AIDGRAM

DEPARTMENT OF STATE 2555 Proj. No ~~5980 542~~ PN

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TO - AIDTO CIRCULAR A 2555

PD-AAB-544-B1

598-15-110-541

13p.

DATE SENT
11/19/70

FROM - AID/Washington

SUBJECT - Castelar Agricultural Graduate School

REFERENCE -

ATT:

1. Attached is a PROP for a regional project of assistance to the Castelar Graduate School. As you can see, the purpose of the project is to equip this institution over the next five years with a sufficiently broad curriculum and trained faculty to permit it to cover a broad range of agricultural science at the graduate level, including animal production, agricultural economics, soil science, plant production, agricultural extension, food inspection, and animal pathology.

2. The institution is intended to be regional in character so that by 1976 50% of the student body of 100 would be from countries other than Argentina.

3. AID/W has approved the PROP for FY-1971 funding. Before considering life-of-project approval, we would appreciate having the addressee Missions comments on the PROP and on the following points:

a) Is such a regional institution at the graduate level in agriculture really needed by these countries? How many graduate students per year will your country probably send to Castelar during 1971, 1972, 1973, 1974, 1975 and 1976?

b) How will these students be sponsored--privately, through government, etc.?

c) Where do students from your country now get their graduate training in agriculture? Are they likely to change to Castelar and, if so, why?

PAGE 1 OF PAGES 2

DRAFTED BY	OFFICE	PHONE NO.	DATE	APPROVED BY:
AMHughes:pga	LA/OPNS	29882	10-29-70	LA/DP:JIHeller

AID AND OTHER CLEARANCES
LA/APU/A:PSmith
LA/DR:DPeacock
LA/DP:CJohnson
LA/DP:RDelaney

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AID-5-89 (11-69) (Do not type below this line) PRINTED 6-69

d) This project will require a fair amount of AID funding. How high from the standpoint of your priorities within your country program would you rate Castelar as a service to agricultural development within your country? What is the reputation of the sponsors of Castelar -- University of Buenos Aires, National University, the National University of La Plata, Institute of Agricultural Technology (INTA) and the Inter-American Institute of Agricultural Sciences (IIAS) -- within your country? What seems to be the general assessment of Castelar's first three years of operation? Are people inclined to believe that Castelar will develop into an excellent, good, mediocre or poor Graduate School. What is the basis of their expectations?

e) Castelar serves a secondary purpose of being a first step towards regional integration. Would appreciate your evaluation of how important you think this step will be in terms of economic and technical relationships between countries in the southern area;

f) For USAID/Argentina: Restrictions on funding make it highly unlikely that the project can be funded in the amounts shown in the PROP. Would appreciate your analysis of how the following funding schedule would affect achievement of project outputs and purpose:

FY 71	$170,000
FY 72	$485,000
FY 73	$480,000
FY 74	$215,000
FY 75	$160,000

Also you are requested to prepare in conjunction with Castelar a detailed plan showing exactly how Castelar will become an increasingly regional - as apposed to national - institution and in particular how the student composition will attain a mix of 50% Argentine and 50% non-Argentine.

ROGERS

Attachment

CABLEROOM SEND TO:

Uruguay	Chile
Paraguay	Bolivia
Argentina	Peru
MONTEVIDEO	SANTIAGO
ASUNCION	LA PAZ
BUENOS AIRES	LIMA

Montevideo
Asuncion
Buenos Aires
Santiago
La Paz
Lima

AID 1020-24 (10-69)

AGENCY FOR INTERNATIONAL DEVELOPMENT (A.I.D.)

A.I.D. Reference Center Room 1656 NS

PROJECT AUTHORIZATION

1. PROJECT NUMBER	3. COUNTRY	4. AUTHORIZATION NUMBER
598-15-110-541	Regional	

2. PROJECT TITLE	5. AUTHORIZATION DATE
Graduate Level Training in Agricultural Sciences Castelar Graduate School	October 1, 1970
	6. PROP DATED September, 1970

7. LIFE OF PROJECT

a. Number of Years of Funding: 5
Starting FY 19 71; Terminal FY 19 76

b. Estimated Duration of Physical Work After Last Year of Funding (in Months): None

