

TERMINAL PROJECT APPRAISAL REPORT

Country: ROCAP - Central America Regional

Serial Number: 76-3

Project: 596-11-660-012.1 - Agricultural Education
Regional Institutions

Initial FY of Obligations: FY 1964

Final FY of Obligations: FY 1974

Total Funds Obligated (net): \$3,894,000

Date of Prior PAR: February 1973

Project Manager: E. Morgan Stickney E. Morgan Stickney by L. E. Clear

Evaluation Officer: Robert Hechtman RH

Deputy Director: Barry Sidman BS

Date Submitted: April 23, 1976 ✓

Project Purpose

The aim of the activity was to assist in establishing faculties of agriculture capable of producing professional personnel needed for Central American economic development in a manner that would encourage specialization and avoid duplication of effort. ROCAP provided technical guidance, visiting professors and scholarships to Central American Agronomy professors in order to improve the curricula, teaching methodology and administration of the schools of Agronomy in the national universities.

Initially assistance was provided through the Superior Council of Central American Universities (CSUCA) to the five Central American Faculties of Agronomy. Subsequently, for reasons discussed below, assistance was provided through IICA in order to up-grade university professional staff, to standardize the two year basic Ingeniero Agronomo program, to organize and conduct meetings of the representatives of the Deans and Directors of the Agronomy faculties with the objective of planning and implementing the uniform curriculum and to develop specialization within the faculties of Agronomy and to improve their teaching capabilities.

Narrative Summary

This terminal evaluation is divided into two parts, the following Narrative and a translation of the Final Report of the coordinator for the activity (IICA). ROCAP considers the IICA report to be a candid summation of achievements made under this program and difficulties encountered. The following comments are intended to supplement the Final Report.

This project involved ten action agents, viz. ROCAP, IICA/ZN, CSUCA, University of Puerto Rico, Tufts University and, initially, the national Universities of Honduras, El Salvador, Guatemala, Costa Rica and Nicaragua. Coordination was accomplished initially between ROCAP AND IICA through the CSUCA acting for the universities. After signature of Project Agreement 73-4 (February 1974) continuing assistance to three faculties was provided by ROCAP and IICA. The change to IICA

was necessary due to unsatisfactory performance of CSUCA and to political dissension that developed between certain member universities, and reflected the greater capacity of IICA to support project objectives. In spite of this change, as revealed in IICA's final report, the project did not achieve its fundamental objective of fomenting improved coordination between the agricultural faculties of the Central American Universities in order to make better utilization of existing resources and establish minimum standards for a two year basic agronomy curriculum. Reasons for this failure included less than full commitment of the five universities to a system of interdependence under which a regional agriculture specialization plan was to have been implemented (see Project Agreement 72-6). This plan would have required a) changes in methods of instruction, including the establishment of uniform curricula during the first two years of training, b) improvement of research facilities and faculty specializations leading to the creation of specialized departments of agronomy, livestock, Agriculture Economies, etc. which assumed that c) students would have financing to move to different countries to follow their specialties. Participation in the project by the universities, in addition, was crippled by frequent changes in deans, the closing of some of the universities due to internal political disputes, faculty strikes, the Managua earthquake, shortage of faculty who could be spared for medium or long-term training, and budget shortages which limited the universities' ability to concurrently pay (salary supplements and substitute professors' salaries.)

Performance by U.S. visiting faculty from Tufts and Puerto Rico was satisfactory throughout the life of project. ROCAP plans no further actions with regard to this activity.

Attachment: Final Report of IICA, August 1974.

FINAL REPORT

1. TITLE: ROCAP-IICA/ZN Agreement - Agricultural Education
2. NUMBER: 73-4
3. COUNTRIES WHERE CARRIED OUT: Capital Cities of the Central American countries.
4. INSTITUTIONS STRENGTHENED: Central American Faculties of Agronomy.
5. DURATION OF AGREEMENT: January 1973 to March 30, 1974; subsequently extended to June 30, 1974.
6. OBJECTIVES:
 - a. Up-grade the academic level of the professional staff in the faculties of agronomy of the Central American Universities.
 - b. Standardize the basic two years for the agronomy engineering program and in related professional areas in order to promote the interchange of students between the universities.
 - c. Promote the adoption of specialization in each of the national universities, thereby avoiding duplication of efforts and facilities.
 - d. Organize and conduct ad hoc meetings with the deans or their representatives in order to prepare "Action Plans" for the development of the Faculties and Schools of Agronomy and to evaluate the progress of this agreement.
7. STRATEGY:
 - a. Appoint visiting professors (University of Puerto Rico) to work in the Central American Schools of Agronomy.
 - b. Furnish postgraduate scholarships in critical areas to Central American professors.

c. Carry out regional seminars on basic sciences and other areas of the curriculum for professors from different universities so as to regionally integrate higher agricultural education.

d. Furnish short-term advisors and consultants.

