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OFFICE IN TRINIDAD & TOBAGO



IICA'S CONTRIBUTION TO THE AGRICULTURAL SECTOR IN TRINIDAD AND TOBAGO DURING 1986

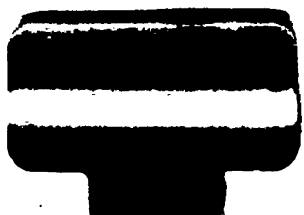
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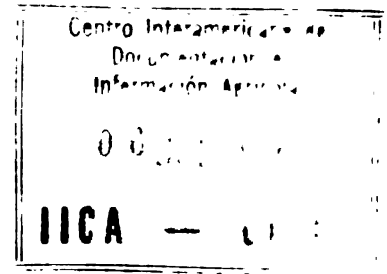
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ACKNOWLEDGEMENTS

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IICA'S CONTRIBUTION TO THE AGRICULTURAL SECTOR IN TRINIDAD AND TOBAGO DURING 1986

INTRODUCTION

The Inter-American Institute for Cooperation on Agriculture (IICA) is the specialized agency for Agriculture of the Inter-American system. The Institute was founded on October 7, 1942 when the Council of Directors of the Pan American Union approved the creation of the Inter-American Institute for Agricultural Sciences.

IICA was founded as an institution for agricultural research and graduate training in tropical agriculture. In response to changing needs in the hemisphere, the Institute gradually evolved into an agency for technical cooperation and institutional strengthening in the field of agriculture.

These changes were officially recognized through the ratification of a new Convention on December 8, 1980. The Institute's purposes under the new Convention are to encourage, promote and support cooperation among the twenty-nine Member States, to bring about agricultural development and rural well-being.

With its broader and more flexible mandate and a new structure to facilitate direct participation by the Member States in activities of the Inter-American Board of Agriculture and the Executive Committee, the Institute now has a geographic reach that allows it to respond to needs for technical cooperation in all of its Member States.

The contributions provided by the Member States and the ties IICA maintains with its twelve observer countries and numerous international organizations provide the Institute with channels to direct its human and financial resources in support of agricultural development throughout the Americas.

The 1987-1991 Medium Term Plan, the policy document that sets IICA's priorities, stresses the reactivation of the agricultural sector as the key to economic growth. In support of this policy, the

Institute is placing special emphasis on the support and promotion of actions to modernize agricultural technology and strengthen the processes of regional and sub-regional integration. In order to attain these goals, the Institute is concentrating its actions on the following five programmes: Agrarian Policy Analysis and Planning; Technology Generation and Transfer; Organization and Management for Rural Development; Marketing and Agroindustry; and Animal Health and Plant Protection.

These fields of action reflect the needs and priorities established by the Member States and delimit the areas in which IICA concentrates its efforts and technical capacity. They are the focus of IICA's human and financial resource allocations and shape its relationship with other international organizations.

GENERAL INFORMATION

The IICA Office in Trinidad and Tobago was opened at 3A Queen's Park West, Port-of-Spain in January 1978 following the signing of the basic agreement with Trinidad and Tobago in August 1977. From its inception, the office sought to support activities destined to improve the agricultural sector in Trinidad and Tobago. The office has cooperated closely with the Ministry of Agriculture, Lands and Food Production and with other national, regional and international organizations and institutions of the agricultural sector. These include:

- a) The Faculty of Agriculture of the University of the West Indies
- b) The Caribbean Agricultural Research and Development Institute (with which it signed a Memorandum of Understanding on May 15, 1980)
- c) The Caribbean Industrial Research Institute (CARIRI)
- d) The Food and Agriculture Corporation of Trinidad and Tobago
- e) Caroni (1975) Limited

The Office is also headquarters of the IICA Regional Plant Protection Programme which operates in nine countries of the Caribbean region.

The current staff of the office consist of:

International Professional Staff

1. Plant Protection Specialist (Director)
Dr. Chelston W.D. Brathwaite
2. Agricultural Research Specialist
Dr. Warren M. Forsythe
3. Agricultural Information Specialist
Mr. Hugo E. Caceres

National (General Services)

1. Administrative Assistant
Mrs. Cathy-Ann Baksh
2. Secretary (Accounting)
Miss Sandra Mahabir
3. Secretary (Programmes)
Miss Francilla Stewart
4. Office Assistant
Mrs. Ruby D'Arceuil
5. Messenger/Driver
Mr. Edwin Franco

The office was relocated to Pannell Kerr Forster Building, Orange Grove Road, Tacarigua in June, 1984.

TECHNICAL COOPERATION ACTIONS

The IICA Office in Trinidad and Tobago continued in 1986 to provide technical cooperation in four of the ten programmes of the 1983-1987 Medium Term Plan. These programmes were:

1. Programme V. Plant Protection
2. Programme VI. Stimulus for Agricultural and Forest Production
3. Programme VII. Agricultural Marketing and Agro Industry
4. Programme X. Information for Agricultural Development and Rural Well-being

1. Activities in Programme V - Plant Protection

This programme recognises that the spread of pests, diseases, and weeds that affect basic food and export crops aggravate the

food, foreign exchange and energy needs of the Latin American and Caribbean countries. Coordinated international action can contribute to reducing the spreading and incidence of these pests, weeds and diseases, since the individual capabilities of national plant protection institutions are usually limited by low levels of physical, human and financial resources with which to attain their objectives.

1:1 General Objective

To promote and support the efforts of the countries to prevent and reduce crop losses caused by pests, diseases and weeds.

