owners) should be trained in the repair of the tanks and in proper methods for installing gutters on their homes.

3. All of the tanks should be provided with water taps and made mosquito and debris-proof. Training the tank owners in this should be integral to this effort also.

4. The Ministry of Health should provide more information to tank owners on proper maintenance and use of the tanks. Radio might be a good means for this.

Evaluation Team: Mr. David Wyler, FSP Tonga Country Director (team leader); Ms. Rosemary Dillon, Tonga Regional Development Advisor; Mr. Maka Vaipuna, Tonga Ministry of Works; Mr. Sateki Telefoni, Tonga Ministry of Health; and Mr. Maunaloa Taufahema, FSP. Report dated April, 1985.

SOUTH PACIFIC: TONGA COOPERATIVE FEDERATION
ANNUAL EVALUATION

Problem and Overview. The Tonga Cooperative Federation (TCF) was established in 1977 by about 60 "primary societies" throughout the islands of Tonga for the purpose of supplying them with groceries and other household needs. By 1981, the federation was dormant and virtually bankrupt. A feasibility study concluded that, with adequate management, training, and capital assistance, the federation could become a viable institution for promoting economic self-help projects among disadvantaged segments of Tongan society. A plan was developed through which expatriate managers would be supplied by foreign donors (A.I.D., Peace Corps, Britain and Commonwealth Nations) for two years, during which time Tongans were to be found, selected, and trained to take over management roles.

U.S. Assistance. A.I.D. has supported development of the Federation through an operational program grant to Agricultural Cooperative Development International (ACDI). The stated purpose of this grant is to promote and implement economic self-help programs among disadvantaged segments of Tongan society. The grant has provided: (1) \$191,000 for working capital, building construction, and training; and (2) two foreign experts. Implementation began when the first of the two experts arrived in Tonga in January 1982 to begin a two-year assignment as secretary/manager of the federation. (This is OPG 879-0251-G-00-1-13-00, or project 879-0251.)

Purpose and Methodology of the Evaluation. This was an annual evaluation carried out according to specifications of A.I.D.'s South Pacific Regional Development Office. With about one year remaining in the project, this was chiefly a process evaluation designed to determine: (1) the extent to which project inputs have been properly applied; (2) whether satisfactory progress has been made toward achieving project objectives; and (3) whether changes are needed to meet end-of-project expectations. Findings are based on interviews, document review, and site visits to Vava'u and Ha'apai.

Major Findings

1. **General:** The Tonga Cooperative Federation has just completed a very successful business year with sales of T\$3.7 million (=US\$2.62 million) and net income equal to US\$104,370. Sales targets were exceeded by the end of 1982 and sales for 1984 exceeded US\$2.13 million. The major component of this business has been wholesaling of consumer goods, which is now well established. Secondary aspects of the business, vanilla marketing and fish marketing, are less well developed. The staff has grown from 3 in 1981 to 30 in 1984.

2. **Consumer goods wholesaling.** The federation's wholesa-

ling business continues to grow and prosper and has reached a stage of development where it can afford to pay for professional management from sales revenue. It was an objective of the Phase II program to "phase out all direct management and financial support for this [wholesaling] activity, leaving a strong management team capable of sustaining a large and profitable wholesaling business." Only the administrative details of how best to achieve this remain, as the federation now has an appropriate organizational structure and operating procedures, a solid capital base, good supplier relations, available banking and loan facilities and a profit position able to support the professional staff required.

3. Vanilla marketing. The federation's vanilla marketing has been conducted within a framework of chaos typical of an emerging industry. Serious marketing of vanilla beans began only in the last 10 years and in 1979 the industry nearly collapsed. It has since been recovering and expanding due to a rejuvenation program by the government of Tonga with help from the Asian Development Bank, but the industry is still in an early developmental stage. The federation's vanilla marketing suffered a serious setback in 1984 when the beans it purchased had not been properly cured, developed mold, and had to be sold at discount. This year, a government-sponsored quality assurance campaign should help to avoid the problems of 1984, but it is hard to say how much lasting damage has been done to the federation's vanilla operations.

4. Domestic fish marketing is a brand new industry for which virtually no market channels have been established. Work the federation has begun, combined with promotional projects of the government projects backed by the ADB and Japanese bilateral aid, is very exciting from a development perspective. The government is building small fishing boats that it distributes at subsidized prices in hopes of establishing an artisanal ("small fishermen") fishing industry. Fishermen selected take a 6-month course in fishing and boating techniques and business management, then become captain of the boat from which they and 3 to 5 crew members can make a comfortable living. The federation plays a crucial role in this by providing a ready market for the fish at a fair price. It freezes the fish and transports them to Tongatapu where fish are in short supply. They are a cheap and attractive alternative source of protein to the canned fish, corned beef, and fatty mutton flaps that are standard Tongan fare. Uncertainties are posed, however, by (1) other government programs that result in destabilizing the price of fish, and (2) government indecision on whether to continue providing freezing and handling equipment to the federation.

5. Handicrafts are sold locally, but no significant export channel has yet been developed despite several attempts. Quality has been kept high, but so have prices. Sales targets for 1984 were not met, although sales were up from 1983. (Handicraft producers are chiefly women.)

6. Farm marketing and farm supplies. The federation now sells farm supplies in Vava'u, Ha'apai, and Tongatapu. It is too soon to evaluate whether this will prove profitable, but so far sales have been disappointing and competition is keen.

7. The federation is almost certain to split soon into two new organizations. One will keep the the TCF name and continue to operate the wholesale goods business. The new organization will operate the other activities. The reason for this is that the large wholesale business leaves little time to develop the other activities. The Management Committee finds it hard to conduct its business because of the built-in conflict between members who are consumers and those who are producers. There is also a conservative attitude among the majority faction representing the consumer societies that the risk-taking associated with developing new industries for fish, vanilla, and other agricultural products should be avoided for fear of endangering the hard-won success of the wholesale goods business. The reasoning is sound, but there is danger that the new organization will not be able to survive without the support of the established federation.

Project Design and Policy Implications. When the project was designed in 1981, the federation was only involved in consumer goods wholesaling and was deeply in debt. The main problem identified was how it might organize itself to cover the overhead so it could survive to provide its member cooperatives and other rural poor with the valuable consumer goods supply services it had provided prior to its financial difficulties. Under the circumstances, it seemed appropriate for the federation to diversify into potentially more lucrative activities. Vanilla and domestic fish marketing were chosen as the government was promoting private enterprise involvement in these new industries. The main change in the assumptions underlying the project was the belief that the consumer goods wholesaling would never greatly exceed a break-even status. This was a happy miscalculation. In fact, the wholesale business could have prospered on its own without diversification (and may even have suffered some from the distraction of top management)--but this outcome certainly was not foreseeable during the design stage.

Major Recommendations

1. Within the current grant, to strengthen vanilla and fish marketing, a central vanilla curing shed should be constructed in Vava'u and a retail fish market should be established in Nuku'alofa. No new resources are required.

2. To assist the new federation: a consultant should be posted in January 1986, and A.I.D. and ACDI should consider a follow-on project focusing on the new federation.

Evaluator: Donald Crane, Director of Technical Services, (ACDI). Report dated July 15, 1985.

**SOUTH PACIFIC: IHAP VANUATU PLANTATION (FARM) MANAGEMENT
TRAINING AND RURAL DEVELOPMENT PROJECT, INTERIM EVALUATION**

Problem and Overview. This project provides help to a newly-independent nation struggling to move from colonial status to indigenous management of its own affairs. The nation is Vanuatu, a small country in the South Pacific consisting of about 80 islands which, until independence in July 1980, were known as the New Hebrides. The population of about 112,000 is 80 percent rural. The economy is based on subsistence farming supplemented by the production of cash crops--mainly copra and, to a lesser extent, cocoa, coffee, and vegetables. Historically, plantation production of agricultural exports has generated the major portion of earnings in the agricultural sector and been a major source of foreign exchange. Since independence, many plantations have reverted from expatriate management to customary owners and are being managed--with considerable difficulty--by indigenous (ni-Vanuatu) rural or village committees. Not having had much previous management experience, these local groups are having problems with management, capital investment, technical issues, and land disputes. A recent influential study, while recognizing the need to support small land-owners, concluded: (1) that the plantation industry should be permitted to survive and continue contributing to national development, (2) that the plantations now under the control of rural and village committees should therefore not be allowed to fragment into small land-holdings, and (3) that prompt intervention by government and private institutions was needed for to prevent the further deterioration of the plantation industry.

U.S. Assistance. This grant was designed to provide such intervention. It was approved in June 1981, shortly after independence, with the following specific objectives: (1) to establish a comprehensive management training program for prospective plantation managers; (2) to provide financial assistance for small rural projects; and (3) to provide financial assistance for development activities that promote awareness, participation, and advancement of women. This is a three-year grant (879-0251) being implemented through a \$498,915 operational program grant (OPG no. 879-0251-G-00-1002-00) to International Human Assistance Programs (IHAP).

Purpose and Methodology of the Evaluation. This evaluation (conducted shortly before the scheduled grant completion date of December 14, 1984) had the following purposes: (1) to determine the extent to which objectives have been achieved and reasons for success or failure of project activities; (2) to analyze the effectiveness of the project in contributing to economic and social development in Vanuatu; (3) to identify unplanned results and implications; (4) to determine if amendments are needed; and (5) to make appropriate recommendations. Findings are based on nine days of interviews, site visits, and document review.

Major Findings

1. IHAP has played a successful catalytic role and effectively met the grant's objectives. IHAP established the first U.S. PVO office in Vanuatu and has developed a good working relationship with government and non-government entities. The project advisor carried out the three specified components and helped launch two additional initiatives (the Plantation Support Association and Village Entrepreneur Training).

2. The Training Plantation Management component has successfully met its goal of establishing a comprehensive management training program for prospective plantation managers.

(a) A promising Plantation Management Training Center has been established. The first 17 trainees have completed a practical 10-month training course in agri-business methodology, and 19 more will finish in March 1985. Trainees include men and women (preference went to couples.) Facilities were constructed on "La Source," the commercial farm (plantation) of the Roman Catholic Diocese. "La Source's" plantation manager serves as director of the training center.

(b) A new initiative was the creation, by the training center managers, of the Plantation Support Association, a cooperative-type organization comprised of ten member plantations, to perform outreach for the training center. IHAP designed and proposed a second OPG, "Assistance in the Revitalization of Vanuatu Agriculture," to support this association. A.I.D. approved this two-year OPG in April 1984 for \$197,875. The association is expected to become self-sufficient in about its third year.

3. The Rural Community Development component has met its goal of providing financial assistance, within the framework of self-help, to individuals or groups at the village level.

(a) Support to small-scale projects. Grants were made to 30 village development activities, chiefly for health posts and purchase of supplies (e.g., for fishing technology, a youth center, and rain catchment). Most of these grants averaged about \$2,500 each. The result was a series of small, narrowly focused, and geographically dispersed projects--which were proportionately more costly to service than the cost of the projects themselves. These projects have had a beneficial, catalytic effect, however.

(b) A grant of \$12,000 to the Nasonal Komuniti Development Trust to supplement its revolving loan fund, which provides small to small village businesses. Loans were provided to 43 borrowers. The major problem is a 30-percent administrative surcharge which, if continued, would lead to the fund's depletion.

