

I. PROJECT IDENTIFICATION

1. PROJECT TITLE
AGRICULTURAL PRODUCTION AND MARKETING

APPENDIX ATTACHED
 YES NO ^{top}

2. PROJECT NO. (M.O. 1095.2)
041.2

3. RECIPIENT (specify)
 COUNTRY **URUGUAY**
 REGIONAL INTERREGIONAL

4. LIFE OF PROJECT
 BEGINS FY **66**
 ENDS FY **76**

5. SUBMISSION
 ORIGINAL
 REV. NO. **11/14/74**
 CONTR./PASA NO. **AID/La-72**

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ U.S. (U.S. OWNED)		
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) COOP COUNTRY (A) JOINT (B) BUDGET	
1. PRIOR THRU ACTUAL FY	1,947	1,093		312		303	239	934	365			
2. OPRN FY 74	436	282	85	133	207	20	1	282	85			
3. BUDGET FY 75	513	399	83	98	90	15	1	399	83			
4. BUDGET 41 FY 76	147	37	8	109	135	-	1	37	8			
5. BUDGET 42 FY												
6. BUDGET 43 FY												
7. ALL SUBQ. FY												
9. GRAND TOTAL	3,043	1,811		652		338	242					

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT
See Logical Framework, PROP Narrative.		

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER Thomas O. Stephens Anilee Rollins	TITLE Rural Dev. Officer Acting Program Officer	DATE 11/14/74 11/14/74
2. CLEARANCE OFFICER Leonard J. Horwitz	TITLE AID Representative	DATE

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

2. CLEARANCES

BUR/GFF.	SIGNATURE	DATE	TUR/OFF.	SIGNATURE	DATE

3. APPROVAL AAS OR OFFICE DIRECTORS

SIGNATURE	DATE	4. APPROVAL A/AID (See M.O. 1025.1 V/C)	DATE

TITLE _____ ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT

AGRICULTURAL PRODUCTION AND MARKETING PROP

REVISION N° 2

Introduction

The purpose of this second PROP revision is to adjust program design to conform to present GOU economic policies and priorities, particularly as they affect the agricultural sector. The project goal and purpose remain essentially the same, but the means of accomplishing these objectives have changed somewhat in view of progress to date, evaluation of on-going activities, a reassessment of future needs, and the quality and availability of GOU support. The changes included in this revision reflect the results of the USAID's Development Assistance Paper presentation in January 1974, the Field Budget Submission in July 1974, and an independent evaluation of the project completed in November 1974. The changes reflected in this PROP revision have the approval of the Minister of Agriculture and Fisheries (MAP).

The analysis presented in the first PROP revision remains valid for the most part, the thrust being that Uruguay must increase her exports if the goals of the National Development Plan are to be attained. This means increased agricultural production as this is the major potential source of both traditional and non-traditional export growth. Mission strategy is keyed to this approach and other on-going Mission supported activities contribute directly to the achievement of the overall goals.

1. The Goal

The goal is to achieve a sustained increase in agricultural production and exports, a reduction of food imports, and the increase and redistribution of farmer income.

This project is related to three of the specific U. S. objectives in Uruguay. The first is the mobilization of higher levels of savings and its allocation to productive investment, and with measures by the GOU to improve economic

administration as well as the efficiency of state enterprises and services. The second is the adoption of a coherent set of economic policies and programs to reduce inflation and expand production, principally for export, thereby expanding the country's capacity to service the import demand and the external debt. The third is to significantly improve the management, program coordination and analytical capabilities of key GOU developmental agencies.

2. Project Purpose

The project purpose is to increase production and productivity of farm units through the expansion of research and related technical assistance. Specific project targets are: (a) to develop improved agricultural research with emphasis on development of new production systems economically attractive in Uruguay and effectively introduced in commercial agriculture; (b) to train key Ministry employees in modern research methods and who understand their function in increasing agricultural outputs. To achieve these objectives, AID will provide technical assistance, training and minor commodity support valued at slightly over \$ 1.0 million over the next two years.