1:2 Special Objectives

To cooperate with the countries in expanding and improving their institutional capability to:

a. Update and standardize national and international legal provisions and regulations governing plant protection

b. Identify, detect and estimate the damage caused by the main crop pests, diseases and weeds

c. Plan, coordinate and implement programmes for reducing the incidence and preventing the spread of the main crop pests, diseases and weeds

d. Plan, coordinate and implement research and technical exchange programmes on crop pests, diseases and weeds

e. Generate mechanisms for upgrading the physical, human and financial resources of plant protection institutions according to the levels of responsibility that have been assigned to them

1:3 IICA's Assistance in Plant Protection in the Caribbean in the past (Regional Plant Protection Programme with activities in eight countries including Trinidad and Tobago)

Over the last five years, IICA has organized a regional plant protection programme for the Caribbean.

The following are some of the main achievements of the programme since its inception:

a. Establishment of a Regional Training Programme for Plant Quarantine Inspectors

So far twenty-one plant quarantine inspectors have been trained. This includes six from Barbados, two from Dominica, two from Grenada, two from Guyana, one from Haiti, two from Jamaica, one from St. Kitts, one from St. Lucia and six from Trinidad and Tobago.

b. Establishment of a Regional Newsletter in Plant Protection

The Caribbean Plant Protection Newsletter was initiated in 1981 and is now in its fifth year. The Newsletter collects up-to-date information on plant protection from international and regional sources and communicates it to the plant protection personnel of the Caribbean.

c. Establishment of a Society for Plant Protection in the Caribbean

The establishment of a Society for Plant Protection in the Caribbean in 1981 responded to the needs of the region for a professional body to give professional stimulation and also to act as a mechanism for communication and co-ordination of plant protection activities. The society which now has some 121 members throughout the region has as its objectives the following:

- to strengthen inter-governmental and inter-institutional cooperation in plant protection in the Caribbean
- to establish a forum for the discussion of plant protection issues affecting Caribbean Agriculture
- to act as a forum for the exchange of ideas and information among plant protection personnel in the Caribbean
- to promote and stimulate research and teaching in plant protection subjects, viz., Entomology, Plant Pathology, Weed Science, etc. and to ensure that these are integrated into the discipline of plant protection
- to stimulate discussions and actions to ensure that the Caribbean environment remains free from contamination from pesticides

- to carry out all other activities which may be associated with preserving the plant genetic resources of the Caribbean from destruction by pests and diseases as may be defined by the Executive Committee

IICA assisted in the establishment of the Society for Plant Protection in the Caribbean at the Second Regional Meeting of Plant Protection in Latin America and the Caribbean held in Mexico City in October 1980.

The Society has held two meetings so far. In 1981 it met in Jamaica and discussed urgent plant pest and disease problems in the Caribbean. In 1983, it met in Trinidad and Tobago and discussed the harmonization of pesticides legislation in the Caribbean. A document describing the Society has been prepared and is available.

d. Harmonization of Pesticide Legislation in the Caribbean

There has been a dramatic increase in pesticide usage in the Caribbean during the last decade and like many parts of the world there is concern with respect to the potential human and environmental hazard to pesticide use. The concept of the harmonization of pesticide legislation and registration requirements in the region stemmed from the initiatives developed by the FAO in 1977 to seek to harmonize the legislative aspects of pesticide use throughout the world. A meeting to consider the harmonization of pesticide legislation and the registration process in the region was held in Trinidad and Tobago under the auspices of IICA and with financial assistance from the National Agricultural Chemical Association (NACA) and GIFAP.

The meeting considered the status of pesticide legislation in the region and established guidelines for harmonization. The meeting has as its objectives:

- to examine and analyse the status of pesticide legislation in the Caribbean
- to become familiar with measures currently in operation and to recommend others for standardizing the diverse requirements for pesticide use

- to provide guidelines to those countries that need to enact legislation to regulate the use of guidelines, norms and technical procedures (chemical, analytical, biological, toxicological)

- to examine the status of establishment or acceptance of the maximum residue levels of pesticide (tolerance) in food in each country

- to analyse the environmental impact of the large scale application of pesticides in the Caribbean

- to stimulate training in pesticide registration procedures and in the safe and efficient use of pesticides

Forty-five delegates from throughout the Caribbean and from Regional and International Organizations attended the meeting.

The meeting recommended, among other things, that the Pesticide and Toxic Chemicals Act of Trinidad and Tobago should be used as a model in the formulation of Regional pesticide legislative actions. Follow-up action in this is now being taken in the development of a Regional Training Programme in pesticide safety in collaboration with the World Bank and the University of Miami, School of Medicine. A 263 page document has been prepared as a result of the meeting.

e. Provided Training in Integrated Pest Management

In collaboration with the Caribbean Agricultural Research and Development Institute (CARDI), the University of the West Indies, Faculty of Agriculture and the Consortium for International Crop Protection (CICP) a two week training programme on Integrated Pest Management was held at the Faculty of Agriculture, University of the West Indies, St. Augustine, Trinidad and Tobago August 10th to 21st, 1981. The seminar was attended by twenty-one participants from thirteen countries in the Region and together with participants from Trinidad and Tobago there was an average daily attendance of thirty-five persons. Lecturers were drawn from the Consortium for International Crop Protection, the University of the West

Indies, Ministry of Agriculture of Trinidad and Tobago, the Commonwealth Institute of Biological Control, the Caribbean Agricultural Research and Development Institute, Caroni Limited and IICA.

The course dealt with the basic concepts of integrated pest management and their application to the solution of pest and disease problems of crops grown in the Caribbean. While most participants expressed a high level of satisfaction with the training programme, it was the opinion of all that a more sustained effort and long-term training in this area was necessary. Certificates were presented at the end of the course.

f. Production of a Bibliography Representing 100 years of Research in Plant Protection in the Caribbean

The document entitled "A Bibliography of Plant Disease Investigations in the Caribbean from 1880-1980". This publication which contains references to cover 3,000 publications on plant disease work in the Caribbean, is intended to serve as a reference source for Plant Pathologists, Nematologists, Agronomists, Research students and other persons interested in Agriculture in the Caribbean.

