

PARAGUAY  
MINIFUNDIA CROP INTENSIFICATION  
QUARTERLY PROGRESS REPORT  
April 1 - June 30, 1982

USAID - CREDICOOP - MASI  
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I. INTRODUCTION

During this quarter, movements of MASI personnel were as follows:

Francisco L. Jordan	- Production Advisor	3 months
Jose Vivas	- Irrigation Advisor	1 month
Walter Price	- Project Director	10 days
Ruben Saucedo	- Tomato Marketing Advisor	7 days

With these visits the number of MASI technicians rises to 12 with a total of 34 person-months. The audiovisual specialists were not able to come to Paraguay due to complications regarding the type of contract.

Mr. Price arrived in Paraguay on April 21st. He discussed suggested changes in the technical assistance program with AID and CREDICOOP, as well as changes in the audiovisuals program.

It is proposed that the short-term marketing technicians be released and a long-term specialist be engaged similar to the one for production. It has been found that short-term advisors are unable to analyze and resolve a problem as complex as

marketing horticultural crops.

Mr. Walter Price brought equipment and supplies for soil testing with him which will help CREDICOOP solve the problems which arise in this respect.

A final decision with regard to a contract with the audiovisual technicians now depends on a decision from the AID Contracts Office.

## II. ADMINISTRATIVE REPORT

The weekly Monday meetings between AID and CREDICOOP staff members continue on a regular basis. The work already carried out is reviewed and the calendar for the forthcoming week is planned.

Various meetings were held with Mr. Walter Price, Mr. Blair Cooper and CREDICOOP staff members in order to revise the technical assistance plan, and to discuss problems which have arisen as well as possible solutions. The contents and schedule of visits of specialists which meet in Washington for final decision was revised.

Messrs. Blair Cooper and Jose Dubini made two field trips in order to see projects in research and propagation in the National Institute of Agronomy as well as on Mr. P. Kirchofer's farm, the latter responsible for pineapple propagation through the National Seed Service.

Irrigation seminars were held by Ing. Jose Vivas, and tomato production and marketing seminars given by Mr. Rubén Saucedo.

The research schedule through the end of 1982 was revised.

Various meetings were held between research staff members in the Ministry of Agriculture and Animal Husbandry in order to discuss problems that have arisen in the research plan to be carried out by the National Institute of Agronomy. The research program was drastically reduced because of lack of space (land) and personnel from I.A.N. Contracts with an individual farm (Coghlan) will be made in order to carry out research in strawberry and tomato.

### III. HORTICULTURAL REPORT

The horticulturist devoted most of his time to the research program with the National Institute of Agronomy (I.A.N.) in Caacupé and on the private farm belonging to Miss Rosa Coghlan so as to be able to carry out research that could not be done in I.A.N. due to lack of space and staff.

A pesticide compatibility table, adapted from the U.S., was prepared.

Photographs were taken of the banana, pineapple, and strawberry trials at I.A.N.

The horticulturist spent various days on field visits with

irrigation specialist Ing. Jose Vivas and Ruben Saucedo, the tomato marketing specialist.

CREDICOOP's strawberry sowing program was suspended for the year 1982. This conclusion was reached after evaluating the propagation material and due to the delay in the decision to be made among CREDICOOP, the National Seed Service and the Agricultural Extension Service.

During this quarter, trials were carried out in irrigation, fertilization, and staking of tomatoes, as well as those in irrigation, fertilization, varieties, mulching, and disease control in strawberries.

This brings the total of trials which CREDICOOP maintains in I.A.N. and the Coghlan farm to 13. This does not include the trial in tomato varieties, the seeds of which are already growing.

#### BANANA

The horticulturist attended and participated in two field days on banana. The first was held in Caraguatay, sponsored by the Agricultural Extension Service and the other on Col Oviedo e Itacurubi's banana plantation by CREDICOOP. The banana trees seem to be in very good condition, promising a good 1982 harvest. The harvest has already begun and during the month of June the first part of production was sold through CREDICOOP. Unless adverse weather conditions occur like last year, it is

hoped that banana production will be good.

The horticulturist participated in three short courses on banana harvesting and packing in Itacurubi and Loreto, Concepcion. The bananas are so big that it is difficult finding space for the two dozen that are supposed to fit in the boxes.

Recommendations about fertilization contained in the audio-visual booklet were revised. A short course on thinning banana trees was given to planters in the Loreto, Concepcion area.

Various visits were made to banana plantations where problems with diseases had arisen. The main problems were nematode attacks, potassium deficiencies, presence of Sigatoka (Ces-cospora leaf disease) and sporadic outbreaks of virosis. Only Sigatoka was present in the area of Loreto, Concepcion.

Marketing Loreto bananas presents problems due to the distance from the market. Attempts to ripen them with calcium carbonate failed due to the rustic facilities available.

The I.A.N. banana trials were thinned and fertilized.

#### TOMATO

CREDICOOP sowed, according to plan, approximately 40 hectares of Nozomi and Santa Cruz varieties of tomato. The plants are growing well and harvesting should begin by the end of August.

Steps were taken to explore other markets such as Sao Paolo in Brazil since the usual market for Paraguay tomatoes is Argentina (Buenos Aires). The present situation in Argentina due to the Malvinas war is open to question and might cause problems for marketing tomatoes in Buenos Aires.

Various visits were made to tomato plantations in order to observe their growth and development. In general, they are in good condition, predominantly with problems of virus, septoria leaf spot, stemphylium (gray leaf spot) and cutworm. It should be added that during the month of June the weather for development of the tomatoes was very poor, raining for nearly two weeks straight with temperatures in the range most favorable for the growth of fungus.

During the quarter, the subject of tomato disease and pest control was discussed, and a rough draft of a guide for identifying some of the diseases was prepared. The tomato fertilization booklet was discussed and revised.

Forty-three (43) varieties of tomato brought from all over the world have been planted and they will be transplanted during the month of July. The bad weather in June restricted preparations for these trials.

#### STRAWBERRY

The strawberry program is limited to research carried out in the I.A.N. and on the Coghlan farm. As mentioned earlier,

CREDICOOP postponed its sowing program due to problems with the propagation material. Irrigation, varieties, fertilization, mulching, and disease control trials are being carried out. Use of plastic had to be abandoned because of transparency of the white plastic (50 microns) and heat absorption by the black plastic.

The white plastic allowed weeds to grow while the black plastic heated up so much that no plants were able to grow at all, affecting both the survival and development of the strawberry plants.

In both cases, the plastic proved to be too lightweight, causing problems with wind in the holes where the seedlings were planted.

To date, white ants and cutworms are the principal problems with the strawberries.

#### PINEAPPLE

CREDICOOP does not have a pineapple program during the first half of 1982. Activities are limited to research projects carried out at I.A.N. and to be connected to the Cayena Lisa pineapple propagation program under the auspices of SENASE and a private farmer. The undersigned visited this propagation project periodically. It is likely that towards the end of this year the first pineapple slips can be obtained for commercial sowing.

It should be mentioned that the present condition of this pineapple nursery is not very promising. The slips are emerging in widely divergent shapes, without much vigor and somewhat late.