

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523
BIBLIOGRAPHIC INPUT SHEET

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Batch 88

1. SUBJECT CLASSIFICATION
A. PRIMARY
Food production and nutrition AN10-0000-G354
B. SECONDARY
Agricultural engineering and structures--Costa Rica

2. TITLE AND SUBTITLE
Consejo Nacional de Produccion for construction of the seed processing facility;
report to AID/W and USAID/Costa Rica on consulting visit for continuing support

3. AUTHOR(S)
Boyd, A.H.

4. DOCUMENT DATE
1976

5. NUMBER OF PAGES
78. 80.

6. ARC NUMBER
ARC

7. REFERENCE ORGANIZATION NAME AND ADDRESS
Miss, State

8. SUPPLEMENTARY NOTES (Sponsoring Organization, Publishers, Availability)
(In TA 76-04)

9. ABSTRACT

10. CONTROL NUMBER
PN-AAF-713

11. PRICE OF DOCUMENT

12. DESCRIPTORS
Costa Rica
Seed production

13. PROJECT NUMBER
931020300

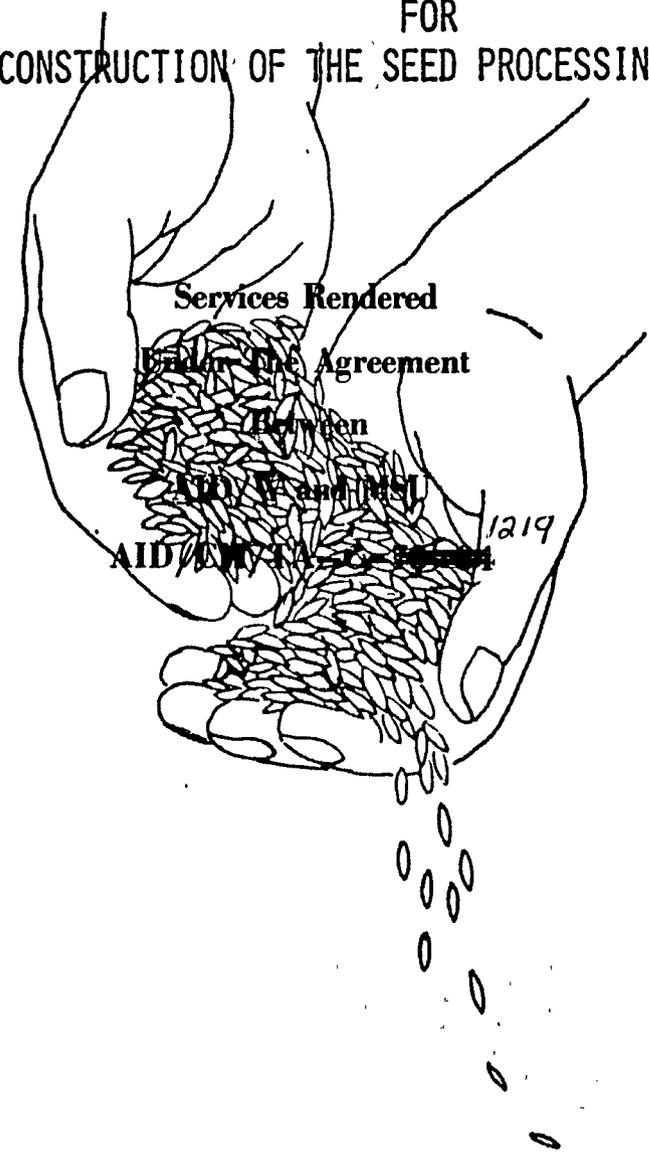
14. CONTRACT NUMBER
AID/ta-C-1219 GTS

15. TYPE OF DOCUMENT

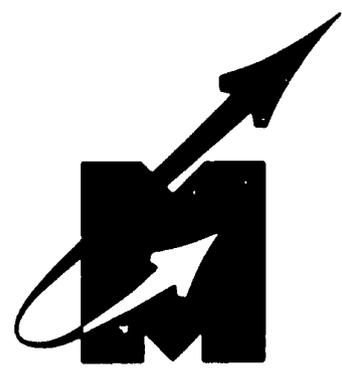
REPORT TO:
AID/W AND USAID/COSTA RICA

MISS. State TA 76-04
PN-AAF-713

CONSULTING VISIT TO COSTA RICA
FOR
CONTINUING SUPPORT OF CONSEJO NACIONAL DE PRODUCCION
FOR
CONSTRUCTION OF THE SEED PROCESSING FACILITY



SEED TECHNOLOGY LABORATORY
MISSISSIPPI STATE UNIVERSITY
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REPORT SUMMARY

TITLE: Report to AID/W and USAID/Costa Rica on consulting visit to Costa Rica for continuing support of Consejo Nacional de Produccion for construction of the seed processing facility.