The bibliography covers all aspects of plant disease and their control, including diseases caused by Fungi, Bacteria, Viruses and Nematodes. The geographic area covered by the reference includes all the territories of the Commonwealth Caribbean. The material covered by the Bibliography dates from the 1880's to 1980.

The entries were compiled mainly from primary sources, many of which have not been indexed previously. It would be impossible to list all the titles searched; however, the main sources of information were Agricultural News, Tropical Agriculture, West Indian Bulletin, the Journal of the Jamaica Agricultural Society, the Journal of Agricultural Society of Trinidad and Tobago, and the Annual Reports and Publications of the Departments and Ministries of Agriculture throughout the region. The Secondary sources included regional bibliographies on agriculture

and related topics and computerized literature searches of the Commonwealth Agricultural Bureau data bases. Copies of this bibliography have been sent to all plant protection personnel in the Caribbean.

g. Production of a Book on the Diagnosis of Plant Disease

A book on Plant Disease Diagnosis was prepared by the specialist to provide plant protection personnel with an introductory handbook for the practical study of plant disease. The book outlines the basic steps, facilities and procedures which are necessary for the accurate diagnosis of plant diseases.

This publication is especially valuable to laboratory assistants who are being introduced to Plant Pathology for the first time, to give them the rudimentary principles and techniques which are required for plant disease diagnosis.

h. Organization of Seminars and Workshops

In addition to the above the programme has financed and organized seminars and workshops on:

- a. Pests and Diseases as constraints to the marketing of fruits in the Caribbean
- b. Urgent plant pests and diseases problems
- c. Pesticide safety
- d. Postharvest losses
- e. Pest and Disease Diagnosis

i. Other Actions

The programme has also initiated actions on the following:

- a. The establishment of a data base of plant protection information for the Caribbean.
- b. Preparation of a comprehensive project to assist in the establishment of a facility for research and training in plant protection.
- c. Coordination of plant protection legislation as it relates to pesticides and plant quarantine.

d. The reorganization of plant protection capability within Ministries of Agriculture in order to obtain a more harmonious and integrated system between plant protection, production and marketing. The model of a pest management unit is being considered.

e. Establishment of a survey for fruit flies in the Caribbean.

j. Support for national plant protection projects in Grenada, St. Lucia and Dominica

The programme has also established national components in Grenada, Dominica and St. Lucia which seek to improve the capacity of these national systems to deliver efficient plant protection services. In all three countries, the project aims to increase the skills of personnel of the Ministry of Agriculture to enable them to provide better plant protection services to the farming community by providing specific training in plant protection. Survey studies for fruit flies and training in postharvest losses have also been carried out. Basic laboratory facilities are also being up-graded and attempts are being made to improve the institutional structure of the plant protection services especially in Grenada where a pest management unit has been set up as a result of collaborative efforts between IICA and the United States Agency for International Development (USAID).

1:4 IICA's Assistance to Trinidad and Tobago during 1986

1:4:1 Training in Weed Management

Mr. Puran Bridgemohan, an Agricultural Research Officer with the Ministry was supported to attend a course on Weed Management Strategies (Research Methods for Developing Countries) at Oregon State University, U.S.A. from July 13th to August 31st, 1986.

The course stressed the overall importance of effective weed management in relation to other cropping inputs. Practical techniques

for conducting research and producing crops, as well as extension programmes, were shared by participants and coordinators.

Throughout, safety aspects and the need for careful socio-economic evaluation were stressed. Course material initially concentrated on weed management basics followed by wide-ranging discussions on various approaches to weed management and the potential results. The 6-day-a-week course included field trips to collect information and interact with growers and others.

On his return to Trinidad and Tobago Mr. Bridgemohan reported that the course was extremely beneficial.

1:4:2 Training course on the Diagnosis of Plant Pests and Diseases

Losses due to plant pests and diseases are high in the Caribbean region and act as limiting factors in success of many crop production enterprises. The inability to properly diagnose common plant pest and disease problems in the field is recognised as one of the major limiting factors in the effective control of plant pests and diseases in the Caribbean. Against this background, IICA in cooperation with the Faculty of Agriculture, the University of the West Indies and the Ministry of Agriculture, Lands and Food Production held the first regional training course on the diagnosis of plant pests and diseases of food crops in the Caribbean from July 7th to 11th, 1986 at the St. Augustine Campus of the University of the West Indies.

The course emphasized the practical techniques which are required for correct pest and disease diagnosis and utilized local examples in the laboratory and in the field. The course lasted for one week and was led by specialists in pest and disease diagnosis and control from the University of the West Indies, Faculty of Agriculture, the

Caribbean Agricultural Research and Development Institute (CARDI), the Ministry of Agriculture, Lands and Food Production, IICA and other regional and national organizations. The course was conducted in English.

The objectives of the course were:

- a. To increase the level of skills of persons responsible for the diagnosis and control of plant pests and diseases.
- b. To provide the basis for the development of a Manual on the Diagnosis of Plant Pests and Diseases.

In collaboration with the Information and Training Unit of the Ministry of Agriculture, Lands and Food Production, the material presented during the course is being used to prepare a video cassette on the diagnosis of plant pests and diseases in the Caribbean for use as a teaching tool in other countries of the region.

Twenty-five persons from Trinidad and Tobago participated in the course.

All the participants were high in praise for the course and recommended that the course be repeated regularly.