3. Proposed AID loan for Agricultural Research/Technical Assistance

The GOU through the Ministry of Agriculture and Fisheries has requested an AID development loan to continue and expand on a national scale the activities now included in this grant project. This activity is designed to bring research results, technical assistance and other supporting services to farmers.

An IRR has been prepared, and if this activity is authorized, the project should be operational by late 1975. This would permit a short overlap with the agricultural development activities outlined in this PROP revision and permit an orderly transfer from grant to loan financing.

Uruguay has no extension service in the traditional U.S. sense. Present extension activity is associated with

supervised credit programs, livestock associations and other special projects.*

Rather than building a full-fledged extension service, the GOU proposes to integrate its search for new and improved technologies (for the most part adaptive research) with the delivery of these findings to the producer.

The MAP has recently reorganized to bring about much closer coordination of research with technical assistance and other supporting services to the farmer. Major production zones have been designated and adaptive research facilities are being established throughout the country. The project purpose is to integrate research and extension through the regional Experimental-Demonstration-Production Units (UEDPs). These units, under the supervision of the five regional experiment stations, will provide demonstrations of new technologies tailored to specific area conditions, from which local producers can learn by observation and participation. Eventually, these units will form the basis for crop reporting, marketing news and other services. Of the existing 70,000 farm or ranch units, less than 20% now receive technical assistance. By reorganizing the research work to make it more extension-oriented, at least 70% of the nation's producers will be reached during the next five years.

The new system of research closely integrated with technical assistance is rather unique and should have a regional (Latin American) as well as local impact. This is a package approach which entails the proper association of all key factors a progressive farmer must consider in planning his enterprise to assure increased production and higher sales and net profits. The farmer, the technical advisor and the research scientist will jointly plan the economic-oriented research at each of the local UEDP units, in observing and evaluating results and in the application of the results in preparing new farm plans. Modern communication techniques will be used to convey information through technicians to the farmers. By employing this new system on a nationwide basis the agencies responsible for credit, marketing, storage and other services will be able to project more accurately the demand for their services and to gear their operations to satisfy these demands.

* The other agencies, besides MAP-IATA, providing technical assistance to farmers include: the Bank of the Republic, Plan Agropecuario, Plan Citrícola, Plan Granjero, FUCREA (a private extension service) the Colonization Institute

4. The Economic Setting for AID Assistance in Agriculture

Uruguay's economic performance over the past two decades has been among the poorest of any country in the free world not afflicted by war or natural disaster. It has been characterized variously by stagnation of production, chronic high levels of inflation, recurring fiscal and balance of payments deficits, high unemployment, declining real income, a deteriorating physical infrastructure and continuing emigration.

The basic causes are not an inadequate resource base, adverse climate or geography or population pressures. Rather they stem from a long history of inappropriate economic policies which have led to serious structural distortions in the economy.

A serious imbalance exists between a large urban sector (80% of the population) which is heavily dependent on the small agricultural sector (15%) which contributes 85% of Uruguay's export earnings and pays for most imports. The resulting balance of payments constraint on imports has been the principal factor in limiting growth, particularly in the industrial sector.

To support the consumption and social welfare aspirations of the urban sector, the agricultural sector has been subjected to tax, pricing and exchange rate policies designed to produce large income transfers to the urban sector. The result has been to disincentivize agricultural investment, inhibit the introduction of new technology and to stagnate production. Likewise, a highly protected urban industrial sector, geared to supply a small domestic market, soon exhausted its growth possibilities and stagnation set in in that sector as well. To mitigate the resultant economic squeeze, past Uruguayan governments have sought to control every economic variable in sight. As the employer of last resort, the government created a large, costly bureaucracy designed to allocate scarce resources and monitor private economic decision-making.

GOU Economic Policies

After a political restructuring took place in 1973, the Bordaberry Administration turned its priority attention to a fundamental development-reform effort. It approved a National Development Plan (1973-77) and at the San Miguel and Nirvana meetings (September - October 1973), translated

the broad goals of the Plan into policy guidelines for action. Essentially, these guidelines call for (1) a gradual reduction of State intervention in the economy to allow productive patterns to be determined by market forces; (2) rejuvenation of the agricultural sector through a variety of incentives including remunerative prices and gradual substitution of land productivity taxes for export taxes; (3) a realistic exchange rate; (4) elimination of impediments to export and (5) restructuring of production along the lines of international comparative advantage.