8. FUNDING BY FISCAL YEAR (in U.S. $ or $ equivalent)

	DOLLARS		P.L. 480	LOCAL CURRENCY Exchange Rate: $1 = U.S. OWNED		HOST COUNTRY	
	GRANT	LOAN	CCC + FREIGHT	GRANT	LOAN	JOINTLY PROGRAMMED	OTHER
Prior through Actual FY	--	--					
Operational FY		--					
Budget FY 71	200,000						
B + 1 FY	744,000						
B + 2 FY	665,000						
B + 3 FY	366,000						
All Subsequent FY's	170,000						
TOTAL	$ 2,160,000					$2,709,500	

9. DESCRIBE SPECIAL FUNDING CONDITIONS OR RECOMMENDATIONS FOR IMPLEMENTATION, AND LIST KINDS AND QUANTITIES OF ANY P.L. 480 COMMODITIES

10. CONDITIONS OF APPROVAL OF PROJECT

Funding is approved for FY 71. Life-of-project approval will be determined after additional information has been received from the Missions concerned to permit clarification of several questions (the precise need for a graduate-level agricultural institution in the southern zone of South America, the number of students likely to be sent to such an institution, etc.). In addition, LA/DR will request Castelar to prepare a detailed plan showing exactly how Castelar will become an increasingly regional institution and in particular how the student composition will reach a mix of 50% Argentine, 50% non-Argentine. This plan will then become part of the PROP.

(Use continuation sheet if necessary)

11. Approved in substance for the life of the project as described in the PROP, subject to the conditions cited in Block 10 above, and the availability of funds. Detailed planning with cooperating country and drafting of implementation documents is authorized.

This authorization is contingent upon timely completion of the self-help and other conditions listed in the PROP or attached thereto.

This authorization will be reviewed at such time as the objectives, scope and nature of the project and/or the magnitudes and scheduling of any inputs or outputs deviate so significantly from the project as originally authorized as to warrant submission of a new or revised PROP.

A.I.D. APPROVAL	CLEARANCES	DATE
	[signature]	Oct 1-1970
	ARA-LA/ARD P.D. Sm 4	10/9/70
SIGNATURE	LA/DR [signature]	10/9/70
AA/ TITLE DATE	A/CONT	

A.I.D.
Reference Center
Room 1656 NS

NON-CAPITAL PROJECT PAPER
(PROP)

598-15-110-541

Country: Regional Project No.:

Submission Date: September, 1970 Original - X

Project Title: Graduate Level Training in Agricultural Sciences
Castelar Graduate School

U.S. Obligation Span: FY 1971 through FY 1976

Physical Implementation Span: FY 1971 through FY 1976

Gross Life of Project Financial Requirements:

U.S. Dollars -	$2,160,000
Argentine institutions cash contributions	$2,709,500
Other Contributions:	
Multinational Programs of OAS	$ 60,000
Ford Foundation	$ 110,000
Institute of Inter-American Agricultural Science (Turrialba)	$ 200,000
	$5,239,500

largest contrib.

not very large.

Viability

A. Summary Description of Project

a) Project Justification:

Modern technically oriented agriculture requires trained scientists ~~to provide technical direction for the orientation and direction of agricultural improvement~~. The number of trained agriculturists in most Latin American countries is far below that found in more advanced countries. The ratio of university level trained people in agriculture working with agricultural producers in Latin America is estimated to be only one to 2,000 producers.

Need: has it been determined [illegible]

In addition to the quantity of trained people available, the level and quality of training becomes increasingly more important as agriculture becomes more technically sophisticated and world food needs increase. Argentina has long recognized this need. During the period 1957-1969 the National Institute of Agricultural Technology (INTA) sent 153 technicians

Or is it generally [illegible] corroborated?

to foreign institutions for training at the graduate school level. Those who have now returned include 18 men at the Ph.D. level - 130 at the M.S. level and 5 with diplomas of the 3rd cycle from France. These men are all now working in agricultural research, extension and teaching in Argentine institutions. These figures compare with only five people with advanced Agricultural degrees in Argentina in 1957. Many more need to be trained not only to serve Argentine agriculture but also agriculture in other Latin American countries. This need has also been recognized by the Ford Foundation who have sponsored 40 selected Argentines to be trained at U.S. institutions at the Ph.D. level in Agricultural Economics. Foreign training for students is expensive and many times the degree of success is limited by language ability of the participants. Indeed, the lack of English often prevents the selection of some of the best candidates for advanced training. Various Latin American conferences have recommended the need to stimulate training at the graduate level throughout the continent. In 1966 the directing council of the Inter-American Institute of Agricultural Sciences at Turrialba, Costa Rica, recommended the development of a graduate program in Argentina to be open to students from all countries but especially from the Southern Cone area. This decision was based upon the availability in Argentina of a physical plant and trained people to conduct such courses.