2. Programme VI - Stimulus for Agriculture and Forest Production

This programme recognises that during the past decade, the problems of agricultural production in Latin America and the Caribbean have been exacerbated. The countries are having more trouble satisfying their production needs for food, agroindustry, generating foreign exchange and replacing hydrocarbons. As a result, a system of specialization has evolved. Large commercial establishments produce export products, while medium and small-scale farms are devoted to producing food. It is evident that the institutions have a limited capacity to design programmes and projects



Dr. Ronald Barow, Director of Research at the Central Experiment Station at Centeno addresses participants in the First Regional Course on Pest and Disease Diagnosis held at the Faculty of Agriculture, U.W.I. from July 7-12, 1986. The course was sponsored by IICA, the Faculty of Agriculture and the then Ministry of Agriculture, Lands and Food Production (now the Ministry of Food Production, Marine Exploitation, Forestry and the Environment).



Dr. E. Patrick Alleyne presents a Certificate to Miss Vidyah Rambaran of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment who successfully completed the First Regional Training Course on the Diagnosis of Plant Pests and Diseases held at the Faculty of Agriculture, U.W.I. from July 7-12, 1986.



Participants in the course on Diagnosis of Pests and Diseases observing specimens in the field.



Miss Cynthra Persad, Plant Pathologist of the Ministry of Food Production demonstrating the diagnosis of Moko Disease of banana to participants.

Participants from Trinidad and Tobago in the course on Diagnosis of Pests and Diseases from July 7th to 12th at the University of the West Indies

NAME	PLACE OF WORK	NAME	PLACE OF WORK
Mr. Ramchan Balroop	- Ministry of Agriculture	Mr. Faizal Mohammed	- Ministry of Agriculture
Mrs. Ann Beddoe	- The University of the West Indies	Mr. Sundar Narinesingh	- Ministry of Agriculture
Mr. Boysie Beharylal	- Ministry of Agriculture	Miss Sita Parbu	- Ministry of Agriculture
Mr. Camodin Boodoo	- Ministry of Agriculture	Mr. Seunarine Raghoo	- Caroni (1975) Limited
Mr. Eric Emmanuel	- Food and Agriculture Corporation	Miss Vidyah Rambaran	- Ministry of Agriculture
Mr. Sarran Harryram	- The University of the West Indies	Mr. Deodath Ramjattan	- Ministry of Agriculture
Miss Gail Henry	- Ministry of Agriculture	Mr. Jairaj Ramkisson	- The University of the West Indies
Mr. Raymond John	- Ministry of Agriculture	Mr. Sahadeo Ramlogan	- Ministry of Agriculture
Mr. Philip Jordan	- Caroni (1975) Limited	Mr. Tikaram Guyadeen	- Ministry of Agriculture
Mrs. Jann Joseph	- The University of the West Indies	Miss Jennifer Williams	- Food and Agriculture Corporation
Mr. Alimuddin Juman	- Ministry of Agriculture	Mr. Osbert Williams	- Ministry of Agriculture
Mr. Liquat Khan	- CIBA-GEIGY	Mr. Dhaneish Ramdin	- Ministry of Agriculture
Mr. Carl Lara	- Ministry of Agriculture	Mr. Roy Griffith	- Ministry of Agriculture

which favour the sector, and need to design incentive policies that encourage investment and the adoption of technological change. Some aspects that should be considered by these policies are the upgrading of the amounts, terms of payment and grace periods of credit, which should be combined with other services like insurance and technology transfer.

2:1 General Objective

To improve the efficiency and effectiveness of the efforts of national institutions to promote the production of annual and perennial crops, livestock products, forestry products and agroenergy to meet nutritional needs, generate and save foreign exchange, encourage industrialization and replace hydrocarbons as a source of energy.

2:2 Specific Objectives

To cooperate with the countries in:

a. Developing institutional skills for identifying and gauging the minimum factors and/or combinations thereof which should be made available to the producers.

b. Developing the skills of sectoral institutions for designing, preparing and implementing interdisciplinary and intersectoral programmes and projects.

c. Developing the capabilities of the institutions for organizing, implementing and managing multicomponent

programmes and projects.

d. Adapting the physical, human and financial resources of the institutions for implementing multicomponent projects.

e. Developing effective fiscal incentive and risk management policies for production, to encourage investment in the sector and the adoption of technological change.

f. Strengthening the organization and coordination of public and private services which provide inputs for production, so as to ensure adequate quantity and prompt delivery.

g. Identifying and developing policies and mechanisms by which the member countries can completely or partially satisfy their hydrocarbon requirements with agroenergy substitutes.

h. Developing and strengthening sectoral credit systems, to upgrade the amounts, terms of repayment, and grace periods, through credit supervision; and integrating credit with other services, especially insurance and technology transfer systems.

i. Developing the processes and mechanisms for the testing, dissemination and adoption of technology appropriate to the different production areas, and integrating these mechanisms into programmes and projects to boost production.

2:3 IICA's Assistance to Trinidad and Tobago during 1986

2:3:1 Rehabilitation of tree crop production

Generally tree crops include cocoa, coffee, coconuts, citrus, and minor crops like tonca beans, avocado, guava, breadfruit, etc. These crops occupy 16.7 per cent of the land area of Trinidad and Tobago. Coffee, cocoa and citrus account for 81,147 ha.

a) Background

There has been a steady decline in the production of cocoa in Trinidad and Tobago over the last few decades. The annual average production figure during the period 1975-1981 was 6.1 million pounds. This figure represents an annual shortfall of 51 million pounds in the production of cocoa. This is compared to the peak production period of 1915-1924 when the yearly average production was 61 million pounds. Cocoa production fell further in 1984 to 3.4 million pounds, and has dropped a further 8 per cent in 1985, despite rising unemployment to alleviate the shortage of labour in the agricultural sector.

b) *IICA's Assistance in the Rehabilitation of the Cocoa Industry*
The Ministry has stated its goals for cocoa rehabilitation as: mechanization, increased yield per acre, and inter-cropping to provide greater incomes for smaller producers.

