

62371

PROJECT CLOSE-OUT REPORT
HONDURAS NATURAL RESOURCES MANAGEMENT

522-0168

Prepared: June 20, 1990

I. BACKGROUND

At the time the Natural Resources Management Project (522-0168) was authorized in 1980, Honduras was faced with critical deterioration in its natural resource base. Moreover, the Government of Honduras (GOH) lacked adequate natural resource utilization policies and laws partially due to the institutional weaknesses of the GOH agencies responsible to implement natural resources programs and to the lack of an adequate natural resource data information system. The project was designed to contain the irreversible environmental damage and decreased agricultural production in the country.

The largest component of the project, Watershed Management, was designed to begin its efforts in the Choluteca River Basin Area, which according to the GOH's National Development Program, was the largest and most deteriorated watershed in Honduras. The experience gained in this area would be utilized by the GOH to extend its natural resources management techniques to other enlarged watersheds. By the end of the project, the project design aimed at improving the incomes of 10,000 of the small farmer families living in the project area and improving the natural resource base of approximately 18,000 hectares of land devoted to hillside farming and grazing.

The Natural Resources Management Project (NRMP), together with other projects (Agricultural Sector II, Rural Technologies, Land Titling, and Forestry Development), was designed to complement the AID's agriculture country strategy which was to improve the efficient use of productive resources of the rural poor, primarily land and labor in order to increase employment and income.

The Project Agreement was signed on July 31, 1980. The Project Assistance Completion Date (PACD), originally July 30, 1985, was extended twice, first to July 30, 1987 and finally to May 31, 1989. During the life of the project, a local currency equivalent of \$5,633,550 was provided as counterpart funding for the Project which exceeded the \$5,600,000 required by the Project Agreement. This counterpart contribution included \$750,000 for the transition period between the NRMP and the Land Use and Productivity Enhancement (LUPE) Project (522-0292).

II. FINANCIAL DATA:

DATES OF AUTHORIZATION:		AMOUNT AUTHORIZED (US \$):	
Original	July 16, 1980	12,252,000 L	2,743,000 G
Amendment	June 11, 1986	- 0 - L	1,157,000 G
		<u>12,252,000 L</u>	<u>3,900,000 G</u>

DATES OF OBLIGATION:		AMOUNT OBLIGATED:	
Original	Jul 31, 1980	5,000,000 L	750,000 G
Amendment No. 1	May 15, 1981		250,000 G
Amendment No. 2	Aug 30, 1982		500,000 G
Amendment No. 3	Aug 30, 1983	2,000,000 L	
Amendment No. 4	Dec 30, 1983		500,000 G
Amendment No. 5	Mar 29, 1985		700,000 G
Amendment No. 6	Jun 19, 1986	3,300,000 L	1,000,000 G
Amendment No. 7	Mar 11, 1987	1,952,000 L	200,000 G
TOTAL		<u>12,252,000 L</u>	<u>3,900,000 G</u>

COUNTERPART CONTRIBUTION: Local Currency equivalent of US\$ 5,633,550

III. PROJECT GOAL AND PURPOSE

The project goal was to improve the employment and income of poor hillside farm families and to improve the management and use of land, forests, and other renewable natural resources. The project purposes were: (1) to strengthen the GOH institutional mechanisms to gather and analyze basic natural resources data and to develop and implement policies, mechanisms, and programs for managing of renewable natural resources; (2) to establish an integrated watershed management program in selected watersheds and areas of the Southern and Central Administrative Regions of the Ministry of Natural Resources (MNR) to support the extended use of improved agriculture, agroforestry, range and pasture management, forestry and soil conservation technologies to improve and stabilize income and employment for the hillside farmer; and (3) to expand an integrated development program in the Sabanagrande area to increase agricultural production, crop diversification, and rural incomes through generation of women-run businesses and marketing of excess agricultural produce.