As a result of this decision an agreement was reached in June of 1967 to establish this institution at Castelar near Buenos Aires in Argentina. The agreement was between the University of Buenos Aires, the National University of La Plata, the National Institute of Agricultural Technology (INTA) and the Inter-American Institute of Agricultural Sciences (IIAS). The above institutions agreed to jointly sponsor the Castelar Agricultural Graduate school. A basic agreement was reached as to the administration and organization of the school. The institution is now functioning and this project will furnish necessary technical and other assistance to complement that now being given by other institutions. (See attachments one and two for project agreement and regulations of the institution).

The need for a regional graduate level institution has been recognized by the neighboring countries. There were applicants from 16 students for the second program in animal production leading to the M.S. degree. These included applicants from Chile, Bolivia, Peru, Paraguay, Brazil and Uruguay. Six of those students have been selected and will receive OAS scholarships. There have also been many applicants from other countries for the second program leading to a M.S. in Agricultural Economics. USAID/Uruguay will sponsor one student from that country. The PROP for Agriculture Production and Marketing from Uruguay has pointed out the need for graduate level training. The Mission Director has indicated that the graduate school at Castelar will be used as much as possible for this training. USAID/Bolivia had three candidates for this second program in agricultural economics that were nominated. One student will attend this program from Guatemala. In addition, there has been close contact with the College of Agriculture in Paraguay. The dean of that institution has expressed his interest in the Castelar Agriculture Graduate School as a means of improving the training of his staff.

What is breakdown between Arg. & non-Arg. students

What would will happen if AID does not provide any assistance.

b) Planned Inputs: FY 1971 through FY 1975

This project will permit AID/W to contract with a U.S. university or several universities to provide technical expertise to help conduct the following graduate programs leading to an M.S. degree in Agriculture.

Why can't Argentina provide all funds for Castelar as a recently approved nation? Argentina is not lacking for public revenues.

Name of Course	Total Man/months Needed for Course	Amount to be Provided Under This Project
Animal Production*	380	30
Agricultural Economics*	332	55
Soil Science*	300	100
Plant Production*	300	100
Agricultural Extension*	180	45
Veterinarian Training (1) (Food Inspection)	90	15
Animal Pathology (1)	90	20

*These programs to be offered each year
(1) These programs to be given only once during the life of project
(See attachments 3 and 4 for man power needs and scheduling)

In addition to the technicians to be provided as indicated above, scholarships will be provided to 16 superior students to be selected for advanced training at the Ph.D. level in the U.S. after completion of the Masters program in Argentina. Some equipment and teaching aids will also be required.

Item	Cost
365 man months of technical assistance	$1,460,000
366 months of Ph.D. level training at U.S. institutions	430,000
Short-term training and orientation trips to U.S. by key faculty members	50,000
Equipment for teaching, research and support for technicians	170,000
Other costs (to include pre contract visits by university representatives	50,000
	$2,160,000

Fiscal Years	Total ($000)	Cont[1]/	Personnel Serv. AID	Personnel Serv. PASA	Personnel Serv. CON	Participants U.S. Agencies	Participants CONT	Commodities Dir & U.S. Ag	Commodities CONT	Other Costs Dir & U.S. Ag	Other Costs CONT
Prior years	0		0	0	0	0	0		0		0
FY 71	200	200	0	0	144	0	10		20		26
FY 72	759	759	0	0	476	0	175		100		8
FY 73	665	665	0	0	472	0	165		20		8
FY 74	366	366	0	0	212	0	130		20		4
FY 75	170	170	0	0	156	0			10		4
Total life	2,160		0	0	1,460	0	480		170		50

c) Setting

Agricultural production both for domestic consumption and for export is extremely important to the Southern Cone countries of Latin America that will be most directly served by this project. Agricultural products account for approximately 90% of the foreign exchange earnings of Argentina. The Paraguayan, Uruguayan, and Brazilian economies are also heavily oriented toward the agricultural sector. The countries of Latin America have been able to increase their total agricultural production during the last decade but per capita production has decreased. It is predicted that this situation will become even more critical during the present decade.