4. The Women in Development component assisted 22 women's

initiatives with funds totalling about \$18,000. These have had a definite beneficial, catalytic effect. However, they too have been small, narrowly focused, and geographically dispersed--and thus costly to service.

5. IHAP introduced a new component, "Vilej Smol Biznis" also called Village Entrepreneur Training. By reprogramming funds, IHAP allocated about \$65,000 to this pilot project which calls for helping village entrepreneurs to identify whether their businesses are "winning or losing" money. Five trainers were trained and have serviced 53 small entrepreneurs, including operators of a village restaurant, three stores, and a women's transport service.

Project Design and Policy Implications. (1) This project appears to have succeeded in large part because of one man, the Catholic diocese's plantation manager who is also director of the Plantation Management Training Center as well as the acting general manager of the Plantation Support Association. It will be important, under IHAP's proposed new OPG, to work toward institutionalizing what he has initiated, and, given IHAP's laudable emphasis on self-help, to follow through on proposed plans to have a local ni-Vanatu person replace the expatriate manager. (2) The project strategy appears sound, so long as there is support for the basic premise that the plantation industry should be revitalized and if this does not undercut the small farmer in the process. (The impact on small farmers is not clear in this report.)

Major Recommendations

1. The project should be extended to April 1, 1985 to allow completion of a few pending activities and formulation of a follow-on grant proposal.

2. The follow-on grant proposal should be prepared in such a way that IHAP's two Vanuatu OPGs are incorporated fused into one.

(a) Continued assistance should be provided to the Plantation Management Training Center to consolidate on gains made and to devise ways and means to generate income for achieving self-sufficiency in the near future.

(b) Support for small-scale village projects and women's projects should be continued, but in a scaled-down fashion.

3. IHAP should maintain its catalytic role and emphasis on self-help.

Evaluation Conducted by: Prodeva Consultancy Services, Inc., J.M. Lopez, M.D., MPH. Report dated September 20-27, 1984.

**SRI LANKA: MAHAWELI BASIN DEVELOPMENT,
COMBINED EVALUATION OF THREE PROJECTS**

**Mahaweli Basin Development Phase I, Mid-Term Evaluation
Mahaweli Basin Development Phase II, Mid-Term Evaluation
Mahaweli Sector Support Loan, End-of-Project Evaluation**

Problem and Overview. The Accelerated Mahaweli Program (AMP) is one of the three cornerstones of the strategy adopted by Sri Lanka's UNP government, when it was elected in 1977, to remedy the problems of slow growth in agriculture and industry, unemployment, and balance of payment problems associated with stagnant exports and large food import bills. The AMP is a massive, ambitious undertaking to develop the resources of the country's major river, the Mahaweli Ganga, and thereby bring that land in the dry zone of the country under irrigated production as small farms owned by voluntary settlers. It is a river basin development program which involves damming the Mahaweli Ganga and creating a system of irrigation canals. The program has the main objectives of generating hydro-electric power, settling poor landless and displaced populations, promoting self-sufficiency in food production, increasing employment and incomes, and regional development. Extensive external support is being provided by A.I.D., the World Bank, and other foreign donors.

U.S. Assistance. A.I.D. supports the AMP through two projects and a sector loan. Their purpose has been to aid the government of Sri Lanka (GSL) in achieving the AMP economic and social goals by providing funds and technical assistance for parts of the overall program that are "downstream" from the main dam structures. The project agreements were signed in 1980 and 1981 for a total of \$170 million (\$160 million in loan funds and a \$10-million grant). Project assistance completion dates (PACD) are June 1985 and September 1986. For technical purposes, the Mahaweli basin, and program, are divided into several "systems." A.I.D. support goes chiefly to System B and a minor portion to Systems C, H, and G.

***Mahaweli Basin Development Project, Phase I (383-0056)** is being implemented in System B, which has a total area of about 130,000 hectares, of which 52,000 hectares have been considered suitable for agriculture. Total funding is \$14.196 million (an A.I.D. loan of \$10 million and \$4.196 million from the Sri Lankan government). The project purpose is "to design and construct the irrigation network for System B and mitigate adverse environmental effects." Specifically, the project was to finance technical assistance and related training and equipment, primarily for the design and supervision of construction of main and branch canals and the design of the main drainage system on the left bank of the system (and, secondarily, for design of distributaries and on-farm works for sample areas totalling 4,000 hectares and technical

assistance for the design and supervision of System B's tertiary irrigation and drainage system). The sum of \$400,000 was designated for goods, services, and training to help mitigate possible negative environmental impacts, particularly on wildlife. The project agreement was signed in June, 1980, with a PACD of September 30, 1986. It is being implemented through a host country contract between the government of Sri Lanka and Berger/IECO.

*Mahaweli Basin Development Project, Phase II (383-0073) was initiated about a year later (project agreement signed May 29, 1981) with the same completion date. Total funding is \$250,999 million. Of this, A.I.D. is providing \$110 million (a \$107-million loan and a \$3-million grant), the GSL provides \$69,999 million, and other donors provide \$71 million. This project is being implemented on System B's left bank, which has a total area of 75,000 hectares. The project purpose is stated as "Development of the area of System B lying along the left bank of the Madura Oya River." Specifically, the project was to finance foreign exchange costs of constructing the main and branch canals which together will provide water to irrigate an area of 21,800 hectares. The loan also funds equipment purchase. The project is being implemented through a host country contract between the government of Sri Lanka and Zachry Dillingham Joint Venture.

*Mahaweli Sector Support Loan (383-0078) is a \$50-million loan which was also signed on May 29, 1981. Its purpose was to provide an "adequate level of financing for activities of the AMP, primarily those 'downstream,' with the subsidiary purpose of relieving balance of payments pressure." The loan provides non-inflationary budget support for selected downstream activities in Systems B, C, H, and G--such as land clearing, on-farm development, construction of social infrastructure (e.g., schools, health centers), irrigation and drainage canals, and some headworks construction. Actual expenditures incurred by the Mahaweli Authority for these activities were to be reimbursed and local currency funds to be generated by financing imports from the United States on the basis of Unrestricted Special Letters of Credit. The PACD is June 30, 1985.

Purpose and Methodology of the Evaluation. The purpose of the evaluation was to analyze results of the three projects including: (1) the degree to which the project purposes have been accomplished; and (2) the effectiveness of the A.I.D. contributions in assisting the GSL to meet the project goals of reducing unemployment, increasing food production, providing land to the poor and landless, meeting settler needs, and providing services to settlers. Other purposes were to determine: (3) if parts of the project being financed by the GSL and other donors are proceeding satisfactorily toward completion; and (4) whether sector support was a successful approach and should be used again in the future. This was

thus an evaluation of progress toward developmental targets in System H and C as well as in System B. Findings are based on settler interviews conducted for the evaluation by five Sri Lankans and on document review, interviews, and a nine-day field visit to Systems B, C, and H by the evaluation team. Security disturbances in the System B area unfortunately made it necessary to curtail field review there after only one day at the project headquarters.

Major Findings

1. Progress in general has been slower and costs higher than anticipated. The AMP was set forth in 1979 as a five-year program to be completed in 1984 at a cost of about 38 billion rupees. It is now expected to take about four years longer and cost of about twice as much. Implementation of this complex and ambitious undertaking nevertheless compares favorably with similar efforts in countries elsewhere in the region. The AMP continues to be a high priority which the GSL is determined to complete on the revised time schedule by 1988/89. The pace of development depends heavily on a continued high level of donor support, particularly in downstream consolidation, maintenance, and off-farm development.

2. A.I.D.-assisted design and construction of the main and branch canals in System B is presently on target (under the revised work schedule). Completion is scheduled to occur by January 1987 and adequate funds are available. However, recent civil strife has produced claim and arbitration actions that may result in financial awards exceeding the funds available under the loan.

3. Downstream development in System B (for which A.I.D. is one source of funds) is not meeting planned completion targets. Downstream canal distribution and drainage channels are not expected to be finished by the time the main and branch canals are completed.

(a) The main constraints are logistic rather than funding. Barring unforeseen circumstances, funds will continue to be available to complete zones 1 through 4A of System B (left bank).

(b) Several factors point to a need to adjust (generally, to slow) the planned rate of development: (a) the need to ensure good quality and early initiation of the necessary maintenance activities; (b) the need to establish a socially and politically acceptable settler recruitment policy prior to introducing large numbers of new arrivals; and (c) the need to review appropriate approaches on the more marginal soils of System B.

(c) The technical assistance contract for implementing an operations and maintenance program for the left bank has

been finalized and the U.S. contractor is gearing up.

4. Effectiveness of A.I.D. contributions in helping the GSL to meet project goals in Systems B, C, and H.

(a) Agricultural production. The contribution to increased production has still been minimal. (In Maha '84/'85, less than 20 percent of the irrigable paddy area in the newly-settled Zones 1 and 5 of System B was cultivated and less than 10 percent was irrigated.) It can be anticipated, however, that A.I.D. will eventually have contributed to increased absolute levels of food output in Sri Lanka, given that development in all three systems (B,C,H) involves the intensification of agricultural production.

(b) Improved income and employment generation. There has been a transfer of land assets to the previously land-poor, but it is questionable whether, so far, the majority of settlers have been able to earn more than a subsistence income as a result. World Food Programme aid and, perhaps to a lesser extent, construction work have helped to provide a temporary safety net. But experience in Systems C and H indicates that the future achievement of production, income, and employment objectives requires immediate remedial action in water management, operations and maintenance, extension training for women, farmer-managed storage and marketing, farm product pricing and import policy, and credit administration and interest rates.

(c) Settlement and settler services are generally well planned, and many settlers are generally satisfied with the social services available. Nevertheless, delays in staffing (especially of schools and health services), inadequate administration and supervision of health staff, and inadequate water and sanitation may be contributing to hardship and ill health in the first years of settlement. Experiences in other systems suggest the need to reconsider the approach to settler house construction and to develop an improved design for the "temporary" structure.

5. Appropriateness of the Sector Support Loan. This innovative loan has played a major beneficial role in permitting larger operational budgets for downstream activities than what the GSL had initially contemplated. The availability of non-inflationary financing made these increases possible.

(a) Planning and budgeting of downstream infrastructure activities was adequate but fell short of targets. Construction specifications were not always enforced and the quality of work was variable. Follow-on maintenance programs have a low priority in project budgets and are not achieving the desired results.

(b) The rate of reimbursement under the loan was slowed down initially by a combination of several factors, most of

which are remediable.

(c) The loan would have had a greater impact on increasing U.S. exports if more information had been made available to the GSL on U.S. products and marketing procedures.

Project Design and Policy Implications

Beneficiary impact. Paradoxically, one reason for the delay in the ability of a significant proportion of Mahaweli settlers to reap economic benefits has been the forced pace of settlement. The drive to construct headworks and develop lands downstream has meant that large numbers of people have had to be relocated to project areas at a rate beyond the organizational ability of the Mahaweli Authority to ensure a good quality of downstream infrastructure development and a reliable supply of water for domestic consumption as well as irrigation. Lack of a reliable irrigation supply and poor agricultural production conditions contributed to early economic set-backs which have led a significant portion of settlers to illegally lease their land. This may have been avoidable in the past, when only 20 percent of the settlers were selected according to the planned norms (while the majority were either resettlers or evacuees), but it can be avoided in the future. Now is the time to learn from past experiences and introduce new settlers more prudently.