REPORT NO.: TA 76-04

AUTHOR: A.H. Boyd, Assistant Agronomist

PERIOD OF REPORT: April 19-26, 1976

CONTRACTOR: Mississippi State University

CONTRACT NO.: AID/ta-C-1219

SUMMARY

1. This visit was a part of continuing assistance to the Costa Rica seed program.
2. Construction of the new seed facility at Barranca was inspected and the location of equipment discussed with the contractor. Location of one machine was corrected before final installation was made. Other possible problems pointed out.
3. Other phases of the seed program are now far enough advanced that it is now important that Ministry of Agriculture and the National Seed Commission bring the proposed foundation seed project into operation.
4. Arrangements for future consulting visits were made in anticipation of attending to details of construction completion and training of operating personnel.
5. It is strongly recommended that the salt warehouse located beside the seed facility be moved to another location.
6. Assistance to other agencies was given at the request of the RDO.

CONSULTING VISIT TO COSTA RICA
FOR
CONTINUING SUPPORT OF CONSEJO NACIONAL DE PRODUCCION
FOR
CONSTRUCTION OF THE SEED PROCESSING FACILITY

April 19-24, 1976

A.H. Boyd

BACKGROUND

Mississippi State University's Seed Technology Laboratory (MSU/STL) has been actively involved in assistance to USAID/Costa Rica and the Government of Costa Rica (GOCR) in developing a comprehensive seed program since 1970. One of the major projects has been the planning and construction of a seed drying, storage and processing facility at Barranca. This facility is now in advanced stages of construction and this consulting visit was requested to check with all interested agencies to insure that construction features peculiar to seeds and the seed processing equipment were being accomplished. In addition, a secondary objective was to coordinate with other segments of the program for inputs as needed.

The Seed Facility at Barranca

A visit was made to the construction site at Barranca accompanied by Mr. Travis King - Rural Development Officer and Ing. Herebierto Rodriguez, USAID Engineer. The facility was inspected and discussions held with CNP, DAF, and AICA/SACMAG representatives.

It appeared that the specifications were being followed and good construction practices were being used. The new air-screen cleaner which is constructed to discharge trash to the right side was located in the space for the old air-screen cleaner which is a left hand discharge machine. Fortunately, no permanent attachments or wiring had been done so it was a simple matter for the contractor to relocate the machine in its proper place.

The old Super X 298 D air-screen cleaner which has been in use by CNP for many years was in process of almost complete rebuilding with fabrication for new fan housings and screen chassis. This machine should function well in the equipment line when work is completed.

It was noted that the working bins under construction had not had the seams welded inside. This is a small but important point in a seed processing plant since all equipment should be as easy to clean as possible. We were assured by the construction foreman that this would be done before work was stopped on that part.

A major point of concern to this consultant, the contractor and others is the location of a new salt warehouse no more than 15 meters from the facility. Such close proximity of this warehouse to the equipment creates a corrosion hazard to the equipment as well as traffic congestion and limitation of space for parking large trucks. It is recommended that this salt supply be moved as far away from the site as possible.

As the facility which was near 90% finished moves nearer to completion it is inevitable that some unforeseen problems will arise. If they are caught early as for example the previously mentioned air-screen cleaner mis-location then minimum inconvenience will occur.

For this reason it was recommended that this consultant be on call to return to Costa Rica as needed. Since it is impossible to anticipate all contingencies the following tentative work plan was made:

1. Up to 2 weeks services pre-arranged with AID/W to be on call by the RDO, Mr. Travis King, to assist with final phases of construction. Time - June or July.
2. Three weeks' services on or about 8-28 August, 1976 to be on hand at start up of plant and assist with training operating personnel at beginning of the first rice harvest.
3. Three weeks' additional services on or about 7-27 November, 1976 to return and work with operating and management personnel at the peak of rice harvest.