The GOU's efforts to implement the development reform were dealt a series of external blows during 1974 due to the sharp increases in oil and other import prices together with the restrictions on beef imports into the European Common Market. The results have worsened Uruguay's 1974 economic prospects with an estimated balance of payments deficit of over \$ 120.0 million, a fiscal deficit approaching 20% of the expenditures and an inflation rate between 75 and 85%. Faced with these bleak prospects, there appears to be no alternative to a diversified production and export development strategy if the country is to move out of stagnation, reduce inflationary pressures, and attain a more manageable balance of payments position.

Despite the externally-caused setbacks to its economy in 1974, the GOU has made steady progress in implementing its National Development Plan according to the San Miguel and Nirvana policy guidelines. There has been a gradual movement away from statist intervention in the economy toward a free market orientation. There has been good progress in liberalization of price controls and more rational criteria are being applied in considering price increases. Industrial promotion and foreign investment laws have been put into effect. A civil service reform is being carried out. A perceptible improvement has come about in the operations and financial management of several state enterprises (airlines, ports, postal and rail systems). Export procedures have been simplified and some import taxes reduced. Several low-yield, high-cost taxes have been reduced or eliminated while the value-added tax has been substantially increased.

The most dramatic changes have recently taken place in the country's financial system. During September 1974 the financial foreign exchange market was liberalized, the financial

rate now being determined by supply and demand. (The commercial peso rate applying to trade is still overvalued). In addition, free convertibility of the peso into hard currencies is now permitted, for the first time since the early 1950s. Positive interest rates now apply on commercial loans and substantially increased effective rates on sight and time deposits have been authorized. The GOU has also taken a number of steps to stimulate a functioning capital market, including authorizing private firms to issue re-adjustable obligations for trading on the stock market, and issuance of dollar Treasury Bonds with fluctuating interest rates.

In respect to the agricultural sector, positive measures have been taken over the past year which have benefitted the producers. Favorable price policies, which corrected previous distortions, have spurred production throughout the sector. Non-traditional exports, mostly agricultural products, have so far risen by 60% over 1973. Support prices for wheat, sugar and sunflower oil have been raised to levels designed to eliminate deficits. Maximum capacity for beef exports in 1974 is estimated to be around 100,000 tons as compared with around 120,000 tons in 1973 (actual beef exports in 1973 were 98,000 tons and are estimated at 106,000 tons in 1974). The export taxes on wool have been virtually eliminated and those on beef substantially reduced.

The resultant revenue loss is being compensated for by important increases in the land productivity tax (IEPROME) whose collections have risen from 5.2 billion pesos in 1972 to 41.3 billion pesos in 1974. The effect of shifting the major tax burden to land and away from other production factors (inputs) should serve to stimulate agricultural investment and production.

The Outlook

There have been more constructive economic policy reforms undertaken so far in 1974 than in any year in the past decade. But much remains to be done. A stabilization policy must be formulated, the fiscal situation brought under control, social security reform enacted, and a liberalization of the commercial exchange rate and the import regime must be brought about if exports are to expand. There are hopeful signs that these necessary measures will soon be undertaken and that the

GOU will receive important new assistance from the international agencies and Argentina and Brazil, and commercial loans, in coping with the severe economic strains expected over the next few years.

The economic reforms already undertaken, however, significantly brighten the prospects for increased agricultural investments and production. For the first time in years, a basic economic policy framework now exists which makes it attractive for the farmer to invest, apply new technology and expand his production. The problem is that traditional exports of meat, wool and hides are in the hands of medium and large producers. The non-traditional exports, (which hold the greatest promise of improving foreign exchange earnings) - including fruit and vegetables - lend themselves more to production by smaller farmers who have heretofore lacked the technology, marketing and financial resources to respond to this opportunity. It is here that assistance from an agency such as AID can play a key role in stimulating production. The World Bank's September 1974 economic memorandum on Uruguay states that, with orientation on non-traditional exports, the GDP could be raised to a 3.5% per annum rate by 1979, compared with a -1.3% in 1972 and 0.3% in 1973. (See Annex A).