Overall impact of A.I.D. contributions. It is important to bear in mind when judging the effectiveness of A.I.D. inputs that A.I.D. financing goes chiefly only to System B and that, even then, A.I.D. financing for System B through the Phase II loan is only about 43 percent of the total estimated cost of the project. This makes for a rather remote connection between the achievement of U.S.-financed outputs (chiefly construction) and achievement of the broader project purpose and leaves wide scope for the impact of external factors which are less under the control of A.I.D. managers.

Major Recommendations

1. Additional U.S. assistance should be redirected to the consolidation of already settled areas.
2. USAID/Colombo needs to organize its own efforts to assure that agricultural expertise is a major part of what is, above all, an agricultural project.
3. Settlers should be brought into the system at a slower pace. The Mahaweli Authority and USAID/Colombo should develop a revised work schedule for the completion of System B with new time-phased cost estimates and financing plan. Settler selection should proceed only when there is a clear

selection policy that ensures settlers of all eligible ethnic groups an opportunity for early participation in System B resettlement and an assurance that they will have a fair chance to farm on good soils at the top end of the system.

4. Special attention should be given to a study of the causes and consequences of illegal land leasing to ensure that land tenure policies protect the weak while not creating undesirable rigidities in land allocation and land use.

5. The Mahaweli Authority and USAID/Colombo should consider whether the operations and maintenance technical assistance contract can be used more effectively to strengthen the Planning, Budgeting, and Reporting system within the Mahaweli Authority and make it more action- and decision-oriented.

6. The claim and arbitration issues need prompt attention. The Mahaweli Authority should take immediate steps to fill the positions requested by Berger/IECO for assisting with these issues.

7. Extension activities should be improved in the areas of farm and money management, training for women, and water and soil management.

8. Greater efforts to promote agricultural producers' organizations for improved storage and marketing are needed.

9. The Mahaweli Economic Authority should meet with the Ministry of Health to agree on concrete measures for improved collaboration regarding administration and supervision of health-related staff, promotion of water and sanitation facilities, the hand-over of buildings, and the design of a prototype for healthier "temporary" settler housing.

10. USAID/Colombo should support World Bank recommendations for a sustained level of program (including food) aid as an important element of the current effort. The policy framework for such aid needs careful attention. Mission management of these programs could be improved by involving more closely program, economic, and controller staff in the design and management of these programs.

Evaluation Team: Gladys Nott, Walter Furst, David Gephart, and Keith Byergo; assisted by Sathyapala Pinnaduwege, Shyamala Abeyratne, Jayantha Perera, R.J.S. Rabel, and P. Watawana. Report dated June 1985.

**SRI LANKA: INTENSIVE MALARIA CONTROL PROGRAMME,
ANTI-MALARIA CAMPAIGN, SECOND ANNUAL INDEPENDENT ASSESSMENT**

Problem and Overview. Nearly 75 percent of the population of Sri Lanka lives in malarial areas. Progress in combatting malaria was being made in the early 1980s (there was a decrease in the overall incidence of malaria from about 50,000 positive cases in 1980 to 38,566 in 1982). In early 1983, however, the situation began to worsen.

U.S. Assistance is not discussed in the report.

Purpose of the Evaluation. The main purposes of this evaluation included: (1) to review the implementation of recommendations made in the 1983 First Independent Assessment; and (2) to review progress of the program in 1983 and its relationship to the proposed "plan of action 1984."

Major Findings

1. There have been epidemic outbreaks of malaria and a general resurgence of malaria transmission throughout Sri Lanka during 1983, and large-scale disaster, particularly in the Mahaweli and other development areas, is now a distinct probability. Epidemiologically, there has been a very serious increase in malaria cases reported--a tripling of cases from 38,566 in 1982 to 127,264 in 1983.

2. The anti-malaria campaign is no longer able to maintain control over malaria transmission at the level it had reached in preceding years. The reason for this, and for the sharp upsurge of malaria transmission throughout Sri Lanka, is a coincidence of several factors:

(1) Administrative and management problems at the central and regional levels have characterized the anti-malaria campaign for the last three years and crippled its operational efficiency. These problems have been discussed at length in previous evaluations, but many of the findings and recommendations of these earlier evaluations have repeatedly gone unheeded. The result is that the situation is far graver now than when the warnings were first sounded.

(2) Field operations decreased in efficiency during 1983. Decreased spraying coverage, insufficient supervision, and faulty malaria case detection have been a consequence of the administrative and management problems noted above. There have been serious shortages of essential supplies. It is open knowledge that malathion is being diverted from the anti-malaria campaign and sold to farmers who use it on their fields. Laboratories also are functioning ineffectively, because of the lack of microscope slides for case detection and surveillance of malaria transmission.

(3) Unusual climatic conditions in 1983, including excessive rainfall in the dry zone, triggered the fast spread of the malaria vector (An. culicifacies) countrywide, and thus an upsurge in malaria transmission that the campaign was not prepared to handle.

(4) Increased population movement soon increased the malaria reservoir countrywide. This population movement is a consequence of new job opportunities in rural areas recently opened for agricultural production by the Mahaweli and other development projects.

3. Some of the recommendations of the 1983 evaluation have been partially implemented; others have not been heeded, although they are still valid. The recent positive steps taken, however, have been cancelled out by the rapidly deteriorating epidemiological situation.

4. Technical problems do not pose a serious threat at present. However, the comparative freedom from real technical problems may not last much longer. Warnings have already been issued concerning the onset of resistance to malathion (in the vector An. culicifacies).

5. The Mahaweli area is currently at risk for a crippling malaria epidemic. The present upsurge presents a major threat to the Mahaweli Accelerated Development Area in particular, since many of its Voluntary Treatment Centres are without drugs. The volunteers are to be the first line of defense against an epidemic but, lacking drugs, become demoralized and ineffective.

6. Coordination with other branches of the public health service is poor. Intersectoral cooperation also remains inadequate.

7. Fortunately, the program continues to have a core of dedicated, conscientious workers.

Project Design and Policy Implications. It should be no surprise that the situation is far graver now than when the warnings were first sounded. Continuing weaknesses throughout this program were noted repeatedly in a succession of evaluations, but their recommendations have rarely, or only partially, been carried out. This problem itself was highlighted in the 1983 annual assessment (see "Executive Summaries of Evaluations Conducted for the Asia Bureau in FY 1983," p.93). The reason the recommendations have not been carried out is less clear, however. Now the overall situation has become so unfavorable for malaria control that when the long-ago recommended steps are taken, no progress is made. This is a case of too little, too late.

Apparently there has not been enough attention either to warnings during the planning stages of the Mahaweli program that it was almost certain to increase malaria transmission and outbreaks if appropriate preventive and other preparatory measures were not taken in advance.

Major Recommendations

1. Government officials at higher levels of authority than the Anti-Malaria Campaign and Ministry of Health must step in to help solve the existing problems. All three levels of authority will need to take measures appropriate at their respective levels to bring the situation under control.

2. Epidemiology. The system for processing and quantifying blood examination results should be computerized.

3. Entomology. The insectory/laboratory under construction since 1981 should be completed immediately.

4. Essential supplies must be provided. The sale of malathion to farmers should be fully investigated and legal action taken to prevent further misuse.

5. Health education and public relations. The health ministry and malaria program management should vigorously publicize the campaign's aims and achievements. Adverse publicity has continued to damage the reputation of the program among administrators, politicians, the public, and the scientific community, and must be combatted.

5. Staffing. All regional malaria officer posts should be filled by specially trained science graduates. The ongoing training of all staff should be expanded.

6. Primary health care. Community health volunteers (FHWs) should be given full support and enabled both to give treatment and take blood slides.

7. The Mahaweli Development Area. In view of the serious consequences that would be provoked by a crippling malaria epidemic, the Mahaweli Authority should provide funds for anti-malaria activities. It should also supply families in the development area with bednets for each family member.

Evaluation Team: A.V.K.V. de Silva (leader), GSL Ministry of Health; R.M.P. Rajapakse, GSL, Treasury; S. Hulugalle, GSL Ministry of Plan Implementation; B.H. Passaperuma, GSL, Dept. of External Resources; George Davidson, British O.D.A.; F.A. Wickremasinghe and John Stivers USAID/Colombo; R. Sloeff, Netherlands government; T. Kurihara, Japanese government; N. Kumara Rai, WHO Consultant; K.M. Rashid, WHO/New Delhi; and D.A. Muir, WHO/Geneva. Report dated 11-30 June 1984.

**SRI LANKA: INTENSIVE MALARIA CONTROL PROGRAMME,
ANTI-MALARIA CAMPAIGN, THIRD ANNUAL INDEPENDENT ASSESSMENT**

Problem and Overview. Malaria is endemic in much of Sri Lanka, but appeared well under control from the mid-1960s to the mid-1970s. Then a major resurgence occurred that had particularly adverse effects on large-scale development projects, especially the Mahaweli Development Project. This led to the launching in 1977 of an intensified malaria control program using malathion with donor assistance from A.I.D., the U.K., and the Netherlands. (The insecticide, malathion, is used for spraying houses and other buildings to eliminate the vector mosquitoes that spread malaria.) The government of Sri Lanka (GSL) gave rather high priority to this program, allocating over 50 percent of its budget for community health services. The Anti-Malaria Campaign, a special decentralized unit of the Ministry of Health, was responsible for implementing the program through its central office, 16 regional offices, and field units in rural malarious areas. More than 4000 personnel positions were established for the campaign.

Malaria incidence declined significantly from 1977 to 1982 (from 262,460 reported cases in 1977 to 38,566 in 1982). With declining malaria incidence, the area of spray coverage was reduced. But adverse climatic conditions in 1983, together with continuing weaknesses in the anti-malaria campaign, resulted again in a sharp upsurge of malaria (to 127,264 recorded cases in 1983, about three times as many as in 1982).

U.S. Assistance A.I.D. has been instrumental in establishing the Intensive Malaria Control Programme and supplying it with malathion. A.I.D. has recently signed a 3-year loan agreement with the GSL which will assure the supply of malathion up to 1987 (and requires increasing GSL inputs and corresponding reductions in A.I.D. funding over the 3 years). A.I.D. also is providing technical assistance to: (1) improve the effectiveness of insecticide spray operations; (2) institutionalize improved surveillance; and (3) introduce alternative methods of control to minimize the need for house spraying.

Purpose of the Evaluation. The main purposes of this evaluation included: (1) to review the implementation of recommendations made in the 1984 Second Independent Assessment; and (2) to review progress of the program in 1984 and the present status of malaria in the country; and (3) to recommend changes for removing constraints and solving problems.

Major Findings

1. Malaria incidence continued to increase in 1984, but has declined thus far in 1985. Excessive rainfall in 1984 resulted in a continuing increase in malaria incidence (from 127,264 recorded cases in 1983 to 149,470 in 1984--nearly

four times as many as in 1982). Fortunately, with the return of normal climatic conditions in 1985, there has been a sharp drop in malaria incidence during the first 4 months of 1985.

2. The anti-malaria campaign continues to suffer from administrative, managerial, and operational problems which have been repeatedly emphasized in previous evaluations.

3. Only a minority of the recommendations of the 1984 Second Independent Assessment have been implemented. Of the 23 recommendations, only 3 or 4 have been fully implemented; about 7 others have been partially implemented; others have not been heeded, but should be carried out promptly.