Modern agriculture requires highly skilled technicians. Technicians to carry out research, to teach, to work in extension programs, to develop economic planning and all the other factors vital to increased agricultural production. The Latin American countries have been slow to develop specialized and graduate training in agriculture. It is only in very recent years that there has been some specialization at the under-graduate level in some Latin American universities. The net result has been that most graduates have been generalists and only through years of work experience have they been able to become specialists and therefore more capable of solving complex problems. The exception has been those who were sent abroad for advanced training or who followed one of the local graduate courses that have been offered at some institutes on a sporadic basis.

The case for improvements in agricultural education in Latin America was highlighted in a 1965 report "Agriculture and the University" published by the Council on Higher Education in the American Republics. This report states that in 1964 the total number of agricultural graduates in Latin America was only 1100. The total number of graduates from U.S. agricultural colleges and universities in the same year was over six times as large. The report also pointed out the total land area of Latin America is about two and one-half times as large as the U.S. and at that time 50% of the population of 215 million people in L.A. were engaged in agriculture compared to 10% of the then 186 million living in the U.S.

The report also points out the poor level of preparation of many of the graduates of the L.A. institutions. It makes a strong case for the support of institutions such as the Castelar Graduate School.

As mentioned above, Argentina, during the last decade, has realized the importance of advanced and specialized training. INTA, which was formed in 1957, established a training center at the National Agricultural Experiment station located at Castelar outside of Buenos Aires. This training center was established in 1961 and during the six year period until the Graduate School was established, there were 55 non-degree courses for specialized disciplines given. INTA is the organization in Argentina responsible for agricultural research and extension. They are the largest employer of agricultural graduates and have long realized the need for specialized and graduate training in order to have more effective technicians. This organization is semi-autonomous and is financed by a 1 1/2% tax on all agricultural exports.

The national agricultural experiment station of INTA carries out specialized research projects as well as research projects that have a national application. There are over 15 groups dealing with everything from animal pathology to plant breeding. USAID/Argentina loaned INTA $1,400,000 for the construction of a new virus disease laboratory and meat technology laboratory to supplement existing facilities. INTA has constructed classrooms and office buildings for the graduate school. A recent IDB loan will be partially used for the construction of a central library building and a computer center. All of these facilities are available for the use of the graduate students. The technicians at the station, in addition to their research obligations, also assist with teaching and assist the students with their individual research problems.

In addition, INTA has 30 major agricultural experiment stations with over 100 technicians located throughout the country. These stations and technicians are also a key factor in the graduate program. They assist both with the teaching role and directing the research programs of the graduate school. For example, the Balcarce experiment station which is the major station in the country dealing with livestock problems, is the physical location of the Animal Production course.

The diversity of the geographical areas of Argentina allows a graduate student to do his thesis on almost any problem of special interest to him.

It is a fact that 80% of the total agricultural product of Argentina is produced in the temperate zone of the "pampa" area. However, a graduate student will be able to do his research work on practically any problem from sheep raising in the Patagonia area to semi-tropical agriculture, such as sugar cane or cotton production, in the north. The possibility also exists for the graduate student to do his research and write his thesis in his own country. This was the case of one of the Brazilian students in the first Agricultural Economics program who has received his M.S. based on research work done in Brazil after the course work at Castelar. A Paraguayan student in the first Animal Production program also considered using data generated under the old Servicio program at Estancia Barrerito in Paraguay. The proximity of Argentina to the other Southern Cone countries will make it possible and practical for many of the non-Argentine students in the future to do their research work in their home countries. This idea is being stressed by the Academic Council of the Graduate School.

In addition to the formal training that will be received at the Castelar Graduate School, it is expected that non-Argentine students will develop a continuing relationship with Argentine institutions. This relationship will help develop a bridge between the various countries involved and the exchange of technical information. The present lack of interchange of knowledge creates many cases of duplication in research efforts in agriculture. Many L.A. countries look only to the U.S. and other more advanced countries for technical information where more appropriate information might be available in a neighboring country.

Argentina traditionally has been a mecca for foreign students. It is estimated at this time that there are 74,000 foreign students studying in Argentina and 14,000 of them are enrolled in the tuition free national universities. There have been numerous applications from students from other countries to attend the Castelar Graduate School.

There have been four complete Masters programs given to date with a total of 62 students with 15 of them being non-Argentine. It is anticipated that this ratio of 75% to 25% will change to at least 50-50 by the end of the five-year period covered by this project.