5. Project Description

We plan to continue to concentrate our resources in the agricultural sector primarily in the production/marketing process, with particular emphasis on research and its associated delivery systems. AID short and long term contract advisory services and mid-career professional training will continue through FY 1976.

This project is compatible with the desired style of U. S. activities in Uruguay and will be aimed primarily at filling needs in key development areas and carrying out activities in which the GOU is particularly interested in working with AID given our special experience or institutional capabilities.

(a) Direct Hire Technical Assistance

A direct hire staff consisting of a Rural Development Officer, two Uruguayan professionals and one secretary will continue to be responsible for the overall management of the technical assistance made available by this project, including

the guidance necessary for the establishment of goals, the designation of priorities, and the planning and coordination necessary to carry out the project.

(b) Contract Technical Assistance

The AID contract with the University Consortium consisting of the Pennsylvania State University, Michigan State University and Texas A&M University, to provide technical advisory services and some commodities, will continue. This agricultural research assistance is designed to improve production/marketing techniques for non-traditional agricultural commodities with favorable export potential, primarily fruits and vegetables. This activity is being carried out in three annual phases, and is now in the second phase. It is scheduled to terminate March 31, 1976.

Advisory services totaling 72 man/months in FY 1975 and 60 man/months in FY 1976 are being provided in deciduous fruit production, vegetable production, pomology, citrus production, plant pathology, entomology, and agricultural information. Short term technical advisors will assist with special problems such as weed control, irrigation and drainage, and farm machinery.

Additionally, we propose to continue short term technical advisory services (outside the University Consortium Contract mentioned above through other existing contracts, regional programs, PASA, etc.) to respond to GOU requests for assistance in specific problems areas through the end of the project in FY 1976. These short term assistance requirements have tentatively been identified in the following areas: soybean production (2 man/months); cereal and oil crop production (2 man/months); marketing of agricultural products (3 man/months); soil fertility (9 man/months); noxious birds control (2 man/months); and grain storage (2 man/months).

(c) Participant Training

A total of 165 man/months of short and long-term participant training will be provided in these areas: citrus, vegetables, fruits, cereal grains, oil crops, plant pathology, entomology, animal husbandry, animal nutrition, agricultural planning, agricultural economics, pasture management, agricultural statistics, credit, soils, certified seeds, veterinary medicine, weed control, agricultural information, agricultural marketing, and agricultural extension.

It should be pointed out that the participant training component of the project is based upon the training needs of the MAP as identified through annual assessments of requirements. The proposed training covers the priority areas jointly agreed to by the MAP and USAID and takes into consideration technical inputs of other donors. Consequently some training may be provided that will support both technical and capital assistance being provided by other assistance agencies.

Recommendations for training are expected from the University Consortium providing the technical assistance, but the training component of this project will not be limited to these recommendations nor will these Universities be expected to provide all training required by the project. Participant training will continue through the Office of International Training in AID/W. We propose to extend short-term training through FY 1976, but no long-term training will be initiated after FY 1975.

(d) Commodities

A small amount of commodity support is included to assist in providing field and laboratory equipment for applied agricultural research, technical publications for research and extension libraries, training material for agricultural information services, and some agricultural materials for research activities.

7. Related USAID Activities

Other USAID supported activities, though not a formal part of this project, are directly related to it and provide assistance in the accomplishment of project goals.

The Development Planning and Administration Project has underway basic economic studies of the Uruguayan agricultural sector in conjunction with GOU planning bodies, to design economic models for the development of this sector and to train Uruguayan counterparts in agricultural economics techniques. These techniques should provide the base for collection and analysis of agricultural production and marketing information and permit the use of this information in the development of agricultural policies, plans and programs to promote sustained growth.

The economic policy studies being undertaken through the Development Studies Program will provide a basis for improved policy decisions affecting the agricultural sector, while the training provided through the Economics and Management Training Program will improve the capacity of GOU officials to plan and implement development policies and programs.

The U. S. supported Binational Center in Montevideo provides English language training for participants scheduled to study in the U. S.