4. A new problem is chloroquine-resistant P. falciparum. Its appearance (in the Dambulla area) spurred the Anti-Malaria Campaign to vigorous, sustained action to contain the spread of this vector. The containment measures adopted appear to have been successful. This clearly demonstrates the ability of the campaign to respond to an emergency. However, in normal activities, performance still is not prompt.

5. Staffing at the headquarters and regional levels has improved. However, these staff are still not able to supervise and support field staff and operations properly because of inadequate subsistence allowances and transportation. Headquarters staff are reluctant to visit the field because the allowance does not meet their bare expenses. The previous evaluation of this program urged that all regional malaria officer posts be promptly filled by specially trained science graduates. Now that this has been carried out, it is essential that the newly-appointed regional malaria officers receive guidance from the headquarters technical staff.

6. Field operations (spraying and case detection) are still inadequate because of: (1) the shortage of field personnel (about 22 percent of positions are vacant); (2) lack of adequate transport; and (3) acute shortages of spray machines, spare parts and glass slides. These shortages should be alleviated with the arrival of equipment from A.I.D. and Japanese aid.

7. Resettlement of population in endemic malarious areas. The fact that large numbers of people from areas where there is little or no malaria are being resettled in endemic malarious areas (the Mahaweli and other areas newly opened for agriculture) contributes to the spread of malaria. This has caused a severe strain on the Anti-Malaria Campaign since other agencies involved in the resettlement provide no funds for anti-malaria activities.

8. The interplay of the above factors resulted in a diminished ability of the Anti-Malaria Campaign to prevent the worsening of the malaria situation in 1984. The situation has been relieved thus far in 1985 because of the return to

normal climatic conditions and spray coverage in the endemic zone being completed in late 1984. Nevertheless, implementation of the 1984 Plan of Action is still behind schedule.

9. Technical problems. The comparative freedom from real technical problems may not last much longer. Warnings have already been issued concerning the onset of resistance to malathion in the vector An. culicifacies and, more recently, the incipient appearance of P. falciparum strains resistant to chloroquine has been discovered.

Project Design and Policy Implications. Responsibility for the persistence of repeatedly-described problems lies with three levels of authority: the Anti-Malaria Campaign management, the Ministry of Health, and higher levels of the GSL. Some continuing deficiencies in the anti-malaria campaign are clearly attributable to its own internal management, but some are beyond its control. It is urgent that the three levels of authority overcome the administrative, managerial, and operational problems of the malaria control, as Campaign personnel must increasingly contend with mounting technical problems of vector resistance to malathion and chloroquine.

Major Recommendations

1. The Ministry of Health must be prompt and supportive in processing requests of the Anti-Malaria Campaign and must bring primary health care workers ("family welfare workers") and range public health inspectors into malaria control.

2. The Ministry of Health and higher levels of government must take a more active role in bringing about inter-ministerial action by agencies such as the Mahaweli Economic Authority, Agriculture, Information, and others. Recommendations of the National Malaria Control Seminar (held in April 1984) concerning intersectoral action for malaria control should be implemented.

3. Urgent attention is needed in the Mahaweli settlement areas where there is an increase in the relative prevalence of the vector P. falciparum.

4. The GSL must supplement field allowances for headquarters staff to enable them to carry out field supervision.

Evaluation Team: R.L. de Sylva (team leader); E.A. Kumarasinghe and P.S. Ariyasena, GSL Ministry of Finance & Planning; A. Abeygunasekara, GSL Dept External Resources; George Davidson, British O.D.A.; F.A. Wickremasinghe, L. Cowper, and J. Stivers, USAID/Colombo; C. Campbell, CDC Atlanta; T. Kurihara, Japanese government; M. Cardenas, WHO/New Delhi; L. Molineaux and D.A. Muir, WHO/Geneva. Report dated 10-30 June 1985.

SRI LANKA: REFORESTATION AND WATERSHED MANAGEMENT PROJECT
MID-TERM EVALUATION

Problem and Overview. During the last three decades, Sri Lanka's forest land has been reduced by approximately 50 percent. The government of Sri Lanka (GSL), recognizing the environmental and domestic energy problems caused by this deforestation, has given high priority in its 1979-1983 Public Investment Plan to replenishing and protecting Sri Lanka's forests. Program targets have focused on: reforestation of watersheds; developing commercial and rural fuelwood plantations; and establishing village woodlots. The Forest Department was given responsibility for implementing many of these programs.

A.I.D. was the first foreign donor to provide major assistance to Sri Lanka in the forestry sector. During the past four years, the United Nations Development Program (UNDP/FAO), the World Bank, and the Asian Development Bank have also begun major assistance programs in the forestry sector.

U.S. Assistance. In March, 1980, USAID/Colombo approved a five-year Reforestation and Watershed Management Project--A.I.D.'s first attempt to help solve physical environment and natural resource problems in Sri Lanka. The project purposes are stated as: (1) to conserve and stabilize watershed areas in the highland regions; and (2) to improve the natural renewable energy and commercial resource base of Sri Lanka. In fact, the real purpose of the project is to improve the institutional capability of the Forest Department so that it is able to continue each of the project activities after project completion. Specific targets were adopted (in a 1983 PP amendment) as follows: "Upon completion, the project will have strengthened the institutional capacity of the Forest Department and assisted in the tree planting activities so that the department will be able to reforest, by 1987, 24,000 acres, which amounts to a 20-percent increase in the stabilized ground cover (forests) in the Upper Mahaweli Catchment Area, and to increase the total area under permanent forest from approximately 265,000 acres in 1980 to 335,000 acres in 1990."

The total project budget was originally \$14.68 million; of this, A.I.D. was to contribute \$4.35 million and the government of Sri Lanka the balance. In July, 1983, the project was amended to extend the completion date (PACD) two years to July, 1987; A.I.D.'s contribution was increased to \$10.45 million (\$9 million loan and \$1.45 million grant funds) and the Sri Lankan contribution was reduced to \$5.7 million (for a revised total of \$16.15 million). The project is being implemented for A.I.D. by SECID (the Southeast Consortium for International Development) on a host-country contract.

Purpose and Methodology of the Evaluation. This is the first evaluation of this project. Its purpose is to review progress and recommend changes if necessary.

Major Findings

1. Institutional development. Good progress is being made. Specifically:

- * The Forest Department has gained the technical knowledge and managerial capacity to mount a large-scale planting project;
- * Key staff have been trained and have returned to positions of authority;
- * A national Forestry Extension Plan has been developed and presented to the Ministry; and
- * The forest research capability has grown and the National Forest College has expanded its curricula to train Forest Officers for the first time.

2. Targets for planting, training, and construction will not be met. When the project was amended in 1983, these three targets--for the number of acres to be planted, the number of staff to receive short-term training, and the amount of construction to be completed--were increased with only a limited analysis of the Forest Department's staff levels or GSL budget restrictions. The new targets, as a result, were over-ambitious. Fortunately, these shortfalls will not have a significant effect on the overall institutional development goal of the project.

3. A full-time chief-of-party is required who has managerial as well as technical experience and who divides his time between Colombo and the field offices. Short-term consultants have provided the required technical assistance, but their visits were too brief. (Half the consultants were in the country for only two to four weeks.)

4. USAID/Colombo needs to document changes in procedures for reimbursement. In 1984, the Forest Department altered its spacing system in the fuelwood plantations based on verbal discussions with the ministry and USAID. These arrangements must be formalized if the Sri Lankan government is to be reimbursed for the planting.

Project Design and Policy Implications. The main lesson learned is that a full analysis of government staffing and budgetary requirements must be made during project design. In this case, a review of the actual number of staff needed to accomplish the project activities and an analysis of the

budgetary restrictions faced by the Sri Lankan government when the project was amended in 1983 would have enabled project designers to establish more realistic targets and cost components.

Major Recommendations

1. The project should continue.

2. Project documentation should be revised to state that institutional development is the primary purpose of the project and to specify the target and budgetary reduction in forest acreage to be planted, the number of staff to be trained, and the number of buildings to be constructed. The reduction in targets will reduce the total funds needed by approximately \$2 million.

3. USAID/Colombo, therefore, should not obligate the \$2-million loan presently planned for obligation in FY 1985.

Evaluation Team: Deanna Donovan, A.I.D. Regional Forest Advisor; Charles Hatch, USAID/New Delhi Forest Officer; and Anne Dammarell, A.I.D. Report dated December, 1984.

SRI LANKA: RICE RESEARCH PROJECT,
PROJECT ASSISTANCE COMPLETION REPORT

U.S. Assistance. The Rice Research Project (383-0040) was created to enable the Department of Agriculture of the government of Sri Lanka to undertake and sustain a quality rice production research program--specifically, one that would further develop improved varieties of rice and accelerate their adoption and also develop new cropping technology. The stated project purpose was to develop a technological base that permits increases in paddy (rice) land productivity through: (1) increased yield of paddy per unit area, and (2) increased cropping intensity of paddy lands. Project funding totaled \$6.785 million--a \$3.565 million A.I.D. loan (reduced from a planned \$3.8 million) and a \$3.22-million contribution from the government of Sri Lanka. The project was to provide training, technical assistance in production and research technology, and commodities for equipping productive research farms. The project agreement was signed in January 1977; the final project completion date was June 30, 1984. Contractors were the Institute of International Education (for training) and the International Rice Research Institute (IRRI).

Evaluation. Three evaluations were conducted during implementation. A post-project survey (attached to the report) of project-funded trainees was made to determine the effectiveness of their training toward meeting the project goals.

Major Findings

1. The project has been quite successful and has had a positive impact on increasing the yields of paddy per unit area and cropping intensity of paddy lands. Rice production in Sri Lanka rose from an estimated 70 percent up to 90 percent of self-sufficiency during the project period. Of course it is difficult to quantify how much of this increase is attributable to the project and the full impact will become clear only as developments now underway progress further.

2. The rice research (breeding) program has been improved. Technical assistance and training provided were effective. The project was to train staff to adopt the genetic evaluation and utilization approach to rice varietal improvements, to coordinate rice and cropping systems research, and to decentralize rice improvement research. Genetic evaluation and utilization was strengthened by the initiation of basic studies on important genotypic characters. A very effective interdisciplinary rice research working group was established and is functioning so well that the working group concept has spread to research on other crops. The decentralization approach to research has been advanced by focusing on regional research stations and systems.

3. A rice-based cropping systems approach (integrating research on rice and other crops) has been developed with production "packages" to improve the productivity of rice farmers. The program is functioning effectively and has resulted in cropping intensification in scattered areas in Sri Lanka. Benefits are expected to be more fully realized in a few years as the number of appropriate systems increases.

4. Resource capability surveys were designed early in the project and used for the cropping systems and breeding activities. The surveys were designed to help the Land and Water Use Division determine the climate and geographic characteristics of different areas. This information was incorporated into new rice and cropping systems technology to tailor varieties and management practices to local environments.

5. Expansion of the Field Trials Division (into the Adaptive Research Program of the Department of Agriculture). The project served as a catalyst to have this activity incorporated into the decentralization plan of the Department of Agriculture. The format for expansion was developed by the project and later adopted and amplified by the World Bank-sponsored Agricultural Extension and Adaptive Research Project, which is being implemented and considered successful.

6. Training provided (Ph.D., M.S., and short-term) was appropriate and useful. A total of 158 participants were trained--33 long-term (chiefly M.S.) and 125 short-term. Research officers trained under the project are distributed throughout the 20 research stations to continue activities supported by the project.

