



# Intsormil

TRIP REPORT

DOMINICAN REPUBLIC

BY

DR. RALPH NEILD  
UNIVERSITY OF NEBRASKA

DR. GLEN VOLLMAR  
ASSISTANT DIRECTOR  
INTSORMIL

June 27 - July 1, 1983

CONTRACT NO.: AID/DSAN/XII-G-0149

☆ International  
Sorghum/Millet

☆ Collaborative Research  
Support Program  
(CRSP)

A Research Development Program of the Agency for International Development, Participating Land-Grant Universities, Host County Research Agencies and Private Donors.



Institute of Agriculture and Natural Resources  
University of Nebraska-Lincoln



# INTSORMIL TRIP REPORT

## DOMINICAN REPUBLIC

Dr. Ralph Nield  
University of Nebraska

Dr. Glen Vollmar  
Assistant Director  
INTSORMIL

June 27 - July 1, 1983

SUMMARY: This trip was in response to a request from USAID/Dominican Republic for technical assistance regarding sorghum research collaboration in the Dominican Republic. The Dominican Republic traditionally has grown maize. Limited sorghum trials indicate that sorghum has considerable potential particularly on land that is marginal for maize production. Problems requiring research include testing germplasm for use in different production areas, sorghum midge, cultural practices and processing and utilization. The government of the Dominican Republic has placed national priority on sorghum research. A Dominican Republic Department of Agriculture and INTSORMIL research agreement was signed. The next step is to finalize a plan of work. This is in process.

### ITINERARY:

- June 27 - Arrived in Santo Domingo at 6:30 p.m. Met by Joanne Logan, NU-8 graduate student and Mr. Ferdanando Duran from INESPRES. (INESPRE is the D.R.'s pricing, marketing and processing of Agricultural products unit.)
- June 28 - Travelled to Santiago. Visited sorghum fields, research station, the Agricultural College, and grain marketing facilities.
- June 29 - Visited with government and research officials in Santo Domingo.
- June 30 - Met with government officials in Santo Domingo.
- July 1 - Enroute to Lincoln.

### AMONG PERSONS MET:

#### Department of Agriculture:

Secretary of Agriculture - Angel Suarez  
Under Secretary of Agriculture - Ramon Rodriguez  
Director of Maize and Sorghum Research - Aguiles Caraballo

#### INESPRE

Executive Director - Jose Michelin  
Assistant Director - Mr. Ferdanando Duran

#### Dominican Agricultural College

Dr. Wilfredo Moscoso

#### CESDA (South Central Headquarters for Agricultural Research)

Sorghum Leader - Rafael Duverge  
CESDA Director - Julio Pena

#### Division of Hydrometeorology

Mr. Jose Placido

#### USAID/Dominican Republic

Mr. Ken Ellis, ADO  
Mr. Emilio Martinez, Assistant ADO

June 27 - Arrived in Santo Domingo 5:30 p.m. and were met by Mr. Ferdinando Duran of INESPRES, National Institute of Price Stabilization and Joanne Logan, NU-8, graduate student in the D.R. An agenda for travel and meetings was prepared.

June 28 - Logan, Neild, Vollmar and Mr. Duran visited INESPRES grain storage and handling facilities and fields of grain sorghum, irrigated and dryland, near Santiago, in the northern part of the D.R. INESPRES has a well organized grain handling system. The sorghum fields were vigorous, free of insects, diseases and weeds and were growing well. Sorghum plants were more vigorous than corn in adjacent fields. Sorghum produces a higher yield than corn in the D.R. and the government is promoting increased sorghum production. A television crew was in the Santo Domingo area taking video tapes for a program by INESPRES on sorghum. An article promoting sorghum was in the daily newspapers along with an announcement that the price of sorghum had been increased \$1.00 per cwt. INESPRES is a key organization affecting agricultural policy and prices in the D.R.

While in the Santiago area we stopped at ISA, Instituto Superior de Agricultura, the Dominican Agricultural College to visit with Dr. Wilfredo Moscoso concerning his work with processing and utilization of sorghum in traditional Dominican foods.

June 29 - In Santo Domingo we visited with the following regarding collaborative sorghum research.

Mr. Jose Michelen - Executive Director of INESPRES  
Mr. Ramon Rodriguez - Subsecretary of Agriculture  
Mr. Aguiles Caraballo - Director of the Corn and Sorghum Program  
Secretary of State Agriculture  
Mr. Jose Placido - Division of Hydrometeorology National Meteorological Service

D.R. government agencies and researchers are very much interested in cooperative research activities with INTSORMIL. A letter of understanding drafted by Dr. Charles Francis and Rafael Perez Duverge during a visit to the D.R. in February, 1983, was discussed and revised.

During the afternoon we had a discussion with Mr. Ken Ellis, U.S.A.I.D. Food and Agriculture Officer who complimented Joanne Logan for her work in the D.R. He was supportive of INTSORMIL's work.

June 30 - A Letter of Understanding regarding collaborative sorghum research between INTSORMIL and the Secretary of Agriculture Angel Suavez and Dr. Glen Vollmar, INTSORMIL Assistant Director was signed.

Following the meeting a trip was made to the CESDA, South Central Headquarters for Agriculture Research to visit with Rafael Perez Duverge, sorghum program leader and Julio Pena, Director of CESDA to discuss tentative plans for collaborative work with sorghum.

During the afternoon a final meeting was held with INESPRES Director Jose Michelen and his staff and Ken Ellis USAID/D.R. who had requested the visit.

July 1 - Departed from Santo Domingo for travel back to Lincoln via Miami.