Local currency generated through development loan activities and PL 480 Commodity sales is playing a key role in supporting agricultural development activities. These funds have made possible initiation and continuation of GOU development activities which would have been curtailed or dropped, and are financing many capital improvements such as the national silo plan.

The AID projected inputs by year are :

	<u>FY 1975</u>	<u>FY 1976</u>
Technical Assistance		
Contract	357,000	266,000
Other	119,000	37,000
Training	90,000	123,000
Commodities	15,000	-
Other Costs	-	1,000
	<u>581,000</u>	<u>427,000</u>
	=====	=====

8. Other Donors

(a) The OAS, through its Interamerican Institute of Agricultural Sciences, (IICA), maintains a regional office in Montevideo. Its relatively modest annual budget is being used mostly for agricultural education activities, services and some technical assistance and a fruits and vegetables marketing project, which directly complements this project.

(b) The UNDP, through FAO, has had a long experience in Uruguay with grant assistance. Since 1950 FAO has completed 12 projects involving 190 man years of advisory services, 69 scholarships and a number of grants for equipment at a total cost of close to \$ 5.0 million. The current annual UNDP budget for Uruguay is about US\$ 2.8 million, of which a third is being used to support FAO projects.

(c) The IDB is quite heavily involved in Uruguay's agricultural development. Of special interest for this project is the active IDB loan for citrus production (Plan Citrícola) and the proposed loans relating to production of fruits and vegetables (Plan Granjero) and forest production (Plan Forestal). Thus, the IDB helps to provide an important element of supervised credit to complement this project.

(d) The World Bank is of major importance in helping to provide the necessary supervised credit backstopping. The Bank has helped finance the MAP - Plan Agropecuario (Livestock Department) since 1962, with a series of four loans totalling US\$ 54.7 million. A fifth loan under review proposes to broaden the scope of Plan Agropecuario by assistance for crop development when associated with livestock production.

Coordination

USAID coordination with the World Bank, IDB and OAS representatives has traditionally been close and effective and takes the form of frequent contacts and joint program reviews. IDB field implementation of approved loans appears to be improving.

9. GOU Contribution

The MAP allocates about \$ 2.0 million annually to support agricultural research. Additionally, the GOU has made good use of local currency generated by PL 480 Title I sales agreements in the construction of grain storage facilities, cold storage plants for fruits and vegetables and agricultural research facilities. The GOU through the MAP will provide in support of this project:

(a) The counterpart and administrative support necessary for the utilization of technical advisory services, including vehicles for transportation, laboratory and field research facilities, and suitable office space.

(b) The financial resources necessary to staff, equip, and maintain a dynamic agricultural research program for both on-going and new activities, outlined in this PROP.

(c) The documentation, coordination and interministerial agreements necessary to permit the effective utilization of all USAID inputs.

(d) Adequate financial resources on a timely basis to operate, maintain, repair and utilize research and extension equipment.

(e) The salaries of Uruguayan technicians while on participant training assignments.

(f) All international travel costs connected with participant training.

(g) All in-country support for short-term technical advisors in specific problem areas. This includes counterparts, in-country transportation, office space, secretarial services, etc.

The GOU inputs directly related to the project activities are:

<u>FY 1974</u>	<u>FY 1975</u>
\$ 600,000	\$ 600,000

GOU inputs to this project have totaled \$ 600,000 in each of the past two years. Official assurances have been received from the MAP that its contribution to the project will equal or exceed this level during the period of active AID involvement. Considering our past experience, the Mission finds the GOU assurances satisfactory.

10. Implementation Plan

FY 1975

(a) Continue to provide technical assistance through the contractual arrangement with Penn State University. FY 1975 will cover the second phase of this activity, planned for three phases. This activity will provide 72 man/months of contractual advisory services.

Long term advisors are to assist in : deciduous fruit production, vegetable production, pomology, plant pathology and agricultural information. Short-term advisors are to assist in the areas of citrus production, entomology, potatoes, weed control, soils, irrigation and drainage, and farm machinery.

(b) Provide 136 man/months of long-term and short-term participant training in the subject matter areas of: citrus, vegetables, fruits, cereal grains, oil crops, plant pathology, entomology, economics, pasture management, credit, soils, certified seeds, weed control, agricultural planning, agricultural information, marketing and agricultural extension.