7. The three evaluations during project implementation had a positive impact on the project and many adjustments were made as recommended. The first two evaluations noted problems with consultant team leadership, delays in commodity procurement, delays in initiating long-term training, and lack of progress on the field trials part of the technical assistance. The third evaluation, conducted after five years of implementation, indicated that many of the earlier problems that had slowed implementation had been corrected and did not jeopardize attainment of the project objectives.

Project Design and Policy Implications. Lessons learned are as follows.

1. During project start-up, management and coordination will occupy an individual on a full-time basis. There will be little time available for meaningful technical work. A technical assistance team leader (chief-of-party) should not be expected to provide much if any technical assistance.

2. A project advisory committee composed of host government, contractor, and USAID representatives should be organized at the beginning of the project and meet on a regular basis.

3. A.I.D. should include grant funds in a project such as this to help meet the logistic needs of contractors.

4. Relevant A.I.D. procurement requirements must be clearly communicated to host governments and contractors.

5. Participant training programs should be developed on realistic time schedules, taking into account the considerable lead time necessary for each step.

6. Selection of the contractor's long-term chief-of-party is critical for success of the project.

7. Commodity management needs continual, close monitoring. USAID must maintain a close relationship with the implementing unit to correct any deficiencies that develop.

Major Recommendations

1. USAID/Sri Lanka should monitor the impacts of this project on an informal basis over the next few years to ensure that the Department of Agriculture is able to sustain a quality rice production research program. USAID has a continuing interest in rice production research, especially the results from the rice breeding and cropping systems programs as they relate to the new Diversified Agriculture Research Project and USAID's long-term interests in the Accelerated Mahaweli Program.

2. Financial status. About \$75,000 worth of IRRI disallowances will need to be resolved.

3. Impact evaluation. This project may be a good candidate for an (AID/Washington-sponsored) impact evaluation.

Report Prepared by: J.W. Bonner, Agriculture and Rural Development Office, USAID/Sri Lanka. Dated January 3, 1985. With Annex "Evaluation of Training Received and Relevancy of Current Assignments of the Participants Trained under the Rice Research Project," by S.Z. Thaha, USAID/Sri Lanka.

THAILAND: ACCELERATED IMPACT PROGRAM (with Peace Corps)
PROJECT ASSISTANCE COMPLETION REPORT

Problem and Overview. Development projects in Thailand have typically been large in scale with a rather diffuse and indirect impact. At the same time, individual villages have specific development needs but lack both the resources to meet those needs and the bureaucratic savvy to secure such resources from government funding sources. Peace Corps volunteers work at the individual village level where they develop a good understanding of village realities and needs and can assist villagers in seeking funding. However, it is difficult for them too to secure funds for initiating small basic-needs activities. An enormous amount of time is wasted trying to put local villagers in contact with Thai funding sources. More often than not, once a potential funding source is found, nothing materializes because Thai bureaucrats judge that those who would be responsible for administering the funds will not be capable of doing so.

U.S. Assistance. In February, 1983, USAID/Thailand signed an agreement with the Thai government's Department of Technical and Economic Cooperation (DTEC) and the U.S. Peace Corps to provide \$50,000, through the Peace Corps, to accelerate small-scale development activities at the village level. The project purpose and strategy was to encourage and support self-help development efforts of local communities by using Peace Corps volunteers to help these communities in identifying and implementing small-scale basic-needs activities.

Major Findings

1. This strategy has proven enormously successful and is being continued in USAID/Thailand and Peace Corps/Thailand's new Small Projects Assistance Program. The Accelerated Impact Program (AIP) has been an extremely effective use of a comparatively small amount of money, has enabled A.I.D. to support effective grass-roots development activities, and has facilitated the entry of Peace Corps volunteers and enabled them to initiate development activities in conjunction with their co-workers, who have little access to funding.

2. A total of 86 local projects were funded throughout rural Thailand for about \$580 per project; all have been completed. All were planned as one-time investments leading to self-sustaining activity. To receive funding, each had to: be income or revenue-producing, benefit a disadvantaged segment of the population, involve contributions from recipients (labor or a portion of income generated), require no more than 50,000 baht (\$2,174, or 100,000 baht for rural public works), and serve as a model for replication elsewhere in Thailand. Most of the projects were established on a revolving or multiplying basis. Other projects introduced an

improved design (as for rain water storage tanks) and an initial fund from which villagers can request loans to acquire this new technology on a revolving basis. Projects included appropriate technology activities, livestock and crop improvement, integrated farming systems, revolving livestock/seed/fruit tree banking, youth group training, water supply systems, weaving, health and nutrition, fish ponds, and biogas production.

3. Promotion of village cooperation, and cooperation between villagers and others, was the most common element in all 86 projects.

4. In some villages, AIP funding was only supplementary to earlier funds, yet desperately needed to carry the project to fruition. Many communities had a perceived need and commitment but only part of the necessary funding; Peace Corps volunteers and their co-workers provided the needed technology and management skills; the project provided the additional money.

5. Supplementary contributions from non-A.I.D. sources were substantial. The \$50,000 provided by A.I.D. was complemented by \$43,000 (cash and in-kind contributions) from other sources--Thai government, other donors, and villagers. This was in addition to locally-supplied materials, non-construction labor and other inputs that villagers contributed.

6. Successful supervision of this project was extremely time-consuming for Peace Corps/Thailand's central office, given the project's many varied and dispersed activities. PC/Thailand supervisory staff performed this role splendidly, despite being understaffed for it.

7. Problems encountered were essentially those to be expected and dealt with, but anticipation of such problems would help participants deal with them more effectively.

Project Design and Policy Implications. Lessons learned were the following.

1. Successful supervision of a project with so many varied activities requires a great deal of staff time--even though sums of money are not large by A.I.D. standards, and staff time comes from an organization other than A.I.D. (in this case, Peace Corps).

2. Success at the village level required careful planning and cross-cultural sensitivity, together with flexibility and ability to learn through one's mistakes. Cross-cultural sensitivity includes patient understanding, compromise, cooperation, careful listening and explanation.

3. A needs survey to identify community perceived needs

and priorities is very helpful. Surveys and planning must be conducted in close cooperation with government co-workers as well as with community leaders.

4. Intended beneficiaries must clearly understand the activity and make a commitment to participate in it through labor or other inputs. People are extremely reluctant to invest time and money in something they do not understand. Even though a need may exist, if there is not enough interest and participation, the activity will probably be doomed to failure. Demonstration activities are thus an excellent way to introduce a new idea.

5. Selecting a group leader for an activity requires careful preliminary checking, rather than open formal discussion. A common problem in Thai society is the appointment of a group leader by virtue of his local position or influence rather than leadership capabilities for the development activity. If he is a poor leader, the typical villager reaction is not to fight for more effective leadership but to pull back from participation and cooperation. This can jeopardize success and misdirect benefits to only the village elites.

6. Misunderstandings are common because of the Peace Corps volunteers' initial inexperience with Thai language and culture, the villagers' lack of experience with development projects, and the fact that most Thais will not ask questions for fear of exposing their lack of understanding.

7. Training and careful supervision are vital. Because of the lack of formal education at the village level, training must be simple, direct, and hands-on, with much repetition.

8. A completely open funding administration system helps prevent discrepancies and suspicions. Payback schemes to perpetuate loans should be simple, agreed upon, obviously fair, carefully planned, and closely supervised.

9. It is important to create a sense of ownership by the villagers in an atmosphere of fun. Fun-loving villagers need the diversion of amusement, competition, and social interaction to relieve the drudgery of long-term manual labor.

Major Recommendations

1. A.I.D. and Peace Corps should continue this strategy.

2. Peace Corps/Thailand's central office should have additional staff for supervising this project.

Evaluation Team: James A. Hanson, Peace Corps/Thailand; and Richard L. Hopkins, USAID/Thailand. Report dated December 1984.

THAILAND: ANTI-MALARIA PROJECT, END-OF-PROJECT EVALUATION

Problem and Overview. Despite at least 30 years of anti-malaria efforts in Thailand, malaria still remains a major health threat. The major problem is caused by occupational and refugee migration within Thailand and across the border with Kampuchea, Laos, and Burma.

The Thai government (RTG) operates a National Malaria Control Program through a Malaria Division in the Communicable Disease Control Department of the Ministry of Health. Since 1979, the anti-malaria strategy, following WHO's global strategy for malaria eradication, is to divide Thailand into two operational areas. In the eradication area (most of the plains), there is evidence malaria transmission has been interrupted, and thus the strategy here is to use eradication methods to prevent resumption of transmission. In the control area (forested, mountainous, border areas), malaria transmission persists with varying degrees of endemicity, and thus the strategy here is long-term malaria control.

The main objectives of the malaria program, set forth in the RTG's 1982-86 Health Development Plan, are: (1) to reduce malaria mortality (to less than 8 per 100,000 population in 1986); (2) to reduce malaria morbidity (to less than 12 per 1,000 in control areas, and less than 1 per 10,000 in eradication areas by 1986); and (3) to support and encourage a primary health care system suitable to the community.

U.S. Assistance. A.I.D.'s Anti-Malaria Project (493-0305) was designed to assist the Thai Malaria Control Program during the four-year period from FY 1980 through FY 1983. The specific project purpose was to develop RTG institutional capacity to provide continuing malaria services to 9.3 million rural inhabitants living in endemic, high-risk malarious areas of Thailand. This was to be accomplished by improving the technical, operational, and managerial capabilities of the Malaria Division. A project agreement was signed in August, 1979, with a completion date of September, 1983, and later extended to December 31, 1984. The project provides a \$4.0-million loan and \$500,000 in grant funds for a total of \$4.5 million.

Purpose and Methodology of the Evaluation. The purposes of the evaluation were: (1) to determine how successfully the RTG Malaria Control Program has met its objectives; (2) to evaluate contributions of the A.I.D. project to the RTG program; (3) to make recommendations for improving the RTG program; and (4) to identify available resources and potential external assistance for meeting the needs of the program. Methodology consisted of document review, interviews, and 22 days of wide-ranging field visits during a five-week period.

Major Findings

1. The RTG National Malaria Control Program is generally well-organized and operated with many unique features worthy of duplication in other countries. Its objectives under the 1982-86 Health Development Plan have not been completely met, but substantial progress has been made.

a. Malaria mortality has already decreased to even below the 1986 target (the rate was 5.9 deaths per 100,000 in 1983), but malaria incidence appears to be increasing.

b. Progress has been made in eliciting community participation and in building up an effective corps of "village voluntary collaborators" (now over 41,000). Village health education activities have been quite successful.

2. A.I.D.'s Anti-Malaria Project has been efficient in most regards and has contributed successfully to meeting the objectives of the RTG Malaria Control Program.

a. Participant training provided by the project was highly successful. Pre-service and in-service training provided to more than 57,000 project participants (about 6,000 more than targeted) was one of the best parts of the project. This, in combination with construction of facilities and provision of equipment, resulted in a tremendous expansion of the malaria clinics and malaria village volunteer network.

b. Technical assistance. The two project monitors performed outstanding work, in large part because of their previous in-depth familiarity with Thailand and its malaria program as Peace Corps volunteers.

c. The research component was not very successful. Only two of the eight A.I.D.-funded field research projects had any impact on achievement of the overall A.I.D. project goals. The other six projects produced some useful information, but did not contribute substantially to project objectives.

d. The vehicle overhaul component was the least successful part of the project. Many of the vehicles were too old for cost-effective overhaul. Funds were reallocated, however, to increase the number of motorcycles purchased under the project. The motorcycle purchase components were very popular and highly successful in permitting better surveillance and supervision.