IICA's main focus in the rehabilitation of tree crop production was the cocoa and coffee industries. The former government had placed emphasis on the rehabilitation of these two tree crops as major potential foreign exchange earners.

In trying to solve the agronomic aspect of the problems in the cocoa industry IICA provided the consulting services of Dr. Jorge Soria during March 28th to April

8th, 1982. Several recommendations were made regarding the rehabilitation of the cocoa industry.

IICA also arranged for Mrs. Cheryl Gonzales and Mr. Kent Villafana to visit cocoa and coffee research and production programmes in Brazil in October 1982.

In 1983, IICA provided for Dr. Basil Bartley to consult with the Cocoa Project of the University of the West Indies from November 29th to December 13th. Dr. Bartley assisted in the identification of cocoa germplasm of the Trinidad collection and made an assessment of the probable value of the plant material for future use in the collection.

A "Preliminary Study of Cocoa Mechanization in Trinidad and Tobago" has been prepared by Dr. Winston Harvey, an Agricultural Engineer in the Crop Science Department at the University of the West Indies. Dr. Harvey was contracted by IICA to evaluate the economic feasibility of the mechanization of cocoa using an all-terrain vehicle (ATV). The ATV has eight low pressure tyres (2 psi), a low centre of gravity, excellent traction and traffic ability in mud, across drainage ditches and on slopes up to 40 degrees.

Dr. Harvey's study has been delivered to the Ministry and favourable comments were given. The Ministry has shown interest in cooperating with IICA and Dr. Harvey on further studies in this area.

Some of the features of the ATV in use observed by IICA are:

a. A fogger applicator for fungicide control of blackpod in cocoa was tried while attached to the all terrain vehicle (ATV) under farm conditions of R. Montano's farm. The applicator is presently being studied by Dr. Winston Harvey of U.W.I. in relation to the low application rate delivered on the farm.



A Demonstration of Herbicide Application for Weed Control in Cocoa using the Argo ATV.

b. Experimental cocoa plantings on the hillside farm of R. Montano were evaluated for erosion during February, 1986. The fields are arranged with paths across the slope to accommodate the transit of an ATV. No erosion was observed.

c) IICA's assistance in relation to Coffee Production

Caroni (1975) Limited, in its policy of diversification away from sugarcane, is planning to plant 1,000 acres of sun coffee in monoculture and for mechanization on sloping land.

In October 1985 IICA organized the visit of Dr. Marc Berthouly to Caroni where he provided consulting services. He advised the company on the growing of non-shade Robusta coffee which is planted on sloping land.

After the visit, Dr. Berthouly arranged for the French Government to have ARABUSTA coffee seeds sent from Martinique to the Centeno Coffee Collection in Trinidad. This French Hybrid Coffee had been sought after by the Government of Trinidad and Tobago for over five (5) years.

During September, 1986 the Caroni hillside coffee and banana plantations were visited as a follow-up on the consulting visit by Marc Berthouly and Warren Forsythe. Points noted were: (1) improved selection of coffee seedlings, (2) improved fertilizer programme, (3) improved seedling potting mixture, (4) bending of coffee, (5) field inspection for erosion — there was considerable erosion in newly planted fields, (6) identification of a land slip mechanism in the field, (7) damage to the field by tractors used in the rainy season for brush cutting. Dr. T.W.A. Carr, Director of Research of Caroni Research Station was present during the visit and has programmed for the Caroni Technology Committee a discussion of the use of the ATV to avoid damage to the fields by tractors during the rainy season.

The Ministry of Agriculture has put renewed vigour in the coffee and cocoa rehabilitation programmes. On October 17, 1986 the new Committee for Rehabilitation of Cocoa and Coffee was launched, headed by Dr. Reginald Griffith.

Increased cocoa and coffee exports has been identified by the former

Government as significant foreign exchange earners in the next ten years. IICA has participated with the new Committee. The Specialist in Generation and Transfer of Technology was in charge of the mechanization sub-committee. IICA's collaboration with the Agricultural Engineering Development Division and its Director, Mr. Dave Duggal was recognized. A committee report with recommendations was submitted to the former Minister of Agriculture on the 30th November, 1986.

The Specialist in Generation and Transfer of Technology, Dr. Warren Forsythe, met with Mr. Dave Duggal of the (AEDD) on several occasions in October and November last year to discuss IICA's collaboration with the Division in Cocoa Mechanization Studies.

3. Programme VII - Agricultural Marketing and Agro Industry

The countries of Latin America and the Caribbean face serious obstacles to achieving an efficient and sustained food supply. These include imbalances in the supply and demand of products and the fact that, in general, agricultural exports are limited to a few traditional product lines and irregular surplus. As a result, there are serious limitations on efforts to expand markets and achieve diversification. To this must be added the inadequacy of infrastructure for storage, preservation, and agroindustrial processing of food and raw materials. This is frequently caused by a lack of price and marketing policies, and the difficulty involved in concerting efforts among countries for marketing their agricultural and forest products at the sub-regional, regional, and world levels. Other problems are the dispersion of poor organization of medium and small-scale farmers, the seasonal nature of production and the absence of alert services signaling the need to make adjustments to changing conditions on domestic or external markets.

