

MICHIGAN STATE UNIVERSITY-COLOMBIA PROJECT TERMINAL REPORT TO I.C.A.  
COVERING THE PERIOD DECEMBER 12, 1951-MARCH 31, 1959

Official Project Title:

Cooperative Program between Michigan State University, the  
Facultades de Agronomia at Palmira and Medellin, Colombia,  
South America and the International Cooperation Administration  
of the United States Government; under Contract No. TECW-13-11

Background:

In the mid-year months of 1951 the Republic of Colombia, South America requested through the Universidad Nacional de Colombia assistance of the Government of the United States to assist in a cooperative program to strengthen agricultural education at the two Colleges of Agriculture in Palmira and Medellin, Colombia. Subsequently the Government of the United States entered into a contract with Michigan State University, 12 December 1951, to provide the desired technical assistance in cooperation with the Universidad Nacional de Colombia. The contract provided for the training of selected Colombian personnel of the two Colleges of Agriculture at Michigan State University in East Lansing, Michigan, and for assigning Michigan professors to work at the Colombian Colleges.

Objectives:

The initial objective was to improve the instructional programs in agriculture at Palmira and Medellin and develop training in forestry at Medellin.

In 1951 most of the professors at these Colombian colleges were part-time teachers with very little technical agricultural training. The instruction emphasized mathematics and chemistry, botany, entomology and plant pathology with a minimum of applied agricultural technology. There was almost no field or laboratory experience in practical agriculture. The part time faculty was concerned almost solely with teaching regular students and had little interest in being of service to farm people, a basic concept of the American Land Grant College system. Practically no research or extension work was being carried

on by either College and the people of Colombia generally did not recognize the need for agricultural education. The Colleges of Agriculture thus had difficulty attracting higher quality students and in obtaining even minimum financial support.

In this setting, the responsible leadership at the Colombian Colleges and Michigan State University decided that the improvement of instruction was a logical starting point in this joint effort, the broader objective being to guide the development of the Colombian colleges at Medellin and Palmira so that they might provide the leadership and stimulation essential to agricultural progress comparable to the role played by the Land Grant Colleges in the United States. Periodic review of the objectives thus broadened the project to include emphasis on short courses for farmers, practical field demonstrations in addition to continually revising, expanding and improving courses of instruction in technical agriculture and forestry.

Operational Philosophy:

The basic philosophy guiding Michigan State University in this cooperative project was that of working within the framework of the Colombian Colleges in an advisory capacity. At times, progress might have been faster if Michigan State personnel had directly undertaken to carry on various aspects of the program rather than working through their Colombian counter-parts and within the administrative and budgetary restrictions of the Colleges. But, it was our belief that only by building the Colleges as responsible institutions and by training Colombian personnel to carry on the program, could progress be sustained over time. This conviction in relation to technical assistance efforts of the United States is even stronger, today, after seven years experience in working with the Colombian Colleges of Agriculture.

## ACCOMPLISHMENTS

Land Grant College Philosophy

Together the Colombian Colleges of Agriculture and Michigan State University have come a long way in a relatively short time toward meeting the broad objective of the cooperative project. However, it must be realized that education is a slow process, as it deals with not only the acquisition of knowledge and skill but changes in cultural values, traditions and attitudes. One of the more important results of this cooperative relationship has been the change of attitude on the part of faculty members with regard to their responsibility to the people other than students. The appreciation of practical experience in training, the values and dignity of being able to do things, as a prerequisite to telling others how, and a recognition of the problem-solving approach to education have been accepted.

In addition, throughout agricultural and educational circles in Colombia there has come about in the last 5 or 6 years a much greater appreciation of the need to relate teaching, research and extension work. Both at Palmira and Medellin the Colleges are working more closely with the agricultural experiment stations and the several extension services of the country.

