

PROJECT ASSISTANCE COMPLETION REPORT

I. BACKGROUND DATA

A. <u>PROJECT TITLE:</u>	Improved Water and Land Use in the Sierra.
B. <u>PROJECT NUMBER:</u>	527-0156
C. <u>DATE OF AUTHORIZATION:</u> <u>AND AMOUNT:</u>	December 31, 1975 \$11,000,000 Loan (Original) \$10,593,519 (Revised September 25, 1987)
D. <u>DATES OF OBLIGATION:</u> <u>AND AMOUNT:</u>	September 26, 1976 \$11,000,000 Loan (Original) \$10,593,519 (Revised)
E. <u>FOOD PROGRAM LOCAL CURRENCY GENERATIONS:</u>	\$5,000,000
F. <u>GOP COUNTERPART:</u>	\$5,000,000
G. <u>OTHER DONOR FINANCIAL CONTRIBUTIONS:</u>	None
H. <u>PACD:</u>	January 18, 1982 (Original) December 31, 1985 (Revised)
I. <u>IMPLEMENTING AGENCY:</u>	National Program of Small Irrigation Office (Plan MERIS), Ministry of Agriculture (MOA).

II. PROJECT PURPOSE

The purpose of Plan MERIS was to improve water and land use in the Sierra, which was to be achieved through an increase in irrigated land areas, increased crop yields and improved efficiency of water use, new crop alternatives, and reduced soil erosion. The project assisted small farm families, typically farming less than one hectare of land.

Plan MERIS encompassed several components, among them, a) design and construction of irrigation and drainage works; b) a special fund in the Agrarian Bank for sub-lending to participating farmers; c) a complementary afforestation and reforestation program; and d) strengthening of personnel and institutional capacity.

III. PROJECT INPUTS

In order to achieve the Project Purpose, the AID Loan/grant financed the following activities:

Component I.- Irrigation and Drainage Works.

- A. Studies: Studies were developed to prepare detailed engineering plans and designs, and estimates of costs and benefits, to develop or improve the irrigation system for proposed project areas.
- B. Technical Assistance: In support of the construction and development activities, the Project funded technical assistance activities in the form of a Pilot research and extension program organized with the support of the AID funded Water Management Synthesis II Project. Technical Assistance included domestic and foreign training of Plan MERIS staff.
- C. Construction and Drainage Works: Heavy construction equipment and vehicles, worth over \$2.0 million, were procured from the U.S. during 1979.

Component II.- Production and Credit.

A special fund for sub-lending to participating farmers for investments in on-farm land development and improvements was established within the Agrarian Bank of Peru. The Project reserved up to \$1 million of AID Loan funds and up to \$2 million in GOP counterpart funds for small farmer credit. The credit component assisted farmers obtain loans for farm improvements (such as land leveling), livestock purchases, and for purchases of production inputs.

Component III.- Complementary Reforestation and Afforestation Programs.

The forestry component was included in the project design to complement soil erosion reduction techniques along canals and on slopes subject to erosion. This activity was carried out in all sub-projects in order to protect the concrete intakes and the main canals.

Component IV.- Strengthening GOP technical capacity at regional level.

Long and short-term training was funded for MOA personnel. Regional MOA offices were strengthened with additional personnel and required machinery and equipment. Additionally, high level technical advisory services in planning and project analyses were given to the MOA Directorate of Water.

IV. PROJECT OUTPUTS/ACCOMPLISHMENTS

The project successfully completed much of the planned activities and goals. There is more water now available on a reliable basis to farmers in the 17 completed sub-projects for crop and pasture irrigation. Some significant long-term production and economic benefits are likely to derive from this project. A significant benefit accruing to all farmers is a decrease in the risk of catastrophic failure associated with a lack of rainfall.

1. Planned Output

- Design and construct 27 small-scale irrigation and drainage networks in the Cajamarca and Mantaro Valleys of the Sierra.

Project Accomplishment

- A total of 17 small-scale irrigation and drainage network sub-projects were designed and completed. With the completion of these sub-projects, over 13,000 hectares were improved or made suitable for improved agricultural production, and 10,439 families were benefited.

2. Planned Output

- Reforest or afforest approximately 1,200 hectares under the complementary reforestation program of adjacent sub-project slopes and along irrigation canals.

Project Accomplishment

- Approximately 795 hectares have been reforested or afforested.

3. Planned Output

- Investments in land and water development and on-farm improvements and livestock through financing and credit extension services.
- Provide extension services in the design and maintenance of irrigation systems and water use.
- Provide analyses of farm level agronomic and socio-economic factors.

Project Accomplishment

- Credit extension assistance was given to 100 farm families and approximately 200 small farmer loans per crop season were granted.
- A total of 135 research plots and 20 demonstration plots on eleven crops have been conducted. In all, 28 technicians and 33 new farmers were trained using base-line data from the 1985 crop cycle.
- Fully developed research, extension and farmer training for farm-level budget analyses and sociological data collation using project computers.

4. Planned Output

- Incorporate 14,900 newly irrigated hectares and improve 13,000 hectares with improved irrigation systems.

Project Accomplishment

- A total of 13,443 hectares have been newly established for irrigation and/or improved through more efficient irrigation systems.

V. Financial Summary:

A. A.I.D. Contribution:

<u>Grant Funds Cumulative by PACD:</u>	<u>US \$</u>
Amount Obligated	10,593,519
Amount Committed	10,593,519
Accrued Expenditures	10,593,519
Pipeline	0

B. Food Program Local Currency Generations: 5,000,000

C. GOP Counterpart Contributions: 5,000,000

D. Other Donor Financial Contributions: None

VI. MISSION ASSESSMENT OF PROJECT

The Project has made improvements in the agricultural production potential of the areas in which its subprojects were located. Small farm producers increased their irrigated land area, adopted higher value crops, and devoted more land to double-cropping. The Project made long-term contributions to agricultural output in the highlands through increased efficiency of land and water resource use, and increased amounts of land and water available to producers.