3. Problems. Several serious problems impede further progress. Among them, high malaria transmission rates still persist in certain control areas. These core areas are mainly responsible for the overall incidence of malaria in Thailand. The overriding need is to develop a long-range plan to solve these problems. Residual house spraying is

presently inadequate and there is little prospect that the present approach will be able to cope successfully with the recent increase in malaria incidence in the problem areas.

Project Design and Policy Implications.

1. The A.I.D. project neglected a crucial element in controlling the problem of malaria: residual house spraying. Residual house spraying is one of the weakest parts of the Thai program. This was apparently included in A.I.D.'s initial project design (PID and PP), but later deleted. Residual spraying is still the most cost-effective method of controlling malaria and the primary method of choice in all countries of the world (except those which have serious problems of vector resistance to residual insecticides, which Thailand does not). The A.I.D. project approach of strengthening the malaria case detection and treatment program was highly successful on its own, but would have been far more successful in reducing the total amount of malaria if it had been combined with a more effective residual spray program.

2. A project monitor (or manager) with previous experience in the country can greatly add to chances for project success.

3. Vehicle repair is not cost-effective when the vehicles are beyond a certain age. There should be a regular vehicle replacement system instead.

Major Recommendations

1. Develop a long-range plan to solve continuing problems. The "Guidelines for Implementation of Malaria Control Measures in Thailand" (issued in 1978) should be updated and revised. Ask WHO for help.

2. Give priority to the control areas where high rates of malaria transmission still persist. Priority should be given in terms of qualified personnel, operational funds, commodities, and vehicles. There should be regular in-depth epidemiological review of malaria status and control. A model of efficient control operations should be tried on a pilot basis.

3. Draw up a realistic 5-year plan of operations for residual house spraying. Use scientific criteria to determine which villages and houses should be sprayed (rather than ad hoc decisions based on availability of insecticide, as often happens at present). Conduct an accelerated health education campaign in areas of high transmission where villagers resist house spraying.

Evaluation Team: Edgar Smith, A.I.D. (retired), team leader; Sombat Chayabejara, RTG (retired) malariologist-epidemiologist; and I.A.H. Ismail, WHO/Geneva. Report dated July 1985.

THAILAND: INTEGRATED IMPROVEMENT FOR THE URBAN POOR
FINAL EVALUATION

Overview. The general problem this project addressed is the plight of the many poor people living in slum-like or other impoverished conditions in Thai cities. The project was part of two A.I.D. programs and is said to have shared the goals of both. The two programs were: (1) AID/Washington's centrally-funded Integrated Improvement Program for the Urban Poor, a multi-country program to integrate urban social services such as health, education, and employment; and (2) USAID/Thailand's Housing Guaranty Program ("Low-Income Housing Policy and Program Assistance Project") designed to help the Royal Thai Government (RTG) serve the shelter needs of lower-income people in urban areas. The "Integrated Improvement for the Urban Poor Project," which is the subject of this evaluation, was funded as a technical assistance component to the first phase of USAID/Thailand's Housing Guaranty Program.

U.S. Assistance. In June 1979, A.I.D. approved a \$50-million housing guaranty program for Thailand and authorized \$15 million for the first phase--funded as the Low-Income Housing Policy and Program Assistance Project for Thailand (493 HG-003). "HG-003" is part of a \$369-million, multi-donor effort to help the RTG's National Housing Authority (NHA) implement its 1979-86 development programs. These NHA programs represent a major shift from RTG efforts earlier in the 1970s to provide public housing by constructing highly-subsidized, mostly rental units. A.I.D. supported this shift, which emphasized slum upgrading and home ownership in sites-and-services projects to be developed on a cost-recovery basis in Bangkok and certain regional cities. The majority were to be affordable by lower-income households.

The project agreement for the Integrated Improvement for the Urban Poor (IIPUP) project (493-0284) was signed in June 1980 and provided a \$250,000, 2-year grant to be used in conjunction with the regional cities component of the NHA program. The purpose of the IIPUP was to help extend shelter and community development programs of the RTG to regional cities with the goal of improving the provision of socio-economic services to low-income families in those cities. The broad range of services for which the grant was to provide technical assistance included shelter, housing financing, employment, health and nutrition, education, and community services. A more specific purpose of the IIPUP was to improve the institutional capacity of the NHA to carry out regional urban integrated shelter/community development programs. Finally, IIPUP funds were to be used to help the RTG develop long-range national shelter policies and strategies related to regional urban development. A.I.D. extended the project twice, for a total of 18 months, through December 1983. The major USAID input was a resident advisor who arrived at NHA in August 1980; other inputs were short-

term consultants and NHA staff training.

Purpose and Methodology of the Evaluation. A centrally-funded review of the NHA regional cities program in July 1979 before this project began identified several administrative and technical weaknesses that might prevent the NHA from meeting the project objectives. The purposes of the present evaluation were: (1) to determine to what extent the project goals were met; (2) to investigate progress made in solving problems identified in the July 1979 review and in subsequent USAID progress reports and internal annual evaluations; and (3) to describe lessons learned. Findings are based on document analysis and interviews conducted in Bangkok from December 13, 1984 to March 31, 1985.

Major Findings include:

1. The project was not successful in meeting its primary objective of improving the provision of socio-economic services to low-income families in regional cities. Anticipated social services have actually been reduced. (1) NHA's decision to implement a regional cities sites-and-services project did not consider socioeconomic needs of lower-income households, and assumed that lower-income families would be willing to move to the new housing and be able to pay for it. (2) Project outputs intended to expand NHA skills in social planning--described in the Project Agreement as a first step to achieving the project goal--did not do so. (3) NHA regional sites-and-services projects have not changed substantially from project designs prepared before the IIPUP grant. (4) Except for certain commercial components included in the pre-IIPUP designs, NHA did not provide non-shelter socioeconomic services in regional cities after completion of the IIPUP.

2. The main reason for the failure to meet the project objective was that the project was poorly conceived. The IIPUP objective was not a priority with the NHA, nor was it relevant to needs that A.I.D. and other donors have pushed the NHA to recognize--namely, the need for minimal government subsidies and cost-recovery in low-income housing projects. These proved incompatible with the implementation of socio-economic programs as part of public-sector housing programs.

3. Secondary reasons for this failure were NHA institutional problems, that eclipsed the fundamental incompatibility between the primary IIPUP objective and secondary ones. NHA was not able to meet the target objectives of its Housing Development Plans nor to complete its projects in a prompt and cost-effective manner. These problems absorbed the time of the project-provided resident advisor and shifted USAID's focus by the second year of the grant to NHA staff training and overall institutional development.

4. The project was partially successful in achieving secondary objectives, particularly in staff training and

policy formulation. Unfortunately, staff selection for training did not pay adequate attention to how the training would serve NHA and project needs.

5. A.I.D. monitoring and evaluation during the project were inadequate. There was no realistic analysis of why NHA did not expand services as planned or follow-through on recommendations in earlier A.I.D.-funded reviews.

6. NHA still suffers from continuing institutional problems identified in the July 1979 review (such as poor coordination). Further A.I.D. assistance is unlikely to have any impact until NHA management corrects these deficiencies.

7 In the Chiang Mai sites-and-services project: (1) project components remain underutilized and undeveloped; and (2) when sales lagged, NHA management decided not to require income qualifications for low-income units.

Project Design and Policy Implications. The failure of the IIPUP project lay (1) in its design and (2) in A.I.D.'s failure to monitor or evaluate the project carefully enough. The project designers apparently did not recognize that the objectives they agreed on for the project were incompatible with those of the overall Thai program it was to support. The project is rightly described as part of two A.I.D. programs and was said to share the goals of both. In fact, however, it appears to have taken just the goal of centrally-funded program that funded it. That goal was fine in itself, but clearer analysis in the design stage might have revealed that it was not feasible given the priorities of the \$369-million program to which the \$250,000 IIPUP project was being tagged on. The small size of the IIPUP project relative to the larger program may also help explain why its implementation was not monitored more carefully. This suggests important lessons for future centrally-created projects and for all projects that are add-ons to larger projects or programs.

Major Recommendations include:

1. A.I.D. should improve monitoring and evaluation.

2. Future project designs for community development projects should be: (1) limited in scope; (2) based on realistic assessment of the priorities of the host government agency; and (3) aimed at a discrete population already in place with documented or other clear needs for the planned assistance.

3. A.I.D. should neither promote integrated shelter/community development projects nor provide technical assistance or funding for them as contemplated by the IIPUP project.

Evaluation Team: Eileen Stavrakis, consultant, assisted by Alexandria Panehal. December 13, 1984 - March 31, 1985.

**THAILAND: KHON KAEN UNIVERSITY RESEARCH DEVELOPMENT PROJECT
FIRST PHASE MID-TERM EVALUATION**

(Focusing on the Rural Development Research Project)

Problem and Overview. Khon Kaen is a city in Northeast Thailand, the poorest region of the country. In 1980, a Research Development Institute (RDI) was established at Khon Kaen University. The institute's primary purposes are: (1) to coordinate, facilitate, administer, and extend research activities; (2) to train field workers and supervisors; and (3) to serve as a link among rural organizations. To fulfill its functions, RDI has to recruit and train additional staff and develop a financial and administrative system that provides for efficient management of projects funded from a variety of sources.

U.S. Assistance. The Khon Kaen University Research Development Project was created with the long-term objective of strengthening the institutional capacity of Khon Kaen University to conduct research appropriate to Northeast rural communities. Project costs are expected to total \$3.4 million, of which A.I.D. provides a \$2-million grant. Implementation began in May, 1983 and is planned to last 6 years. The project has the following components:

1. Strengthening the overall capacity of the Research Development Institute to administer, facilitate, and coordinate research (\$500,000); and

2. Improving the ability of faculty members to conduct relevant rural community research in two areas:

(a) Rural Development Research, which includes both commissioned and open-invitation research projects developed by individuals, departments, faculties, or even external research entities (\$700,000).

(b) Integrated Farming System Research, which includes research in crops, livestock, and social sciences using methodology and techniques developed under a previous program financed by the Ford Foundation (\$800,000).

Purpose and Methodology of the Evaluation. This is the first of two evaluations planned for the project. Its purposes were to focus on the Rural Development Research component and evaluate: (1) the adequacy of procedures developed for reviewing research proposals; (2) the effectiveness of the selection and contracting procedures; (3) the effectiveness of the administration of grant funds; and (4) the relevancy of research being proposed and conducted. Findings are based on analysis of project documentation and interviews with Khon Kaen University and RDI administrators and faculty and a sample of persons who received research grants, whose proposals were rejected, and who did not submit proposals.

Major Findings

1. In general, the project is being well-managed and has potential for achieving a beneficial impact. It is in the hands of very able researchers and administrators and provides opportunities for faculty members to conduct good, useful research for the development of the rural Northeast.

2. Rural Development Research

(a) Procedures for reviewing proposals for "open-invitation" research were appropriately developed and carried out, but the review process took much longer than anticipated. The process was to take 5 weeks but took several months. (Requests for proposals went out in September 1983. A total of 72 proposals were submitted. After three rounds of screening, 10 proposals were approved in January 1984. Disbursement of funds to researchers began in July 1984.)