Prestige of Agricultural Education

Significant, above many of the tangible accomplishments of this cooperative endeavor has been the growing prestige of the two Colleges of Agriculture among the Colombian people themselves. In the relatively short period of seven years the demand for students trained at the Colleges has steadily increased until last year there were at least two employment opportunities for each graduate. Earlier it was most difficult to find professional employment for the graduating students. Both private industry

and government now realize the contribution graduate agriculturalists can make. This is in part due to changes made in the nature and quality of training provided by the Colleges. The association of the Colleges with Michigan State University has also added an international stature that has helped attract higher quality high school students in ever-increasing numbers. These and other developments in the country are bringing about important changes.

### Curricula and Courses

During the first two years of this project the chief attention and interest of the Michigan State University technical advisors was directed toward course revision and staff training in instruction. At both Colleges the courses in Animal Husbandry, Agricultural Engineering and Soil Science were completely revised adding emphasis on practical laboratory and field experiences. At Medellin new courses in forestry were developed. Lecture by lecture, Michigan State University professors and their counterparts incorporated the latest research findings from Colombia, other Latin American and European countries and the United States. Selected Colombian professors were sent to Michigan State University for formal study returning to work closely with Michigan State University professors on the job.

Later new courses were added and others revised in Agricultural Economics at Palmira; as well as in Farm Crops at both Colleges, as Colombian Professors were trained to teach them with the aid of experienced Michigan State University staff members. In total, over 28 required and elective courses were developed or completely revised. Many of these were re-worked to incorporate new materials or laboratory-field experiences three and four times in the continuous process of improving courses of instruction.

Without question the quality of classroom teaching now given students at both Colleges is as good, if not better, than in any other Latin American College and comparable in many fields to Agricultural Colleges in the United States.

### Student Enrollment

The regular college student enrollments more than doubled during the period of cooperation with Michigan State University as shown in Table 1.

Table 1  
Student Enrollment

Year	No. Students at Palmira	No. Students at Medellin	Total Enrollment
1952	91	94	185
1953	83	105	188
1954	87	117	204
1955	85	114	199
1956	135	157	292
1957	142	173	315
1958	227	222	449

The rate of growth is highly significant even though in absolute number the enrollments are still low. Pertinent to understanding this is (1) the science of agriculture and the profession of agriculture and forestry in Colombia are in their infancy, (2) public education in Colombia is limited. In the entire country of some 13 million people there are only 8,000 high school graduates each year eligible for University or College entrance.

### Short Courses

One of the most far reaching developments of this cooperative effort was the introduction of practical short courses for non-degree students by

the two Colleges of Agriculture. Over 30 special short courses of from three weeks to six months were conducted from 1954 to 1958 with an enrollment of over 650 trainees. They were farmers, machinery dealers, dairy plant technicians, public health workers, farm managers, tractor drivers, extension workers, land owners, livestock dealers, etc.

It is difficult to single out any one of these short courses as being more significant than others but for illustration the training given some 70 technicians and dairy plant operators throughout the country has had far reaching effects in the field of human health. The dairy plant management and sanitation short courses have resulted in a much higher quality and standard of cleanliness for dairy products available to the people of Colombia.

Through short courses of this type offered by the Colleges much has been and can be done to improve agricultural practices. The idea of this type of training for those not attending College is new to the faculty but has gradually been accepted as a College responsibility. It has also been enthusiastically received by many groups of people interested in learning how to apply agricultural technology to their every day problems.

It is of utmost importance to Colombian agricultural development that adequate means of financing a greatly expanded short course program through the Colleges be found.

#### Crops and Livestock Field Demonstrations

Particularly, in the last two years with the financial help of a supplemental contract between Michigan State University and the U. S. Department of Agriculture under Public Law 480 extensive roughage crop and livestock demonstrations were conducted by the Colleges to demonstrate the

benefits of proper nutrition of livestock and poultry. Through these demonstrations the Colombian staff and the advanced students received valuable experience in conducting work of an experimental nature. The enthusiastic support given these demonstrations by farmers proved the value of this type of work in building support for the institutions. More and more people as a result are looking to the colleges for agricultural leadership and technical assistance.