3:1 General Objective

To support national, subregional and regional systems for the marketing and industrialization of agricultural and forest

products, in order to stabilize supply and demand and sustain acceptable prices for producers and consumers, promote food security, ensure that products will be available to meet domestic and export needs, and develop measures that will prevent discrimination against specific groups of producers and consumers.

3:2 Specific Objectives

a. To design and implement marketing systems able to meet the requirements of quantity, quality and service posed by a rapidly growing urban population.

b. To improve planning and implementation skills in public agencies responsible for monitoring the efficient operation of national marketing and agroindustry systems, and in charge of generating and implementing integrated policies for the production, processing and marketing of agricultural products.

c. To reinforce the action of regional and subregional systems through concerted efforts by various countries for marketing exportable foodstuffs, produce and raw materials of agricultural origin.

d. To design and implement strategies to prevent marketing systems from discriminating against specific groups of producers or consumers.

3:3 Assistance to the Ministry of Agriculture, Lands and Food Production in the improvement of the Domestic Marketing of Food Crops in Trinidad and Tobago

3:3:1 Background

Former Minister of Agriculture, Mr. Kamaluddin Mohammed requested technical assistance in the establishment of a marketing system for food crops in Trinidad and Tobago. This request was issued during an official visit by the former Director-General of IICA, Dr. Francisco Morillo on the 24th June, 1985. The request was later formalized by the Chief Technical Officer of the Ministry, Mr. Mannie Dookeran, in a letter on the 2nd July, 1985.

As a result of this request, IICA's Marketing Specialist and Director of the IICA Office in Barbados, Mr. Michael Moran and Dr. Chelston W.D. Brathwaite, Director of IICA Office in Trinidad and Tobago met with officials of the Ministry of Agriculture, Lands and Food Production and other officials of the agricultural sector from July 7th to 9th, 1985. The meeting sought to identify specific areas of technical cooperation and the development of a plan of action to fulfill the request for technical help.

This meeting resulted in a marketing mission which visited Trinidad and Tobago from August 25th to 31st, 1985. It submitted a final document entitled "Proposals for the Improvement of Domestic Marketing of Fruits and Vegetables in Trinidad and Tobago."

The Ministry accepted the proposals and is currently preparing to submit them to Cabinet with specific reference to marketing infrastructure.

Meanwhile the Ministry has continued to request IICA's assistance, in training, to establish a system of market information in agriculture relating to supply, demand and price and the improvement of postharvest technology (Market Information Systems).

3:3:2 Activities carried out in 1986

1. An officer of the Ministry of Agriculture, Lands and Food Production, Miss Bridget Poon, was trained in the development of market information systems in Barbados and in the United States of America
2. An officer of the Ministry of Agriculture, Lands and Food Production, Dr. Lennox Sealy, was contracted to prepare a manual on the postharvest handling of food crops in Trinidad and Tobago
3. IICA and CARIRI (Caribbean Industrial Research Institute) signed an agreement for the preparation of four slide sets on postharvest technology to be used for training to reduce postharvest losses



IICA and CARIRI signed a Cooperation Agreement to provide for the preparation of local training materials in Postharvest Technology. Acting Director, Dr. Desmond Ali (second from left) and Dr. Chelston Brathwaite (centre) signing the agreement. Others are Liaquat Shah, Lennox Lewis and Ena Harvey of CARIRI

4. The office is also collaborating with the Department of Agricultural Economics of the University of the West Indies in carrying out an infrastructural analysis of local and municipal markets in Trinidad and Tobago

4. Programme X - Information for Agricultural Development and Rural Well-Being

An accurate assessment of the international and national situation is essential for defining policies, programmes and projects aimed at agricultural development and rural well-being for the countries of the region. A precise and updated diagnosis depends, then, on the availability of systematic and periodic data on sectoral features and trends. In Latin America and the Caribbean, however, there is a shortage of this type of information and analytical skills, as well as insufficient infrastructure and personnel working in the field of documentation. This is caused by limited institutional capabilities to implement information systems, the reduced availability of systematic sectoral information, and the poor coordination between information systems and services, which generates a duplication of efforts and resources.

4:1 *General Objective*

To support the national institutions in establishing, developing and consolidating national agricultural information and documentation systems, and integrating them into an inter-American agricultural information and analysis system.

4:2 *Specific Objectives*

To cooperate with national institutions in:

- a. Improving the availability of systematic sectoral information that is sufficiently broad in scope, trustworthy, timely and accessible.
- b. Developing the analytical skills of sectoral institutions for identifying those data and analytical procedures which are most relevant for making decisions on planning
- c. Developing technical, physical, human and financial resources consonant

with the magnitude and complexity of modern information and data analysis systems for planning and decision-making

d. Improving the quantity and quality of available physical, human and financial resources for generating and maintaining an up-to-date reference and bibliographic base on agricultural development and rural well-being

e. Including systematized information and documentation in agricultural and rural development plans

4:3 *Activities carried out in 1986*

Late in 1978 the Ministry requested the assistance of IICA to assess its library resources and submit a proposal for upgrading the library infrastructure. As a result of IICA's support a document was submitted to the Ministry entitled "Establishment of Trinidad and Tobago's National Bibliographical Information Network". In March 1983, the Trinidad and Tobago Government requested IICA's help in implementing the proposal by way of technical expertise.

In March 1984, an Information Specialist was transferred to the IICA Office in Trinidad and Tobago and IICA's assistance on the implementation of the project began.

a. *Production and publication of the document "Agricultural Bibliography of Trinidad and Tobago 1960 - 1985"*

This information source is designed to improve the availability and access to the agricultural information of Trinidad and Tobago. This bibliography covers 2,342 documents in agriculture and related sciences produced from 1960 to 1985. The bibliographic data refers to:

- (i) documents produced by institutions of Trinidad and Tobago
- (ii) documents on aspects of the agriculture of Trinidad and Tobago, produced by local offices of regional or international organizations, and
- (iii) documents produced abroad on the agriculture of Trinidad and Tobago.