8. ACTIVITIES PROGRAMMED AND CARRIED OUT:

Even though some limitations which are mentioned further on were encountered, the following activities were carried out:

A. Seminars among Professors:

a. April 1973. Regional Seminar on Horticulture with emphasis on Olericulture. Guatemala.

b. June 1973. National short course on Agricultural Machinery. La Ceiba, Honduras.

c. October 1973. Regional Seminar on Educational Evaluation. Guatemala.

d. January 1974. Regional Seminar on Agricultural Development. San Jose, Costa Rica.

e. February 1974. Conference on agricultural production systems for the tropics. CATIE, Turrialba, C.R.

f. April 1974. Regional Seminar on Forest Sciences, CATIE, Turrialba, Costa Rica.

g. April 1974. Regional Seminar on Evaluation of Zootechnic Education. Guatemala.

h. May 1974. Regional Seminar on Insecticides, Fungicides and Herbicides. Managua, Nicaragua.

i. June 1974. Regional Seminar on Planning and Administration of Higher Agricultural Education. Guatemala.

B. Meetings of Deans and Visiting Professors:

- a. January 1973. Ad hoc meeting of Deans of Agronomy. Guatemala. Visiting Professors attended.
- b. March 1973. IX Meeting of the Permanent Commission of Higher Agricultural Education of CSUCA. San Jose, Costa Rica.
- c. June 1973. Extraordinary Meeting of the Deans of Agronomy of Central America. Guatemala.

C. University of Puerto Rico Visiting Professors:

During the reporting period the UPR furnished seven visiting professors at the Schools of Agronomy of Central America. Their specialties included horticulture, agricultural machinery, phytoecology and phytopathology.

D. Central American Professors with Scholarships Abroad

- a. During the period covered by this report, the following two professors obtained their postgraduate (Masters) degree:

From Nicaragua: Ing. José Oporta Telles in Pastures and Forage. Finished: October 1973. University of Puerto Rico.

From Costa Rica: Ing. Flérida Hernández in Experimental Designs. Postgraduate School of Chapingo, México. Finished: March 1974.

- b. Other professors who began training during the period of this report:

From Nicaragua: Ing. Frank Sequeira B. Nemathology. University of Puerto Rico. Finished: November 1974.
Ing. Rafael Blandón A. Nemathology. University of Puerto Rico. Finished: November 1974.

Ing. Aleyda Juarez Moya. Crops. University of Puerto Rico.

Ing. Miguel López G. Entomology. University of Puerto Rico.

Ing. José A. Gonzalez R. Phytopathology. University of Puerto Rico.

9. ACTIVITIES PROGRAMMED AND NOT CARRIED OUT:

Due to circumstances which came up during the development of the program, in agreement with ROCAP, the following activities were cancelled.

a. National Seminar on Agricultural Machinery which was to be held in San José, Costa Rica.

b. A Seminar on Experimental Designs was cancelled and in its place one on Planning and Administration of Higher Agricultural Education was programmed.

10. STATISTICAL SYNTHESIS:

a. List of cooperating and beneficiary institutions:

- University of Puerto Rico.
- Central American Faculties of Agronomy.
- Representatives from IICA in Central American countries.
- Del Valle University in Guatemala.
- San Carlos University in Guatemala.
- Nutrition Institute for Central America and Panama (INCAP).
- Agricultural Trade Institute (INDECA) of Guatemala.

b. Numerical Resume of Participants

b1. According to Activities and Countries

Activities	COUNTRIES						Total
	Guate.	El Salv.	Hond.	Nic.	C.R.	Others	
Horticulture Seminar	9	2	2	2	2	-	19
Agric. Machinery Course	-	-	56	-	-	-	56
Ed. Evaluation Seminar	1	2	2	2	2	-	9
Agric. Develop. Seminar	2	2	2	2	2	-	10
Produc. Systems Conf.	2	2	2	2	2	5	14
Sem. on Forestry	2	2	2	2	1	6	15
Zootechnics Seminar	2	2	2	2	2	-	10
Insecticides & Fungicides Seminar	2	2	1	5	2	1	13
Planning Seminar	2	2	2	2	2	-	10
Meetings of Deans	2	2	2	2	2	3	13
Visiting Professors	2	1	2	2	-	-	7
CA Professors with Scholarships	-	-	-	6	1	-	7
Totals	26	18	75	29	18	15	181

b2. According to type of participation

Kinds of Participants	Countries and Institutions							Total
	Guate.	El Salv.	Hond.	Nic.	C.R.	IICA	UPR	
Assistants	24	17	70	19	17	-	-	147
Transit Professors	3	-	1	-	-	-	-	4
Lecturers	4	-				10	3	17
Graduate Students	-	-		6	1	-	-	7
Visiting Professors	-	-	-	-	-	-	7	7
Organizer	-	-	-	-	-	1	-	1
Collaborator	-	-	-	1	-	-	-	1
Totals	39	17	71	26	18	11	10	184