IV. PROJECT DESCRIPTION

The project originally consisted of three components which were increased to the following five:

- 1) Natural Resources Policy and Planning
- 2) National Cadastre Program/Natural Resources Data Collection and Analysis
- 3) Strengthening of the Ministry of Natural Resources Watershed Management Resources Directorate to Improve its Information System
- 4) Implementation of Improved Land Management Practices in Selected Watersheds
- 5) Implementation of a rural development activity in Sabanagrande to increase the agricultural productivity through the introduction of new technologies.

The project's geographic scope, originally the confines of the Choluteca River Watershed (included five subwatersheds), was expanded to include selected subwatersheds and areas of the Central and Southern Regional Directorates of the MNR such as the Nacaome, Sampile/Guasaule and the Ulua River Watersheds.

A Project Office was established to administrate and implement project activities under the administrative authority of the MNR.

V. CURRENT PROJECT STATUS

The Project is completed. Project extension and administrative activities have been continued during the transition period from the Natural Resources Management Project PACD to the start up of activities under the Land Use and Productivity Enhancement Project, which builds upon the Natural Resources Management Project and the Rural Technologies Project.

VI. OUTPUTS

Outputs accomplished under the project were:

<u>OUTPUT</u>	<u>LOP TARGET</u>	<u>ACCOMPLISHED</u>	<u>PERCENT OF TARGET ACCOMPLISHED</u>
Sub-Watersheds Treated	5	5	100.0
No. of Field Agencies	30	31	103.3
Farmer Groups Organized (Male)	250	600	240.0
Women's Groups Organized (Female)	50	419	838.0
Farmer Participants (M)	7,000	10,188	145.5
Women Participants (F)	1,000	7,139	713.9
Improved Cropping/Soil Conservation (ha.) (M)	18,000	18,945	105.0
(F)	-	108	-
Trees Produced (X 1000)	5,000	3,815	76.3
Agroforestry (ha.)	1,500	2,502	166.8
Range Management (ha.)	7,000	27,804	397.2
Vegetable Plots (F)	1,000	5,733	573.3
Training Farmers (M)	7,000	15,876	226.8
(F)	-	1,934	-

As indicated in the table, the Project met or exceeded Life of the Project (LOP) targets in all major output categories with the exception of the number of trees produced and planted. This shortfall was due primarily to a change in emphasis away from massive reforestation of unprotected public lands and towards on-farm agro-forestry activities in which trees have a much higher survival rate. The unusually high accomplishment related to women's activities reflects a change midway through LOP to emphasize Women in Development (WID) activities that were not envisioned at the time the Project was authorized. Similarly, a distinction is made between farmer groups (farmer participants), who were made up entirely of men whose main activities are crop production and cattle raising, and women's groups (women participants) who were involved in household activities such as home improvement projects and family vegetable gardens.

In addition, the Project produced 23 major manuals and other publications, as well as numerous audio/visuals, including an excellent video, which were utilized extensively in Project training and promotional events.

VII. EXTENT TO WHICH THE ORIGINAL PROBLEM HAS BEEN SOLVED

The problem addressed by this Project was the need to contain the irreversible natural resource deterioration and decreased agricultural production in selected geographic areas of Honduras. The Project effectively addressed the problem by achieving well over 100 percent of its planned outputs. The geographic area covered by the Project has experienced substantial increases in agricultural production, nutritional improvement, and incomes, and the natural resource base has been significantly stabilized through soil conservation, reforestation, etc., as indicated by the Project outputs. In addition, the improved cropping and farm management technologies are being continued in some Project areas because local "contact" farmers were trained in promotion. The successful experience gained in the Project area will now be extended throughout other areas in Honduras under the Land Use and Productivity Enhancement Project.