Growing out of these demonstrations, thirteen farmer bulletins were prepared by the Michigan State University technical advisors and published for public distribution. They covered poultry, swine, beef cattle and dairy feeding and management as well as forage crops, variety and soil management recommendations. The titles of these bulletins now available for distribution from the Colleges are:

1. Conserve el Color de la Yema Con Forrajes Nativos.
2. Alimentacion de Cerdos.
3. Ceba Intensiva del Ganado.
4. Por Que Tener Cerdos Atrasados?
5. La Relacion Entre La Infestacion de "Nuche" y Los Factores de Produccion en Ganado de Carne.
6. Mas Proteinas Con el Uso de Alfalfa y Kudzu Tropical.
7. Mejor Forraje Con Pasto Buffel.
8. Sorgo y Sudan, Buenos Pastos de Corte.
9. Mas Leche...y Mas Sana.
10. La Alimentacion de Gallinas Ponedoras.
11. Alimentacion de Pollos "Broilers"
12. Alimentacion de Cerdos.
13. Alimentos Concentrados Para Vacas de Leche.

Also, field days were sponsored bringing large numbers of farmers to the campuses of the Colleges. As a result, people were encouraged to adopt many improved farming practices. While this type of extension activity is common on Land Grant Colleges in the United States, it was an innovation for the Colombian colleges. Their success should encourage an expansion of this type of activity in the years ahead.

### Technical Consultation

In addition to helping the Colleges develop the teaching, short course and demonstrations program, many of the Michigan State University professors (because of their international reputation) served as informal consultants to individual farmers, agricultural industry and various organizations as well as governmental agencies. In so doing they involved their Colombian counterparts and the College administration. It is estimated that over 600 different Colombian farmers were provided individual technical advice. The livestock breed association was particularly appreciative of the help given them.

A special research and demonstration project carried on in cooperation with the Dow Chemical Company on the control of the Torsola fly, or nuche insect, received widespread attention.

### Staff Development - Scholarship Program

The primary cooperative effort of Michigan State has been to train the Colombian faculty. The plan developed to do this most effectively involved the on-the-job working experience with Michigan State University professors as well as formal graduate training on the East Lansing campus. Both have proven effective and the combination of the two types of training superior to either alone.

The following Colombian Professors and students considered candidates for staff positions received intensive graduate study at Michigan State University.



Professors and Students from Colombia, South America Who Studied at  
Michigan State University Under This Project

Name	Major Field of Study	College	Dates at M.S.U.
Mario Gonzalez	An. Hub.	Palmira	8/1/52 - 7/31/53
Javier Gomez	Forestry	Medellin	1/1/53 - 12/31/53
Jaime Guardiola	Ag. Eng.	Medellin	1/1/53 - 12/31/53
Jose Herrera	Ag. Eng.	Palmira	1/1/53 - 12/31/53
Samuel Posada	An. Hub.	Medellin	1/1/53 - 12/31/53
Emilio Ramirez	Soils	Medellin	1/1/53 - 12/31/53
Alberto Sanchez	Hort.	Palmira	1/1/53 - 12/31/53
Ricardo Alvarez	Ag. Eng.	Medellin	1/1/54 - 12/31/54
Jairo Alviar	Forestry	Medellin	1/1/54 - 2/28/55
Humberto Arango	An Hub.	Palmira	8/1/53 - 7/31/54
Jairo Correa	Dairy	Medellin	1/1/54 - 12/31/54
Alvaro Posada	Soils	Palmira	4/15/53 - 4/15/54
Alberto Betancourt	An. Hub.	Palmira	3/30/53 - 6/54
Marco Ramirez	Ag. Eng.	Palmira	6/12/54 - 6/12/55
Luis Correa, V.	Plant Path.	Medellin	1/1/54 - 12/31/54
Adel Gonzalez	Soils	Palmira	9/1/54 - 9/1/55
Miss Carolina Gutierrez	Home Econ.	Palmira	9/1/54 - 8/31/55
Ernesto Villegas	Farm Crops	Palmira	9/1/54 - 8/31/55
Alberto Cardenas	Ag. Econ.	Medellin	1/1/55 - 12/31/55
Gustavo Velez	An. Hub.	Medellin	1/1/55 - 12/31/55
Nelson Delgado	Entomology	Medellin	1/1/55 - 6/30/55
Jesus Villa	Ag. Eng.	Medellin	6/28/55 - 12/28/55