The document is arranged in the following three sections: Bibliographic Index, Subject Index and Co-author Index. The publication is being distributed to institutions, authorities, agricultural specialists in the country as well as abroad.

b. Technical Assistance to the Fishery Division

The Fishery Division was assisted in the adoption, design and implementation of a system for the creation of bibliographic data base on shark and the publication of a bibliography on this subject was financed.

c. Technical Assistance to the Central Experiment Station

The Library of the Central Experiment Station was assisted in the use of AGRINTER/AGRIS methodology for description and recording of national agricultural documents.

5. Other Technical Cooperation Activities

5:1 Participation in Seminar on Technical Cooperation Programming in Trinidad and Tobago

A seminar/workshop on Technical Cooperation Programming was held in Trinidad and Tobago from November 4th to 6th, 1986. The seminar which was organized by the United Nations Development Programme (UNDP) had as its objectives:

- a. to provide Government Officers in charge of technical cooperation with the opportunity to share experiences
- b. to discuss ways of improving the management and coordination of technical cooperation activities in Trinidad and Tobago

The seminar was attended by senior officials of the Ministry of Agriculture, Lands and Food Production, the Ministry of Finance and the Ministry of External Affairs. The Director of the office represented IICA at the meeting and presented a paper on "IICA and Technical Cooperation Programmes" which provided information on IICA's role in technical cooperation in the Caribbean.

5:2 Organization and hosting of the Directors of IICA Offices in the Caribbean

The Annual Meeting of Directors of IICA Offices in the Caribbean was held in Trinidad and Tobago from November 10th to 13th, 1986. The meeting was attended by the Directors of the offices in the Caribbean Region and officials from IICA Headquarters at Costa Rica. The IICA Office in Trinidad and Tobago provided the logistic support for the meeting.

5:3 Providing logistic support to the Argentine/Caribbean Seminar

A seminar designed to foster better cooperation between Argentina and the countries of the Caribbean was held in Trinidad and Tobago from December 8th to 12th, 1986. The seminar was attended by delegates from nine countries in the region and from national, regional and international agencies based in Trinidad and Tobago. The seminar was sponsored by the Ministry of Foreign Affairs of Argentina, the United Nations Development Programme (UNDP) and the Inter-American Institute for Cooperation on Agriculture (IICA). The local office of the Institute provided the logistic support for the seminar.

The seminar was formally opened on behalf of the Honourable Minister of Agriculture, Lands and Food Production of Trinidad and Tobago by Dr. E. Patrick Alleyne, the Permanent Secretary in the Ministry. Introductory remarks were also made by Ambassador Yujnovsky, Mr. Hugh Greenidge, Resident Representative of the U.N.D.P. and Dr. Jorge Werthein, Director of External Relations, IICA, Coronado, Costa Rica while Dr. Chelston W.D. Brathwaite, Director of IICA in Trinidad and Tobago chaired the opening proceedings.

The participants were introduced to the ways in which Argentina might cooperate with the Caribbean States. Country participants were invited to make presentations on the state of agriculture in their respective countries while regional institutions had the opportunity to explain on various work programmes. As an analytical tool for

project identification and preparation, participants were introduced to the Logical Framework under the leadership of INTA. The Logical Framework was then used by participants working in groups to develop project ideas which were subsequently discussed in plenary session.

Participants also visited the Northern Range Reafforestation Project at Mount St. Benedict and the Upper Watershed Management Planning Project. Both Projects together were aimed at reducing erosion, floods and environmental degradation and increase agricultural production on the hilly slopes.

The Trinidad and Tobago delegation was led by Dr. Vincent Moe and during the seminar several areas of possible Argentine assistance to Trinidad and Tobago were identified. These included:
(a) Improvement in Crop Management
(b) Pasture utilization and Management
(c) Assistance to increase milk production and production of improved cattle and animal feed.

6. Future Initiatives

Future areas of technical cooperation in Trinidad and Tobago are currently being worked out between the IICA Office in Trinidad and Tobago and officials of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment. The areas identified so far are:

- a. Support for the improvement of domestic marketing of food crops in Trinidad and Tobago.
- b. The development of cost effective technology for modern tree crop production.
- c. Plant Protection.
- d. Development of methodology for use in the allocation of resources for agricultural research in Trinidad and Tobago.
- e. Providing training in Agribusiness and Farm Management.

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Project document "Research on Hillside Farming Systems in the Caribbean." 30p. (prepared by W. Forsythe).

Project document "The Development of Cost-Effective Technologies for Modern Tree Crop Production". 13p. (prepared by W. Forsythe).



Director of the IICA Office in Trinidad and Tobago, Dr. Chelston W.D. Brathwaite (centre) looks on as new Minister of Food Production, Marine Exploitation, Forestry and the Environment, The Honourable Lincoln Myers, meets Mr. Hackman Owusu-Agyemang, Resident Representative of F.A.O. at a Ministry Function of 30th December, 1986

Conclusions and Recommendations
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PESTS AND DISEASES AS CONSTRAINTS IN THE PRODUCTION AND MARKETING OF FRUITS IN THE CARIBBEAN

**PROCEEDINGS OF A SEMINAR ON PESTS AND DISEASES AS CONSTRAINTS
IN THE PRODUCTION AND MARKETING OF FRUITS IN THE CARIBBEAN
HELD IN BARBADOS, WEST INDIES FROM
SEPTEMBER 29TH TO OCTOBER 3RD, 1985**

Edited by
Cheiston W.D. Brathwaite and Raphael Marte



Offices in Barbados and Trinidad & Tobago

Port-of-Spain, Trinidad & Tobago, October 1986

AGRICULTURAL DOCUMENTATION AND INFORMATION No. 145

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**AGRICULTURAL BIBLIOGRAPHY OF
TRINIDAD AND TOBAGO
1960 — 1985**

*Prepared by
Hugo Caceres-Ramos*



OFFICE IN TRINIDAD AND TOBAGO
PORT-OF-SPAIN, TRINIDAD AND TOBAGO
1986

Thursday, October 9, 1986 Pg.13



ACTING DIRECTOR Dr Desmond Ali (second from left) and Dr Chelston Brathwaite (centre) signing the agreement. Others are Liaquat Shah, Lennox Lewis and Ena Harvey of CARIRI.