(c) Provide 12 man/months of short term technical assistance to assist in specific problem areas such as price policies, cereal and oil crop production, marketing of non-traditional agricultural commodities, grain storage, soil fertility and noxious bird control. Included in this short term technical assistance will be an estimated six man/months to assist the MAP in planning an agricultural extension delivery system with the capacity to effectively make new technology available to producers.

(d) \$ 20,000 of commodity support will help finance field and laboratory equipment for applied agricultural research technical publications, training materials, and some agricultural materials for research activities.

FY 1976

Technical assistance and training inputs are to be made following the pattern of previous years, but on March 31, 1976 the contract technical assistance with Penn State University will be phased out; participant training will be reduced and other arrangements made to support further training in accordance with identified needs; and a project termination agreement will be formalized.

ANNEX A

Fruits and Vegetables with Best Prospects for Export

<u>Crop</u>	<u>Import Country</u>	<u>Why From Uruguay</u>
Peaches	Brazil	800 miles closer to market than is the Mendoza area. The well-adapted local variety, Rey del Monte, is of export quality. Precocity permits early financial reward from improved cultural practices. Modern methods of rot control permit marketing of fresh fruit in Brazil.
Apples	Brazil	1000 miles nearer Brazilian market than is Rio Negro Valley of Argentina; wider use of "sports" permits sale of more attractive fresh product; improved pest control, fertilization, pruning will lower cost of production, making fruit more competitive. Form can be improved.
Pears	Brazil	Brazil is a reportedly excellent market for all deciduous fruits. The pears Williams (Bartlett) and Packham's, are well adapted to Uruguay. Uruguay is 800 miles closer to Brazil than are the Mendoza and Rio Negro areas in Argentina. Pears, like apples are relatively easy to transport.
Onion and Garlic	Brazil	High quality, well-adapted production in Uruguay; Uruguay production would extend Brazilian season.
Pulse Crops	Brazil	These crops, high in content of protein and energy are in great world demand; Brazil, a heavy consumer of pulse crops, is barely self sufficient; beans are easily handled and transported. Disease resistant lentils are being tested in Uruguay.
Cauliflower	Brazil	Quality of native production, and length of harvest season, superior to Brazilian production. Insect control not a problem in Uruguay.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

From FY 1965 to FY 1970
Total U.S. Funding, 3043
Date Prepared: 11/14/74

Project Title & Number : AGRICULTURAL PRODUCTION AND MARKETING

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>achieve a substantial increase in agricultural production as a base for overall economic expansion.</p>	<p><u>Measures of Goal Achievement</u></p> <p>Increases in both dollar value and amount of both traditional and non-traditional agricultural exports.</p>	<p><u>Verification</u></p> <p>CIAP Analyses. IBRD Analyses. Central Bank Reports. Bank of the Republic.</p>	<p><u>Assumptions</u></p> <ol style="list-style-type: none"> 1) International market opportunities at reasonable prices will be available. 2) Climatic conditions will be favorable or can be modified by irrigation, drainage and mulching, by improved pest and weed control and by use of hormones. 3) Public and private sector investments in agriculture remain at acceptable levels

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number : AGRICULTURAL PRODUCTION AND MARKETING

From FY 00 to FY 76
Total U.S. Funding 3043
Date Prepared: 11/14/74

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of 4

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Project Purpose:</u></p> <p>Increase the capability of the MAP and other agencies assisting the agricultural sector so as to increase production and improve the marketing of agricultural products.</p> <p>Specifically provide improved agric. research with emphasis on development of new procedures that are economically attractive and effectively introduced in commercial agriculture.</p>	<p>Conditions that will indicate purpose has been achieved:</p> <p>End of Project status:</p> <ol style="list-style-type: none"> 1) Technicians trained will occupy key positions. 2) A permanent and modern research system in fruits and vegetables production will be operating. 3) Farmers will have adopted new production systems and techniques. 	<ol style="list-style-type: none"> 1) USAID Reports. 2) MAP Files. 3) Experiment Station reports and files. 4) FAO and IDB Reports. 5) Surveys of research results. 6) Special reports by U. S. advisors. 7) Visits to farming enterprises and discussions with their owners or managers. 	<ol style="list-style-type: none"> 1) Returned participants will occupy key positions, and sufficient incentives will be provided to retain qualified technicians. 2) MAP priorities will remain the same. 3) Coordination between all agencies involved in agriculture production and marketing will improve.