11. FINANCING

In accordance with the clauses in the agreement, ROCAP contributed \$37,500 for the seminars, half the salary of the Coordinator appointed by IICA/ZN and the Secretarial costs for professors in transit, Dean's meetings, materials for the seminars, etc. The \$37,500 were administered by IICA/ZN.

ROCAP also contributed \$237,500 to finance visiting professors in Central America and scholarships for postgraduate studies abroad for Central American professors. This amount was administered under contract by the University of Puerto Rico.

IICA/ZN, on its part contributed half the salary of the Coordinator and the Secretary. Besides, various technicians of its professional staff had the opportunity to participate

in seminars and provided other facilities such as transportation, office material, etc.

12. ACCOMPLISHMENTS AND LIMITATIONS

Nine seminars were held in which over 90 in-service professors participated. The subjects covered were in accord with areas of study of the universities. These seminars were designed to improve higher agricultural education in the region. Records of most of the seminars were published. These records contained very useful reference material.

The professors who went abroad for postgraduate studies will strengthen the Schools of Agronomy. Their number was limited due to the financial restrictions of the beneficiary organizations.

The visiting professors who worked in the Central American faculties did an efficient job. They all were in charge of one or two curriculum courses within their specialty. Many of them planned and carried out investigation work. Others participated as advisors within the faculty. Many of them wrote manuals and compiled valuable bibliographies. Others planned laboratory programs and compiled samples of cryptogamous sicknesses. In some cases, where there was no literature available, the visiting professor prepared course material. The academic quality of the professors is unquestionable. The enthusiasm and dedication with which they worked gave them a lot of prestige. I believe that the local professors who acted as their counterpart learned a lot from the visiting professors.

In two opportunities the Deans were able to interchange ideas and experiences and also plan and implement "Action Plans" to be executed by this program. It is not often that the Deans meet, on their own account, to consider common problems.

A project for the establishment of subjects at the regional level was formulated. The distribution of these subjects was as follows:

Guatemala.....Horticulture and/or Agricultural Engineering
El Salvador....Phytoimprovement
Honduras.....Forestry
Nicaragua.....Parasitology
Costa Rica.....Agricultural Economics

The project was practically approved by the Deans but it did not prosper. It seems that besides the high investment which is needed, some of the faculties wish to strengthen the basic curriculum first and others the professional curriculum. The same is true of other units such as library, experimental stations, laboratories, etc.

With respect to the basic cycle, two seminars were held in 1972. I believe that little by little the schools have been implementing the recommendations which came out of these seminars. In some cases decisions regarding the new curriculum are of a higher level concern, i.e. decisions regarding their implementation do not depend solely upon the schools.

Before starting to describe other limitations, we wish to make known that the officials from ROCAP as well as those from the University of Puerto Rico were always open to dialogue trying to promote the development of the Schools of Agronomy in the area.

There were many limitations found and these, to a high degree, prevented the accomplishment of the anticipated objectives. A brief listing follows:

a. Most of the Schools of Agronomy do not have medium nor long-term plans for development or expansion. There are no plans for the improvement of faculty.

b. Internal problems in some of the schools, such as the case in Honduras and El Salvador, viz:

The School for Agricultural Sciences of the University of Honduras went on strike November 73. Activities started again in February 74 in Tegucigalpa and in June 74 in La Ceiba.

The University of El Salvador was intervened by the government, starting work again in July 73. The reorganization period was very slow.

c. There is a shortage of professors, consequently schools suffer if one or two professors are sent for post-graduate work for periods of one or two years.

d. The academic expectations of some of the professors who went to the University of Puerto Rico were not met and they encountered housing and financial problems.

e. Certain mobility (vertical and horizontal) of the faculties was limited.

f. The regional orientation project has not ripened. All faculties have a diversified curriculum but at a local level. There is no financing for transferring students among schools for semi-specialization courses at the undergraduate level to take advantage of the local orientations.

In resume it can be said that a lot was done but there is still a lot to be done. No doubt, the Schools of Agronomy need sustained help since we all agree that the professionals that graduate from them are essential to the rural development of the countries.

Ing. Marco Tulio Urizar
IICA/ZN Coordinator

Managua, August 1974