VIII. EVALUATIONS AND AUDITS

Two external evaluations were carried out. The first one (Report dated October 15, 1984), carried out by Winrock International, covered the period from August 1980 to January 1984 and its objectives were to determine (1) the institutional development to date, (2) the level of effort made to organize and implement field activities, (3) the extent of Project coverage and acceptability and (4) the need for Project extension. This evaluation confirmed the Project had a slow start during the first two years and recommended an extension of the project for at least this same period. Among other recommendations, the evaluators also recommended adding funding, implementing the Project in another watershed and integrating the Project into the MNR. The second external evaluation (Report dated June 6, 1986), carried out by Tropical Research and Development Inc., covered the period from July 1980 to December 1985 and its objectives were to (1) assess Project activities and provide recommendations for improving performance during the remaining Project life, (2) to quantify the benefits realized to that date and to Project future benefits for the Project and (3) to recommend strategies to be implemented in a possible follow-up Project with broader geographic scope. This second evaluation revealed the Project was making excellent progress towards its targets (number of farm families and hectares), and recommended a phase II project in a more extended geographical and technical approach based on the NRMP technical foundation. This recommendation was fulfilled with the authorization of the Land Use and Productivity Enhancement Project (522-0292) on February 8, 1989.

The Regional Inspector General for Audit made a program results audit of the Project in July 1986. This audit covered the period from July 1980 to April 1986 and its objectives were to (1) determine the accomplishment of Project objectives and (2) to evaluate selective Project operations to assure their efficiency and appropriateness. Among other recommendations, the audit report included revising the Project's original goals and objectives to be more realistic and requiring the GOH to improve its Project administration.

The GOH through the MNR performed a final evaluation of the Project in August, 1989, to measure its impact on the transference and adoption of technologies in its target population.

This evaluation was conducted over a period of two months by seven MNR employees. Findings included a 96% continued acceptance rate among randomly selected project participants with respect to the technologies disseminated during LOP. The study also concluded:

1. The component of promotion, extension, and farmer training was the most important, and constituted the basis for project success, through the organization of beneficiary groups (male and female).
2. The soil conservation activities were a critical component, and reduced migratory agriculture.
3. The livestock and range management activities resulted in improvements in herd management and health.
4. The apiculture and aquaculture activities experienced some successes, but generally did not receive sufficient support from the main Project Office, as compared to other components.
5. The agroforestry and forest management activities were much more successful than massive reforestation efforts.
6. The decision to promote WID activities which emphasized the women's role among participating families was a very positive one, and resulted in significant improvements in family nutrition and overall household development.
7. There was a measurable socio-economic impact in participating communities due to the adaptation of improved production and productivity technologies.
8. There were, nevertheless, severe limitations regarding timely logistical support to extensionists in the field, such as the delivery of agricultural tools and supplies, and the availability of sufficient Project vehicles.

9. There were problems regarding the selection and management of personnel in the later years of LOP, due to a relaxation of hiring requirements after 1986.

A final external evaluation of the project was cancelled because extensive analysis of the Project was made during the design of the LUPE Project (No. 522-0292).

IX. FINANCIAL STATUS

<u>SOURCE</u>	<u>OBLIGATED</u>	<u>COMMITTED</u>	<u>DISBURSED</u>	<u>UNEXPENDED</u>
GRANT	3,900,000	3,888,256	3,854,415	45,585
LOAN	12,252,000	12,146,093	12,101,140	150,860
TOTAL	16,152,000	16,034,349	15,955,555	196,445 (1.2%)

X. LESSONS LEARNED

The Natural Resources Management Project provided a series of "lessons learned" which were considered during project operations and were taken into account in the design of the Land Use and Productivity Enhancement Project. Examples of these are:

- the need to coordinate delivery of a wide range of services via one outreach mechanism;
- the need for project activities to obtain independence from bureaucratic constraints and processes found in most ministries;
- the advantage of utilizing low salaried "para-technicians" supported by few professional extensionists to increase coverage and reduce recurring costs;
- the need for "para-technicians" and professional extensionists to be generalists rather than narrow technical specialists;
- the critical importance of training programs in early project life designed specifically for both technicians and farmers;
- the need for constant farmer feedback in the planning and evaluation process and for farmer participation in providing ideas and strategies to resolve problems;
- the importance of relying less on subsidies as incentives for promoting sustained participation;

- the need to develop baseline data and maintain a survey capability for measuring project impact; and the importance of simplified forest management plans for fuelwood and saw timber production in small areas.
- the need to give particular attention to appropriate training and orientation of female extensionists and paratechnicians.