### SORGHUM IN THE DOMINICAN REPUBLIC:

Most of the land area used for cereals where sorghum can be competitively grown is in Maize. Maize is a traditional food and is grown on small and large farms. Sorghum has production advantages particularly when conditions are marginal for maize production. Research plots and planted fields indicate that sorghum can do well in the D.R. and will yield more than maize. One of Fred Miller's white lines grown at Santiago looked very good. The variety most commonly grown is Pioneer 8244. The government of D.R. is committed to using its agricultural resources for the best quality and quantity of production and is strongly supporting increased sorghum production on marginal maize production land. There is a need for developing sorghum programs from growing to utilization that will fit both large and small farmers. Also, considerable research needs to be done to include sorghum in composite flours for human consumption. In the more humid production areas the sorghum midge has been identified as a serious problem. The government is committed to price policy changes that will support shifts in production to sorghum. Shifts to sorghum will come slow on the small farms where small plots of maize are grown. Large farms are expected to make changes as the equipment and technology becomes available to them.

### ACTIONS TAKEN AND RECOMMENDED:

An agreement for collaborative research was signed. Copies in Spanish and the English translation are attached. It was agreed that INTSORMIL staff draft a plan of work based on the discussions in the Dominican Republic and that in about a month an INTSORMIL representative will return to the Dominican Republic and finalize a plan of work with Dominican Republic researchers and administrators. Dr. Ralph Neild, University of Nebraska, is assuming leadership with this. Items discussed as plan of work possibilities include; training, a sorghum workshop, winter nursery, equipment needs and technical assistance with sorghum problems such as the midge problem and utilization. The Dominican Republic administrators and scientists were very interested in providing land and cooperating with a winter sorghum nursery.

### RECOGNITION:

Joanne Logan (NU-8) and Ferdinando Duran (INESPRE) were most helpful to us in making appointments, translating, transportation and other aspects of the trip. The Dominican Republic officials and researchers were most cordial and enthusiastic in regard to INTSORMIL collaborative research with Dominican Republic sorghum researchers.

### DETAILED REPORT

A detailed report of Sorghum Production potential and research needs for support of production and processing is in process. This report will be submitted to USAID/Dominican Republic for distribution.

LETTER OF UNDERSTANDING BETWEEN THE SECRETARY OF  
AGRICULTURE OF THE DOMINICAN REPUBLIC AND INTSORMIL

INTRODUCTION:

Considering that INTSORMIL is a collaborative program for the investigation of sorghum with the participation of 8 North American Universities, AID and benefiting national government institutions.

Considering that the objective of INTSORMIL is to improve the production and utilization of sorghum in those countries where it is grown for grain.

Considering that the Dominican Government through SEA is interested in increasing and developing the production of sorghum in the country.

Considering that sorghum production constitutes one adequate way to improve the earnings of small and medium producers in areas when precarious agroclimatic conditions prevail.

Considering that sorghum represents the most obvious way to achieve an increase in grain production in the Dominican Republic.

Considering that SEA and INTSORMIL recognize and emphasize the importance of developing and strengthening scientific exchange in the field of research to promote the use and increase the production of sorghum.

Therefore, SEA and INTSORMIL have agreed to sign the following letter whose objectives are:

OBJECTIVES:

- a) Execute cooperative sorghum research projects related to problems of mutual interest and specific to the sorghum crop.
- b) Promote the exchange of germ plasm between INTSORMIL and the National Maize and Sorghum Research Program.
- c) Organize training for advanced degrees and experience for professionals in the field for personnel from the National Program and other INTSORMIL students.
- d) Propose ways in which the National Program can receive technical assistance from INTSORMIL and seek operating funds for specific projects in sorghum research.
- e) Promote the exchange of publications and other research results as well as participation in technical and scientific workshops which are conducted by INTSORMIL.
- f) Seek ways to implement these projects and others of mutual interest within the financial capabilities of both institutions..

### III. SPECIFIC AREAS OF COLLABORATION:

This letter of understanding establishes the following specific areas of collaboration:

- a) Resources for research projects:
  - Seek operating funds to support specific research projects of mutual interest, which could come from INTSORMIL.
  - Provide the necessary facilities in SEA to execute these projects as well as operating costs when available.
- b) Exchange of germ plasm:
  - Provide genetic materials from INTSORMIL which are resistant to drought, insects and diseases, have high yield potential, possess adequate food quality, etc.
  - Summarize and analyze information on the yield and adaptation of these materials and other experiments.
- c) Training:
  - Education and training of technical personnel at the appropriate levels.
  - Provide facilities for the conduct of field or other research for graduate students who are financed by INTSORMIL.
  - Provide the means to participate in meetings, seminars or conferences which are sponsored by either institution.
- d) Technical assistance:
  - Facilitate technical assistance from INTSORMIL scientists on problems considered important by the National Program, such as:
    1. Use of sorghum and its derivatives in foods and animal feeds
    2. Agronomy and production systems
    3. Seed production
    4. Insect and disease problems
- e) Exchange of information:
  - Collaborate in the exchange of information and research results on sorghum.
  - Write joint publications or reports based on cooperative research projects.

### IV. IMPLEMENTATION:

- a) The specific projects which are mentioned in this agreement will be implemented subject to the availability of resources from INTSORMIL and the SEA.
- b) This agreement provides the opportunity as well to seek other sources of financing which will permit the implementation of future collaborative projects.
- c) This working agreement allows collaboration with other projects, such as that between the bean project (Beans CRSP) and INTSORMIL.