It is highly possible that both OAS and IIAS will increase their financial support of this project during this period. The need for greater IIAS support to the Southern Cone countries was agreed upon at the recent Annual Meeting of the Directors at Mar del Plata. It is also expected that LA/USAID's will make an increasingly greater use of the facilities offered in Argentina for advanced training in agriculture at the M.S. level. With increased financial support from outside sources the number of non-Argentine students will continue to expand.

B. Strategy

The Castelar Agricultural Graduate School is a going and viable institution. It was started with many problems and lack of general orientation. The founders of this institution were not sufficiently aware of the problems involved in developing graduate level training in the agricultural sciences. They underestimated their need for outside assistance and indeed the scheduled program in Soil Science has been postponed because of the unavailability of a coordinator and teaching staff. This field of soils is of a great deal of importance not only in Argentina but in the surrounding countries. The need to start this program is urgent. Another problem arose in the field of agricultural economics. It had been thought that there were sufficient Argentines trained in this field of specialization to serve as coordinating and teaching staff. This did not prove to be true and it was only through the intervention of the USAID-sponsored Texas A&M team, at the request of INTA, that the graduate level program in Agricultural Economics could be continued. Problems have also been found in the other subject matter courses and the need for outside technical assistance has become a matter of great concern by all of those connected with this activity.

This project as proposed will provide the critical outside technical assistance during the next five years of operation during the time that the Graduate School is being firmly established and while the necessary man-power is being trained to take over the coordinating and teaching roles at the Graduate School. It is the purpose of this project to

assure the logical and sound development of this Graduate School so that the Masters degrees from Castelar will be equivalent to those from U.S. institutions. In order to reach this objective it is proposed to provide a staff of from four to six professors on a full-time basis who will act as coordinators of the various graduate level courses and who will also provide teaching assistance as needed. The coordinators will specifically be in charge of developing the course curriculum and identifying the outside assistance needed for specific teaching assignments. It is further proposed that this project will provide from 10 to 15 short-term specialists who will be assigned to Argentina on a 60-90 day basis to teach specific aspects of the various courses.

It is also proposed that the outstanding graduates from each course of study be sent to the U.S. to continue their training at the Ph.D. level to provide them with the proper tools to become the leaders in their particular fields in their own countries. It is planned that two to three students from each course will be selected on the basis of their demonstrated capabilities and sent to the U.S. to study at the termination of their M.S. degree.

In order to reach these objectives contracts will be signed with two or three universities to provide the assistance necessary to Castelar Agricultural Graduate School. The subject matter fields will be divided between the participating universities depending upon their particular interest and capabilities. Since Michigan State University has experience in Argentina, it is hoped that they will be willing to accept the responsibility for the development of a graduate level course in soils and also assist with the program in agricultural extension. In the past Pennsylvania State University has indicated their interest in working in the field of crop production. They will be asked to provide the coordination for this course. Texas A&M University has provided technical assistance to the first course given in animal production and have expressed their willingness and ability to provide the technical input that will be necessary for future courses in this subject. It is planned that the other subject matter areas will be assigned to the participating universities best able to provide the necessary assistance.

C. Planned Targets, Results and Outputs

It is planned to provide technical assistance to the Castelar Agricultural Graduate School over a four to five year period that will enable this institution to improve and intensify its activities in training graduates to the M.S. level in agricultural studies. It is planned to assist with basic agricultural programs in which improved technology is needed if agricultural production is to be increased in the area served by the Agricultural Graduate School. These include, but are not limited to, animal husbandry, soil fertility, agricultural economics, agricultural ecology, food hygiene, plant breeding and agricultural extension. It is expected that the average annual enrollment of the Graduate School will be 100 students, approximately half of whom will be from Argentina with the remainder from other Latin American countries.

The training of 100 graduate students each year will be a tremendous step forward in providing agricultural technicians with the necessary knowledge to keep agricultural development in pace with that in more advanced countries. At the same time it will be possible to select outstanding students from these graduate courses who will be provided with the opportunity and given the incentive to study in the U.S. at the Ph.D. level.

The final result of this project will be a very substantial increase in the number of agriculturalists trained at the M.S. level in the temperate areas of Latin America. These men will be in a much better position to cope with the problems found in the agricultural development process. The alternative to this measure is to continue sending students to U.S. universities for training. With adequate technical assistance comparable training can be provided at Castelar at a much lower cost and ultimately better results since the students will be trained in their own environment.

D. End of Project Status

At the end of the five year period it is anticipated that the following results will have been achieved.

1. A viable self-sustaining institution will have been developed in Argentina that will be able to provide graduate training to students from all Latin American