(b) Effectiveness of the selection procedures. A major issue is whether the process leads to fair and just selection of proposals. Opinions are mixed. The Rural Development Research Committee, which is responsible for the process, represents a fair distribution of fields of specialization, and each of the members is generally well-respected academically. But there is a general feeling that many of the committee members are close friends and hence the current composition may not lead to fair selection of proposals.

(c) Effectiveness of the contracting procedures. Requirements for researchers to submit monthly reports and documentation for reimbursement are too rigid. RDI staff are taking some appropriate steps to simplify requirements.

(d) The administration of grant funds appears quite effective. Several problems have been resolved and good working relationships and procedures now seem to exist.

(e) Research being proposed and conducted is relevant to the development needs of Northeast Thailand. The ten "open-invitation research" projects focus on health and nutrition, energy sources, rural diseases, animal husbandry, agricultural engineering, and fisheries. Three proposals are being prepared for relevant commissioned research and RDI has organized two workshops to encourage more people to participate in this research. Workshop participants included rural development workers, farmers, monks, government officials, and experienced researchers from other universities.

(f) Many faculty members are eager and have the ability to conduct rural development research, but lack the experience needed to write a clear and sound proposal or to conduct independent research.

3. Integrated Farming System Research. This component has a good beginning and is in the hands of the best researchers at Khon Kaen University. It is viewed as a model for multi-disciplinary research at Khon Kaen University.

Project Design and Policy Implications. The project appears to have been appropriately designed. Implementation is proceeding well and the relevance of the research projects being funded is hard to challenge. The impact of this research on rural development is not likely to be realized in the short run, however, but should be measurable through longer-term evaluation after the project has been completed.

Major Recommendations

1. RDI should streamline the proposal review (screening) procedures so that the entire process can be completed within 3 months. Pre-screening should be carried out continuously. Compensation to reviewers should be raised to 500 baht.

2. The Rural Development Research Committee should be restructured.

3. For researchers who lack experience in preparing a good proposal, assistance should be provided through a consultancy service.

4. Unsuccessful researchers should be supplied with comments if they desire them.

5. Staffing issues need to be resolved. These include civil service salary levels for RDI staff and appointment of deputy directors.

6. Integrated Farming System Research. The mid-term evaluation of this component should focus on: coordination between the Farming Systems and Rural Development research components; the impact of farming systems research on participating farmers as well as the rural population in general; and the extent to which new and weak researchers are given the opportunity to participate in the research; and links with government implementing agencies.

7. Long-term evaluation of the impact of this project should be carried out at some point in the future.

Evaluation Team: Dr. Twatchai Yongkittikul (team leader), National Institute of Development Administration, Bangkok; Dr. Richard Hopkins and Khun Thongkorn Hiranraks, USAID/Bangkok; Khun Chaiwat Wisewitayawet, DTEC; and Prof. Rangsi Nanthasarn, Khon Kaen University. Report dated March 15, 1985.

THAILAND: LAND SETTLEMENTS PROJECT
END-OF-PROJECT EVALUATION

Problem and Overview. Northeast Thailand is the poorest part of the country. Constraints to development here include: poor resources and especially poor water supply; suboptimal use of land, labor, and available agricultural technologies; a limited amount of land available for further agricultural expansion; and limited local development planning. USAID/Bangkok and the Thai government share the program goal of improving the quality of life and increasing incomes of the rural poor, with special emphasis on the Northeast. The present project compliments numerous other projects supported by A.I.D. and other external donors that attempt to overcome constraints to productivity and output growth in Thailand's agricultural sector and is consistent with the emphasis on improving agricultural production in the Northeast.

U.S. Assistance. The primary purpose of this project (493-0289) was to enable small farmers in eight of Northeast Thailand's poorest "self-help" land settlements to make the best possible use of their land and available resources [and thereby to improve agricultural production and their standard of living] through techniques that could be readily replicated throughout the Northeast. Specific objectives included: improving farm planning through crop diversification, improving and maintaining soil fertility, adoption of year-round cultivation of land, improving access of the rural poor to needed goods and services, and developing a replicable development and evaluation strategy. The project emphasized a "bottom-up" approach to increase local participation in planning and management--which was a new approach for the Thai implementing agency, the Department of Public Welfare. Total project funding was \$8.63 million; this included \$4.2 million from A.I.D. (grant and loan), \$4.09 million from the Thai government, and \$340,000 from other donors. Starting and ending dates were September 20, 1979 and December 31, 1984.

Purpose and Methodology of the Evaluation. Due to start-up delays, no mid-project evaluation was conducted. The purpose of this evaluation was to document the project experience and lessons learned. Baseline measurements of key project effect and impact indicators were collected via household surveys prior to implementation. These results, together with comparable follow-up survey data, provided the primary basis for judging project effects and impacts. Other findings are based on field visits, interviews, and review of project documents.

Major Findings

1. Beneficiary participation was satisfactory. In the agriculture subprojects, beneficiary participation in both selection and implementation was quite good. It appears that

beneficiary participation resulted in better use of scarce local resources, particularly in agriculture, and the beginning of an organizational base for continued bottom-up activities. In the infrastructure subprojects, beneficiary participation was less good and limited to selection of specific projects and sites. Roads, weirs, ponds, deep wells, most shallow wells, and rain storage tanks were constructed by outside contractors. In some cases, contractors hired local villagers to work as construction laborers. This taught villagers an unfortunate lesson, that they should be paid to help themselves.

2. Impact. There is evidence of a marginal improvement in the standard of living among the beneficiaries and, in a relatively short period of time, the project has contributed to the sustainability of agriculture in the land settlements. Growth in farm production will probably fall short of that anticipated in the project's economic analysis, but the long-term return on investment will probably be quite acceptable.

3. Research-application links. Most research and field demonstration activities made satisfactory progress. Preliminary indications are that farmers are accepting new crop production practices. Probably the biggest success has been improved rice varieties, with an estimated 90 percent of farmers growing improved cultivars. Another area showing positive signs of success is soil and water conservation, although full benefits will not become clear for a few more years. A weakness, however, was poor communication between researchers and extension agents; research results were not disseminated to extension agents, seriously reducing the benefits of the research.

4. Project management. The project was capably and wholeheartedly supported by both the Thai government and USAID staff at all levels. Thai project managers spent much time in the field. This, and the favorable ratio of one agricultural extension agent to 300 farm families, were probably the major factors in the degree of success achieved. Peace Corps and other volunteers were also a positive element. Finally, the USAID-provided technical assistance advisor was also competent. Management problems were relatively minor.

5. Replication. The overall methodology of the project is replicable (given sufficient funding) and, with some modifications, will probably be replicated in other settlement development projects in the Northeast.

6. Data collection. The surveys conducted for evaluating this project were appropriate and good quality and the analyses by the Khon Kaen University research team were well-done and will prove useful. The benefits of collecting the data would have been greater, however, had there been time and funds for more thorough analysis. The quasi-experimental research design (which required a control population) was not

particularly effective due to the difficulty in development work of finding carefully defined control populations and controlling for extraneous influences.

Project Design and Policy Implications. A major lesson may be that A.I.D. needs to be more flexible concerning the length of projects. Due to start-up delays, this project was active for only a short time (just under 3 years) and came to an end just as it was beginning to build up momentum. This end-of-project evaluation suggests that the project was well designed and was well on the way to achieving its objectives, but was not able to capitalize on its early achievements because the life-of-project was not extended subsequent to the start-up delay. Changing traditional attitudes and practices is an inherently slow process that cannot easily be accelerated. A second lesson is that farmers should not be expected to commit 100 percent of their land to new technologies, as was anticipated in the design of this project. Farmers participating in this project adopted new technologies on only a selective basis--for specific crops or only on limited portions of their land.

Major Recommendations

1. Beneficiary participation

(a) Beneficiaries of infrastructure projects should be required to invest some element of their own capital or labor as a test of their desire for the project.

(b) The agricultural extension agents assigned to the project should remain in place for at least 2 to 3 more years to ensure that gains made will not be lost.

(c) Training courses should include more practical "hands on" activities.

(d) Field trips for farmer trainees to observe agricultural operations should be to the farms of successful farmers, not to government-managed stations.

2. The project methodology should be replicated. For this to happen, it should be translated into Thai and distributed to other government agencies.

3. Quasi-experimental design studies should not be attempted, except under extraordinary circumstances.

4. A.I.D. should be willing to extend projects that have a slow start-up but good progress thereafter, to permit them to finish planned activities.

Evaluation Team: Dr. G. Lamar Robert; Dr. Supot Faungfupong; and Dr. Robert Magnani. Report dated November 7, 1984.

THAILAND: MANAGING ENERGY AND RESOURCE EFFICIENT CITIES
INTERIM, MINI-EVALUATION

Overview. The Managing Energy and Resource Efficient Cities (MEREC) project was designed by A.I.D. as a worldwide demonstration project. It has been implemented in three cities outside the United States: Tacloban in the Philippines, Guarda in Portugal, and Phuket in Thailand.

U.S. Assistance. The Thailand Managing Energy and Resource Efficient Cities Project was initiated in December 1983, with a grant agreement signed by A.I.D., the Department of Local Administration of the government of Thailand, and the municipality of Phuket. The project purpose are: (1) to lay a foundation for more efficient energy and resource management by small and medium-sized cities; and (2) to demonstrate and promote greater municipal planning and implementation capacity. Total project funding was estimated at \$510,700. This includes \$450,000 from A.I.D. (a \$250,000 grant and an additional \$200,000 for technical assistance to be provided by the Tennessee Valley Authority through a PASA); the grantee's contribution is estimated at \$60,700. The project assistance completion date is December 1, 1986.

Purpose and Methodology of the Evaluation. The purpose of this evaluation was to compare development strategies in the MEREC project and the A.I.D.-sponsored DDMP project to identify useful approaches for improving local management in rural and small urban areas in Thailand. Findings are based primarily on data collected through 25 in-depth interviews conducted from January to April, 1985. Observations were also made of interactions in committee meetings.

Major Findings

1. The MEREC approach is a departure from, and could come into conflict with, conventional planning approaches. (The potential for conflict is minimized in the Phuket case, however, since the grant is very small--only about 3 percent relative to the total municipal budget.) MEREC entails:

(a) A structured planning process in which municipal officials take the lead in: (a) identifying the locality's resources and chief problems related to those resources; (b) specifying relationships between the various sectors; and (c) selecting project activities and strategies to make the most efficient use of the resources.

(b) Municipal officials producing an action plan, based on the above process; and

(c) Municipal officials implementing the action plan

--in the Phuket case, with assistance from the Office of Regional Cities Development (ORCD) and the Local Government Affairs Division of the Department of Local Administration (DOLA), the Tennessee Valley Authority, and consultants from the Prince of Songkla University.

2. Phuket Municipality has been enthusiastic about the project. Its positive attitude, however, probably stems not so much from commitment to the MEREC concept (about which it is rather hazy) as from other factors. One is the novelty factor; this is the first technical assistance grant the municipality has ever had. Moreover, there is the promise that, if MEREC is successful, Phuket will be a showcase for Thailand.

3. The mayor is the key decisionmaker in this project, which owes much of its impetus to his initiative. This is because of the ad hoc character of the MEREC project organization (i.e., not lodged in the line-agency bureaucracy of the Thai government). But functional relationships with external agencies have created dependencies, especially with respect to funding and technical assistance. This means that the institutional actors on whom the municipality depends can constrain and sometimes dictate choices.