NOTE: The above visits and consulting services are in no way to replace or lessen the contractor's responsibilities for construction and future operation of the equipment. They are only to assist in areas needed to insure good seed production and processing as opposed to grain handling.

Other Activities and Discussions

CNP

Meetings were held at CNP in San Jose to discuss the facility with Lic. Gilbert Bernhard where all the above considerations were covered. In addition a meeting was held with Ing. Enrique Sanchez and the seed section staff where operation and quality control was discussed. Ing. Victor Witte and his seed section staff attended the MSU/STL Short Course for Seedsmen on April 5-7, 1976 and subsequently visited several rice seed companies in Mississippi, Louisiana and Arkansas. Adaptation of methods of quality control in the U.S. to Costa Rican conditions was discussed and will be a major part of future assistances when the facility is nearer the start up date.

Field standard enforcement and critical inspection of incoming seeds will be even more important than before since complete small lot identity will be impossible in a facility of this size and design.

Foundation Seed Facility

No visit to Estacion Enrique Jimenez nor discussion with Ministry of Agriculture (MAG) administration was accomplished but the need for implementation of a foundation seed project should be emphasized at this time. The Barranca facility is not a foundation seed facility but a commercial or certified seed production facility. CNP has neither the obligation, time nor technical capability to handle foundation seed at this time.

The small facility at Toboga was planned to support the plant breeders

and foundation seed program. At present there is no money in the MAG budget for its completion, nor for a manager for the project.

This is brought up in this report because it is important to remember that a seed program cannot perform its services well unless all the necessary elements are functioning. At present, Costa Rica has an excellent seed testing laboratory, some private seed producers who are increasing their quality and volume very well, and will soon have at Barrancas a very good facility in the public sector. Missing is a foundation seed program to feed the pipeline.

The foundation seed program will not be the only constraint but it appears to be the next most pressing need followed by or in conjunction with better COCR support for the National Seed Commission.

It is strongly recommended that MAG make a special effort to implement plans begun previously in that direction. As always MSU/STL is available for assistance through USAID/Costa Rica.

University of Costa Rica

Discussions were held with Dr. Ronald Echandi on the possibility of presenting a regional (Central America and surrounding countries) quality control short course in cooperation with UCR. Suggested date would be June, 1977. Further plans will be made and final decision on presenting the course will be made later.

Discussions with Mr. Travis King (RDO)

Needs for economic information and projections concerning the seed program and agricultural production in general were discussed. It was recommended that a MSU/STL Agricultural Economist be requested to assist in:

- a. Economic evaluation of processing plant operation.
- b. Evaluation of need for regional warehouses, drying facilities, and/or complete processing plants.
- c. Projections of seed production and use.

Part of the above would be a more detailed follow-up of a previous report by this laboratory for ROCAP and IICA made in 1973. Time of this visit is recommended to be in August, 1976 with future work as agreed to by the economist, USAID/Costa Rica and GOCR.

Mr. King requested that a sample of achote, a red food dye producing plant, be processed at MSU/STL to determine seed processing methods. In addition, contact was made with the food technologist at MSU to see if there was interest in work with the plant outside the scope of the MSU/STL - USAID seed contract. They are interested and further possibilities will be explored.

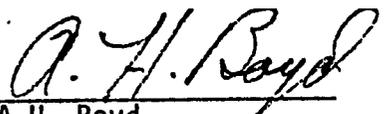
CARE of Costa Rica requested assistance in obtaining supplies of Improved Pelican soybean seed for a food project in Costa Rica. With the permission of Mr. King this was done by coordination with CARE in San Jose and later at MSU by calls from New York, San Jose and Louisiana.

Mr. King requested samples of winged bean seed for testing. These have not yet been obtained.

Discussions with Mr. King and Mr. Bill Baucom on small, inexpensive drying methods for small farmers were held. Many existing ideas and methods were discussed but no firm recommendations were made. A request for research in this area may be forthcoming.

Acknowledgements

The author wishes to express his appreciation to Mr. Travis King and his staff for their usual fine support and interest in the project.


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