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS																																																																																								
<p>ts:</p> <p>ore Trained Technicians.</p> <p>earer GOU support of ion research.</p> <p>ore meetings with wers.</p> <p>reased research acti- in fruits and etables.</p> <p>ore technical publications</p> <p>proved staffing at Brujas.</p>	<p><u>Magnitude of Outputs:</u></p> <table border="1"> <thead> <tr> <th></th> <th>Prior Years</th> <th>FY 74</th> <th>FY 75</th> <th>FY 76</th> </tr> </thead> <tbody> <tr> <td>Participant trained:</td> <td>89</td> <td>25</td> <td>29</td> <td>20</td> </tr> <tr> <td>Total: 163 participants.</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th></th> <th>CY</th> <th>CY</th> <th>CY</th> <th>CY</th> </tr> </thead> <tbody> <tr> <td>No. of research projects.</td> <td>70</td> <td>74</td> <td>75</td> <td>76</td> </tr> <tr> <td>Total:</td> <td>30</td> <td>78</td> <td>91</td> <td>102</td> </tr> <tr> <td>Fruits</td> <td></td> <td>24</td> <td>26</td> <td>27</td> </tr> <tr> <td>Veget.</td> <td></td> <td>16</td> <td>20</td> <td>23</td> </tr> <tr> <td>Plant protect.</td> <td></td> <td>30</td> <td>35</td> <td>39</td> </tr> <tr> <td>Potatoes</td> <td></td> <td>8</td> <td>10</td> <td>13</td> </tr> </tbody> </table> <p><u>Publications and Reports:</u></p> <table border="1"> <tbody> <tr> <td>1) Printed or in process</td> <td>6</td> </tr> <tr> <td>2) Proposed</td> <td>31</td> </tr> <tr> <td>3) Special Reports</td> <td>7</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>No. of personnel</th> <th>CY</th> <th>CY</th> <th>CY</th> </tr> </thead> <tbody> <tr> <td>Las Brujas</td> <td>73</td> <td>75</td> <td>77</td> </tr> <tr> <td>Technicians</td> <td>15</td> <td>21</td> <td>29</td> </tr> <tr> <td>Assist. Tech.</td> <td>8</td> <td>11</td> <td>13</td> </tr> <tr> <td>Operation Serv.</td> <td>12</td> <td>16</td> <td>16</td> </tr> <tr> <td>Administrative</td> <td>4</td> <td>6</td> <td>8</td> </tr> <tr> <td>Field Personnel</td> <td>15</td> <td>16</td> <td>20</td> </tr> <tr> <td>Total:</td> <td>54</td> <td>70</td> <td>86</td> </tr> </tbody> </table> <p><u>Other indices:</u> No. of grower meetings in which L. B. personnel participate; change in No. of station visitors; changes in No. of varieties tested and recommended; survey of No. of production practices modified; evaluation of</p>		Prior Years	FY 74	FY 75	FY 76	Participant trained:	89	25	29	20	Total: 163 participants.						CY	CY	CY	CY	No. of research projects.	70	74	75	76	Total:	30	78	91	102	Fruits		24	26	27	Veget.		16	20	23	Plant protect.		30	35	39	Potatoes		8	10	13	1) Printed or in process	6	2) Proposed	31	3) Special Reports	7	No. of personnel	CY	CY	CY	Las Brujas	73	75	77	Technicians	15	21	29	Assist. Tech.	8	11	13	Operation Serv.	12	16	16	Administrative	4	6	8	Field Personnel	15	16	20	Total:	54	70	86	<p>USAID Files.</p> <p>Las Brujas Files.</p> <p>Technicians Reports.</p> <p>Participant Trainees Log.</p> <p>Surveys.</p>	<ol style="list-style-type: none"> 1) Qualified participants will be available for training on time. 2) GOU will continue to make available US\$ 600,000 per year of counterpart support. 3) Technical aid will be available and supplied by the Consortium, as needed.
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Project Title & Number : AGRICULTURAL PRODUCTION AND MARKETING.