Name	Major Field of Study	College	Dates at M.S.U.
Camilio Azcarate	Dairy	Palmira	3/29/55 - 6/55
Adalberto Figueroa	Entomology	Palmira	1/1/56 - 12/31/56
Oscar Ospina	Soils	Medellin	4/1/56 - 6/30/57
Gonzalo Quintero	Dairy	Medellin	4/1/56 - 3/30/57
Rafael Bravo	Soils	Palmira	1954
Millan Gutierrez	Forestry	Medellin	1/1/57 - 12/14/57
Alfredo Carrasco	Ag. Econ.	Palmira	9/15/56 - 8/15/57
Miss Carmen Llanos	Plant Path.	Palmira	6/1/57 -
Luiz Florez	Ag. Econ.	Medellin	9/1/57 -

While not all of these persons joined the teaching staffs upon their return to Colombia, they make up a well trained core of men and women capable of contributing to the agricultural development of their country.

Among those who have returned to the teaching staffs and worked closely with their American counterparts are men now recognized as national authorities in their fields. They should continue to provide Colombian agriculture the kinds of leadership so badly needed. Michigan State University is proud to have had a part in their training.

#### Facilities

During the last seven years the physical plants at both Colleges have been greatly improved for instruction in agriculture. With the assistance of the Kellogg Foundation a new dormitory and conference center has been constructed at Palmira, new agricultural engineering buildings with equipment have been completed at each College, a dairy and swine herd, poultry

flock, water purification plant and milk processing plant have been added at Medellin. Assistance has also been rendered to improve library and laboratory facilities by the Rockefeller Foundation and an additional 2½ million peso building program is now being planned by the National University at the two Agricultural Colleges. The planning and development of these facilities has been made in close cooperation with Michigan State University personnel.

### College Budgets

The following tables show the local financial condition of the two Colombian Colleges from 1952 through 1959.

Facultad Budget at Palmira by Years - (In Thousands of Pesos)

Year	From National University	Other Sources	Total
1952	241	5	246
1953	250	5	290
1954	370	200	570
1955	374	252	626
1956	426	240	666
1957	445	150	595
1958	772	50	822
1959	876	210	1086

Facultad Budget at Medellin by Years - (In Thousands of Pesos)

Year	From National University	Other Sources	Total
1952	308	46	354
1953	326	52	378
1954	421	14	435
1955	465	206	671
1956	483	319	802
1957	420	321	741
1958	580	200	780
1959	940	230	1170

The real significance of these figures is the increase in financial support to the Colleges from the National University and other sources. However, insufficient money has been and continues to be a serious problem in the development of the Colleges, particularly as it relates to staff salaries. There have been many proposals to correct this situation and the 1959 budget is encouraging. Progress has and is being made in mobilizing local support of agricultural interests in behalf of the Colleges which should over time result in more adequately providing a realistic budget in relation to the total job to be done in agricultural development by the Colleges.

The possibilities of obtaining increased funds, particularly, from the Ministry of Agriculture and the Departamentos is encouraging.