4. Managerial relationships are strained. The project is under the supervision of the Thai government's Office of Regional Cities Development (ORCD). Relationships between the municipality and ORCD, and between the ORCD and the USAID/Bangkok project officer, are strained.

5. The consultant team from Prince of Songkla University has made a significant contribution to the project and is favorably regarded by municipal officials and working groups. Some coordination problems have arisen, however.

6. Internal project administration has not received enough attention. This has resulted in unnecessary delays and could negatively affect implementation of the subprojects.

7. Twelve subprojects have been selected:

*Water: water meter calibration and leak detection, and construction of rainwater storage demonstration tank.

*Urban waste: sanitary landfill in mangrove area, fermentation tank for making fertilizer, centralized rubbish container, and bio-gas generator.

*Economic development: study and development of markets for rubber sheet product, rubber wood, coconut, coconut wood, cashew, and promoting private sector investment.

*Energy: analysis of total energy consumption and need in Phuket.

*Urban land sector: mine reclamation, traffic system improvement, and demonstration of the use of local materials for constructing low-cost, energy-efficient houses.

(a) Most of the subprojects are relatively small, and therefore feasible. With new approaches such as MEREC, it is vital that tangible evidence of success be produced.

(b) Some of the subprojects can be implemented without relying on external assistance. It appears that with less dependency on other institutional actors, the likelihood of success will be greater.

8. Phuket's current Municipal Development Plan identifies development problems and priorities, but energy and resource management is not mentioned. Seven of the 12 MEREC sub-projects are included, however, although they are not high on the priority list.

9. Funding is probably inadequate given the project scope and purpose. Although the A.I.D. grant is described as "seed money," to date no funds have been secured from other external sources.

10. Comparison of the MEREC and DDMP strategies is like comparing apples and oranges. Both are ad hoc projects undertaken as a result of A.I.D. initiatives and designed to foster local management capabilities, but there are many differences.

Project Design and Policy Implications. Unavoidably perhaps, in both DDMP and MEREC, the subprojects--rather than the project rationale--are the most visible elements at the local level. The subprojects are tangible and therefore "easy to understand." But the DDMP project managers have never lost sight of the overall objective of DDMP, even though there have been differences of opinion as to what the project "really" is about. Unfortunately, this macro-perspective may be disappearing in the MEREC project. Having identified subprojects, the municipality is focusing all its attention on their implementation. Many of the key people involved cannot even remember the underlying rationale behind the project. Since resource management, rather than project implementation per se is the raison d'etre for MEREC, it is essential that the collective organizational memory be refreshed. Otherwise, MEREC may turn out to be yet another case of "not seeing the forest for the trees."

Evaluator: Suchitra Punyaratabandhu-Bhakdi, Ph.D., National Institute of Development Administration. Report dated April 30, 1985.

**THAILAND: NORTHEAST RAINFED AGRICULTURAL DEVELOPMENT PROJECT,
MID-TERM EVALUATION**

Problem and Overview. The farmers of Northeast Thailand are, in general, the poorest in the country. Most are subsistence-level rice farmers who depend on rain for irrigation, but soil is poor and rainfall erratic. Programs of the Thai government's Ministry of Agriculture and Cooperatives (MOAC) have not focused, or focused effectively, on the needs of these farmers. Technology development has been either commodity-oriented or discipline-oriented under relatively protected experiment-station conditions, and links between research and extension have been minimal.

U.S. Assistance. The Northeast Rainfed Agricultural Development Project (NERAD) is an effort to begin to close this gap in the development and delivery of technology for Northeast rainfed subsistence farmers. The project purpose is to develop a replicable agricultural development program for increasing farm productivity and farm incomes, particularly among lower income farmers in the rainfed agricultural zones --specifically, in eight [later expanded to nine] representative tambons (sub-districts) of Northeast Thailand. The intent is to establish adaptive agricultural research and extension programs that are responsive to the needs of poor farmers. Total funding for the project (493-0308) is \$15.725 million; of this, \$10 million is from A.I.D. (a \$6.3-million loan and a \$3.7-million grant) and \$5.725 million is from the Thai government (the MOAC and DTEC). A.I.D. funds provide technical assistance, training for farmers and extension personnel, intensified Cooperating Country support in target areas; construction and equipment purchase; and water resources development, land/soil modifications, surveys, mapping, research and demonstration. The project completion date is August 31, 1988.

Purpose and Methodology of the Evaluation. This was a joint Thai/USAID evaluation whose purpose was to provide the project managers with recommendations for mid-course corrections to increase chances of project success. The evaluation occurs at a time when the desired innovations have been initiated and begun to function. Data derive from three sources: written documents, observations during site visits in all nine tambons, and interviewing, including in-depth interviews with farmer leaders and ordinary farmers. All team members were bilingual in Thai and English.

Major Findings

1. Lack of understanding of the nature and purpose of the project has been a major, and the main, problem to date. People responsible for implementing the project do not have a

clear understanding of what the project is supposed to accomplish. This lack of mutual understanding has manifested itself at all levels of the cooperating departments and agencies. The problem was exacerbated further as each of the agencies ended up interpreting the project in terms of its own objectives and seeing it chiefly as an infusion of additional funds into its ongoing programs. This central problem is compounded by the fact that the project is very broad in scope, both in the number of departments involved and in the diversity of geographic and ethnographic areas covered.

2. The project has made admirable progress in implementing an admittedly poor design. Many of the early "growing pain" problems have been overcome, with the result that the project as a whole is beneficial. Progress has been achieved through continued self-examination and encouragement of open communication among MOAC departments involved. It remains for these gains to be solidified, for accumulated experience and information to be used more effectively, and for all concerned to establish a more unified understanding of the project purpose.

3. The present compartmentalization of activities may prevent the project from achieving its objective. Inter-departmental cooperation, which is critical for this project, is excellent in many regards at the field level but lags behind at the policy level. Unfortunately, activities to be coordinated are regarded as more important than the project concept. Project managers are well aware of most of the problems.

4. A large amount of data has been generated, but these are not useful for overall management decision-making.

5. Villagers (farmers) are not adequately involved in project activities. In many cases, the villagers have no role in the management of the project-sponsored activities but are only onlookers wondering what is going to happen to these activities. Many project officials have never thought about this issue, although some field personnel are becoming more aware of villager needs.

6. The NERAD approach, although complex, holds important potential for rainfed agricultural development in Thailand. It provides on-the-job training in farming systems research and extension, not only in the field, but at ministerial levels. The experience and lessons learned under NERAD, not otherwise available in Thailand, will be especially valuable during the Sixth Five-Year Economic and Social Development Plan, which calls for an increase in the number of such integrated projects.

Project Design and Policy Implications. The question of "poor project design" requires further analysis. It appears that the underlying concept--based on introduction of a

farming systems research and extension approach--was sound, but that the project paper did not develop it adequately. (The Logframe, for example, is too vague to be of use and many of its "Objectively Verifiable Indicators" are not objectively verifiable.) The project paper is especially confusing for the large number of Thai personnel who have only limited English abilities. It also appears that there were no key Thai personnel involved in the design process who remained involved to guide the project into implementation. Whatever consensus of understanding was achieved through verbal discussion of the project paper was frequently lost due to turnover of Thai personnel. This project presents a case study in unsuccessful project design that should be studied by A.I.D. to extract "lessons learned."

Major Recommendations

1. The project should be continued, but special attention should be given to:

- (a) The need for common understanding of the project purpose;
- (b) The difficulties inherent in a more meaningful assessment strategy for farmer needs; and
- (c) Improving integration of ideas and coordination of activities for on-farm research.

2. Technology development. Review all project activities. Consider discarding those that neither contribute to institutional development, advance inter-departmental coordination, or require significant participation by villagers.

3. Participation of villagers must be increased. A cultural or ecological anthropologist, familiar with Northeast Thailand, should be added to the technical assistance team for the remainder of the project to ensure adequate villager participation. This was recommended in the project paper but has not yet occurred.

4. Monitoring and evaluation should be improved.

5. Translation. Project documents should be translated and available in both Thai and English. This would help remedy the problem of inadequate comprehension of the project, which is exacerbated by the rapid turnover of lower-level personnel who lack a good command of English.

Evaluation Team: Dr. Lamar Robert, Dr. James Chamberlain, Dr. Supot Fuangfupong, and Dr. Manu Seetisarn. Report dated June 10-July 26, 1985.

Appendix

ACRONMYS USED IN THIS REPORT

ADB	Asian Development Bank
BIFAD	Board of International Food and Agriculture Development
CIDA	Canadian International Development Administration
FAO	Food and Agricultural Organization of the United Nations
FY	Fiscal Year
GDP	Gross Domestic Product
GSL	Government of Sri Lanka
HMG	His Majesty's Government (Nepal)
IDRC	International Development Research Centre (Canada)
NEDA	National Economic and Development Authority
NGO	Non-governmental organization
ODA	Overseas Development Authority (Britain)
OPG	Operational Program Grant
PACD	Project Assistance Completion Date
PASA	Participating Agency Service Agreement
PES	Project Evaluation Summary
PHC	Primary Health Care
PID	Project Identification Document
PP	Project Paper
PVO	Private Voluntary Organization
R&D	Research and Development
RTG	Royal Thai Government
WHO	World Health Organization

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

MEMORANDUM

To: See Distribution

From: ANE/DP/E, Sharon Pines Benoliel ^{SPB}

Subject: Guidelines for Using the Executive Summaries Report

During the ANE Evaluation Conference, a number of evaluation officers requested information concerning how the Annual Executive Summaries Report could be used. This memo responds to this request.

Why an Executive Summaries Report was Developed

The purpose of evaluation in A.I.D. is to provide information on the performance and impact of projects to managers. While evaluative feedback on one's own project may be most important for management decision-making or planning a follow-on project, planners and managers can benefit from tapping into the rich evaluative literature accumulated on many other similar projects. Learning and applying these "lessons of development" becomes difficult, however, when faced with the massive amount of information available. The Executive Summaries Report was, therefore, developed to ease the burden of using evaluation findings.

Possible Uses of the Executive Summaries Report

General Uses

-for planners and managers that do not have time to read entire reports or search for and access the executive summaries of those reports that may be helpful.

-for planners and managers who may have the time to read certain reports in their entirety but need first to assess the relevance of the report's content to their tasks at hand.

Program Office

-for program staff charged with assessing the value and viability of proposed new projects and extensions of existing projects, the executive summaries contain a section on project design and policy implications for other similar projects.

Project Design Teams

-for project managers and design team members looking for what strategies seem to work and within what context.

-for project managers and design team members looking for what strategies are not working well and why--what obstacles have prevented success and what, if any, adjustments or revisions are recommended.

Project Evaluation Planers

-in developing a scope of work, it is often valuable to review a description of other evaluation efforts of similar projects to the one currently being evaluated.

-scope preparations may also benefit by a review of brief descriptions of methodological schemes and critical indicators used to measure performance and impact and any obstacle encountered in using the chosen methodology and indicators within the particular context.

-in determining the most appropriate and effective members for an evaluation team, it may be useful to note which team members were chosen (listed at the bottom of all executive summaries) for those evaluations that seemed particularly well done and appear similar to the evaluation being planned.

Draft: Sharon Pines Benoliel, ANE/DP/E, Wang # 02490