NARRATIVE SUMMARY

OBJECTIVELY VERIFIABLE INDICATORS

MEANS OF VERIFICATION

IMPORTANT ASSUMPTIONS

PAG

ts:
 ID: 1. Participant train-
 - 165 man/months of
 short and long term
 ing in agricultural
 ed areas.
 ommodities.
 74 man/months of con-
 ual technical assistance
 e fields of vegetable
 iction, pomology, agri-
 nunications, citrus,
 pathology, etc.
 ecial agric. advisory
 ces for 35 man/months.
 : 1. Ministry of
 ulture and Fisheries
 arch Stations Budget
 Brujas and Salto).
 erpart Technicians.
 fied Participants.
 ings and Equipment.
 tional Funds.
 cipants Travel Cost.
 tic Support for
 icians.

Implementation Target (Type and Quantity)

USAID cummulative obligations through FY 76:

	FY 75	FY 76
(in 1000 US\$)		
Tech. Assist.		
Contract	180	130
T. A. Other	60	15
Training	135	30
Commodities	20	10
Other costs	0.5	0.5
	<u>395.5</u>	<u>185.5</u>

GOU Las Brujas Station (in thousands of US\$)

	FY74	FY75	FY76
Personnel	100	200	200
Operation	34	60	60
Investments	32	50	50
Total:	<u>166</u>	<u>310</u>	<u>310</u>
Salto St.:	150	250	250
Total :	<u>316</u>	<u>560</u>	<u>560</u>

AID/W approved PROPs and Evaluation Reports

- 1) The GOU will pay international travel and salaries for all partic
- 2) Other donors will con to give priorities to th sector.
- 3) GOU budgetary allocat will be sufficient to adequately support this project.

C. List of U. S. Advisors Under the University Consortium Contract.

(Including past, present and proposed).

Name and/or Title	Specialty	Dates		Man/Months
		From	To	
<u>A. Past - Terminated</u>				
Dr. John S. Boyle	Plant Pathology	1/15/73-	4/15/73	3
Dr. Rafael Cintron	Citrus	2/1/73 -	3/30/73	2
Dr. Rafael Cintron	Citrus	11/2/73 - 2/	2/74	3
Dr. Anthony Hatch	Pomology	8/13/73-	11/13/73	3
Dr. Angus J. Howitt	Entomology	10/1/73 -	12/31/73	3
Dr. Wilford R. Mills	Potato Pathology	1/1/74 -	3/31/74	3
				<u>17</u>
<u>B. Present</u>				
Dr. William Hooker	Potato Pathology	9/29/74-	12/29/74	3
Mr. Stanley Mahaffy	Information	10/4/74 -	1/ 4/75	3
Dr. Oscar Taboada	Information	7/12/74-	3/31/76	20 $\frac{1}{2}$
Dr. Richard Stuckey	Plant Pathology	8/20/73-	3/31/76	31 1/3
Dr. Ronald Morse	Vegetable Spec.	7/ 1/73-	3/31/76	33
Dr. Chester W. Hitz	Pomologist, COP	12/10/72-	3/31/76	39 2/3
				<u>140$\frac{1}{2}$</u>
<u>C. Proposed 1/</u>				
Mr. Art. Wells	Entomology	Jan. -	Mar. 1975	3
--	Agr. Economist	Mar. Apr. May,	75	3
Dr. Rafael Cintron	Citrus	Jan. - Mar.,	1975	3
--	Veget. Spec.	Feb. - Apr.	1975	3
--	Citrus Pathology	---		3
--	" Production	---		3
Dr. Bowen	Peach varieties	---		3
Dr. Howitt	Entomology	---		3
--		---		3
Unspecified		---		6
				<u>33</u>
TOTAL :				190 $\frac{1}{2}$

1/ The difficulty from signing the contract between AID/W and PSU has delayed some assignments. The delay in the reorganization of citrus research at Salto has postponed or delayed other assignments.