#### College Organization

At both Medellin and Palmira the College departments of Soil Science, Farm Crops, Animal Husbandry and Agricultural Engineering have been greatly strengthened, new departments of Agricultural Economics developed and the Instituto de Forestal created at Medellin, to train Colombian Foresters so badly needed to develop the vast forest resources both for domestic consumption and as the basis for an export trade with the United States and other countries. Organizationally the Colleges are now equipped to expand their services to more students and in the fields of extension and research. There is now a nucleus around which to build for the future, a course of development planned. These are going institutions, staffed and under the guidance of Colombians that can and will function without outside assistance. An artificial structure that will topple when United States technical assistance is withdrawn has not been created. Michigan

State University is particularly proud of this accomplishment of the Colombian Colleges. It has been a mutually beneficial experience enriching our own institution as well as theirs.

#### Michigan State Personnel

Contributing to the success of this project has been 25 of Michigan State University's best qualified professors who have each, with their families, lived in Colombia two years or more. In addition, six University administrators have contributed their time and talent to the project for significant periods.

A list of this staff is included here in recognition of their personal part and for future reference.

#### Technical Advisors from Michigan State University assigned to MEDELLIN South America

Name	Dates	Major Field	Address as of March 1959
Herbert, Paul A.	Dec. 1, 1951 Feb. 28, 1952	Forestry	362 Wildwood, East Lansing
Bailey, Murrell L.	Jan. 1, 1952 July 31, 1953	Ag. Eng.	215 Kedzie Dr., East Lansing
Mausteller, John E.	Jan. 1, 1952 Jan. 15, 1954	Forestry	220 Centerlawn, E. Lansing
Robertson, Lynn S.	Jan. 1, 1952 July 31, 1953	Soils	1134 Marigold, E. Lansing
Snyder, Woodrow W.	Jan. 1, 1952 July 31, 1953	An. Hub.	1522 Melrose, E. Lansing
Braamse, Leonard J.	June 1, 1953 June 30, 1955	Soils	436 Grove St., E. Lansing
Johnson, John D.	June 1, 1953 June 30, 1955	An. Hub.	R. #3, Charlotte, Mich.

Name	Dates	Major Field	Address as of March 1959
Swanson, Lewis E.	June 1, 1953 Jan. 1959	Ag. Eng.	c/o Claridge Hotel, 820 Connecticut Ave., N.W., Washington, D.C.
Freeland, F. Dean	July 1, 1954 July 15, 1956	Forestry	4323 Greenwood Dr., Okemos
Pettigrove, Herbert R.	June 1, 1955 May 31, 1957	Crops	314 Turner Rd., Williamston
Weaver, Earl	July 1, 1955 March 1959	An. Hub.	803 Cherry Lane, E. Lansing
Gaskins, Wayne	Aug. 16, 1956 Dec. 1958	Forestry	c/o Western Forest Industries Ass'n., 526 Henry Bldg., 309 SW 4th Ave., Portland, Oregon

Technical Advisors from Michigan State University  
assigned to PALMIRA  
South America

Name	Dates	Major Field	Address as of October 1957
Farwell, Elwin D.	Jan. 1, 1952 Dec. 31, 1952	An. Hub.	209 Fairlawn Dr., Berkeley 8, Calif.
Hansen, Clarence M.	Jan. 1, 1952 Dec. 31, 1952	Ag. Eng.	211 Elvin Ct., Lansing
Willits, Nathan A.	Jan. 1, 1952 July 31, 1953	Soils	Soils Dept., Rutgers Univ., New Brunswick, New Jersey
Fisch, Harrison C.	Jan. 1, 1953 May 31, 1955	Ag. Eng.	Gaza, Iowa
Freeman, Verne A.	Jan. 1, 1953 Jan. 31, 1955	An. Hub.	806 Coolidge Rd., E. Lansing
Hough, Hugh W.	June 1, 1953 June 30, 1955	Soils	Agronomy Dept., U. Of Wyoming, Laramie, Wyoming
Sheppard, Charles C.	Jan. 1, 1955 Dec. 31, 1956	An. Hub.	1365 Haslett Rd., Haslett, Mich.

Name	Dates	Major Field	Address as of October 1957
Trant, Gerald I.	June 1, 1955 June 16, 1957	Ag. Econ.	1403 Spartan Village, Apt. B, E. Lansing
Smith, Chauncey W.	June 1, 1955 Mar. 31, 1956	Ag. Eng.	139 Kedzie Dr., E. Lansing
Albrecht, Carl	July 1, 1956 Dec. 31, 1958	Ag. Eng.	418 LaSalle Blvd., Lansing
Newland, Herman W.	April 1, 1957 Mar. 31, 1959	An. Hub.	
Kyle, Leonard	Aug. 26, 1957 Mar. 31, 1959	Ag. Econ.	2340 Shaunee Trail, Okemos, Mich.
Lawton, Kirkpatrick	Aug. 26, 1957 March 31, 1959	Soil Sci.	1403D Spartan Village, East Lansing, Mich.

Short Time Consultants and Supervisory Personnel  
Serving the Colombia Project from Michigan State University

E. L. Anthony, Dean of Agriculture Emeritus  
T. K. Cowden, Dean of Agriculture  
Glen Taggart, Dean of Foreign Affairs  
P. A. Herbert, Director, Division of Conservation and Natural  
Resources (retired)  
J. T. Stone, Professor, Agricultural Administration; Project Administrator

Good Will and the Future

These accomplishments of the cooperative project between Michigan State University and the Colleges of Agriculture at Medellin and Palmira have come about only as a result of the efforts of many individuals, Americans and Colombians, working together on a great variety of specific activities.

These are reported in detail in the July 1, 1958 - March 31, 1959 supplement to this report and in the annual project reports previously submitted.

The bonds of personal and professional friendships developed are in some ways as important as the specific activities and accomplishments. They are not reported by the staff. Friendship and understanding between peoples of two countries are intangible, yet, in the long run extremely important. It is out of these kinds of relationships that international trust, respect and peace are fabricated.

Through this cooperative project an immeasurable quantity of good will between agricultural leaders of our two countries has resulted, more than justifying the public expenditure of money in these troubled times of world misunderstanding. Even though the International Cooperation Administration of the United States Government will no longer be financing this particular project - a continuing cooperative relationship between Michigan State University and the Colleges of Agriculture at Medellin and Palmira of the Universidad Nacional de Colombia will continue with the assistance of the W. K. Kellogg Foundation.



Project Budget Summary

## MICHIGAN STATE UNIVERSITY

International Cooperation Administration - Colombia  
Expenditures for December 1, 1951 thru April 21, 1959

	Contract SCC-14538 12/1/51-8/31/53	Expended 9/1/53- 12/31/58	Expended 1/1/59- 4/21/59	Totals
Salaries	\$ 99,749.67	\$348,308.74	\$ 15,911.68	\$463,970.09
Transportation	29,079.91	36,622.16	7,729.70	73,431.77
House Rental	16,610.46	52,089.99	1,684.05	70,384.50
Cost of Living	11,518.63	32,988.15	1,114.34	45,621.12
Freight Furniture, etc.	31,304.67	29,882.82	3,326.53	64,514.02
Temporary Cost of Hotel	3,840.91	3,093.49	0	6,934.40
Other Miscellaneous	2,797.59	14,390.69	766.96	17,955.24
Overhead	20,677.98	83,333.57	2,836.88	106,848.43
Student Fees, Maint., Travel, etc.	<u>11,877.95</u>	<u>52,494.00</u>	<u>0</u>	<u>64,371.95</u>
	<u>\$227,457.77</u>	<u>\$653,203.61</u>	<u>\$33,370.14</u>	<u>\$914,031.52</u>

Note: Expenditures for the period January 1, 1959 to April 21, 1959 do not include final costs on the contract. It is anticipated there will be additional charges and adjustments for disallowances not removed from the expenditures. Final accounting to be made at later date.