Cariri signs co-operation pact with institute

A CO-OPERATION agreement between the Caribbean Industrial Research Institute (CARIRI) and the Inter-American Institute for Co-operation on Agriculture IICA was signed on Tuesday at Cariri's St Augustine offices.

This follows a post-harvest technology seminar which Cariri held earlier this year, as a result of which Cariri and IICA discussed possible strategies for effective follow-up activity.

The lack of appropriate training materials was identified as a priority need.

The agreement provides for preparation by Cariri of local training materials in postharvest technology. IICA will provide financing and access to information. Training ma-

terials will consist of a series of slide sets, designed to cover the major aspects of postharvest systems in Trinidad and Tobago and will be entitled "Post-harvest handling for the production of harvest fresh quality produce — a farmer's training aid."

Initially, these slides will be used in training programmes by officers of the Ministry of Agriculture, Lands and Food Production. They will possibly be used later on for training in any IICA's 29 member states.

Signing the agreement on behalf of IICA was Dr Chelston Brathwaite, Director of the local IICA Office, while Acting Director Dr Desmond Ali signed on Cariri's behalf.

Friday, November 28, 1986

Argentina aid for Caribbean agriculture

BRIDGETOWN, Nov. 27, Cane — ARGENTINA will host a five-day meeting in Trinidad and Tobago next month to hear what kind of support it can provide to the development of Caribbean agriculture, informed sources said today.

The seminar, to be held from December 8 to 12, is supported by the United Nations Development Programme (UNDP) and the Inter-American Institute for Co-operation on Agriculture (IICA).

Participants will come from Agriculture Ministries in 12 countries, namely Guyana, Antigua, Barbados, Dominica, Grenada, Jamaica, Trinidad and Tobago, St Kitts-Nevis, St Vincent and the Grenadines, St Lucia, Bahamas and Suriname.

Representatives from the secretariats of the Caribbean Community (Caricom) and the Organisation of Eastern Caribbean States (OECS), the Caribbean Food Corporation, and the Economic Commission for Latin America and the Caribbean (ECLAC) will also attend.

The proposal by Argentina takes place amid moves by IICA to encourage an exchange of technical and other expertise between countries of the Caribbean and Latin America to boost regional agriculture.

Monday, November 3, 1986

Agriculture key to Caribbean growth

MEXICO CITY, Nov 2, Cane — CARIBBEAN and Latin American countries said that agriculture held the key to their economic recovery.

The declaration came at the end of a meeting of the Inter-American Board of Agriculture (IABA), the governing body of the Costa Rica-based Inter-American Institute for Cooperation on Agriculture (IICA).

Delegates from 25 countries, including three from the English-speaking Caribbean, endorsed IICA's new five-year development programme as crucial to boosting regional agriculture and providing an avenue for countries to deepen cooperation.

Approval of the 1987-1991 medium term, setting out IICA's technical cooperation priorities in its 29 member coun-

tries, was the main agenda item at the three-day meeting last week.

It emphasises development of regional agriculture as the major source of economic growth and modernisation of the sector through inputs of new technology with the aim of enhancing the marketing competitiveness of regional produce.

"Approval of the plan was a prerequisite for allowing us to move in the direction and priorities expressed in that plan and in that sense, it was a very good meeting," IICA Director-General Dr Martin Pineiro told reporters.

Delegates said the plan was a direct response to the agricultural development needs of IICA member countries.

"I think we have entered a new area in terms of progress in agriculture in the

Caribbean," said St Lucia's Agriculture Minister Ira d'Auvergne.

An end-of-conference communique said delegates agreed the way forward for regional agriculture was modernisation of production techniques and methods through the introduction of appropriate technology.

It expressed concern about trade protectionist policies in the industrialised world and farm subsidies which, delegates felt, presented "a serious obstacle" to the development and reactivation of Caribbean and Latin American economies.

The next IICA board meeting will be held in Canada next autumn, along with the Inter-American conference on Agriculture.

Monday July & 7, 1986

Course on diagnosis of plant pests opens at UWI today

DR. E. PATRICK ALLEYNE, Permanent Secretary, Ministry of Agriculture, Lands and Food Production, will officially open a one-week regional course on the diagnosis of plant pests and diseases of food crops at the St. Augustine Campus of the University of the West Indies today at 9.00 a.m.

The course, which is being sponsored by the Trinidad and Tobago Office of the Inter-American Institute for Cooperation on Agriculture (IICA), in collaboration with the Ministry of Agriculture, Lands and Food Production and the Faculty of Agriculture, University of the West Indies, is designed to improve the level of skills of persons responsible for the diagnosis and control of plant pests and diseases of food crops.

It is being held against the background of increased losses due to plant pests and diseases in the Caribbean which limit the success of food crop production.

The inability to properly diagnose

common plant pest and disease problems in the field is recognised as one of the major limiting factors in the effective control of plant pests and diseases in the Caribbean.

The course will seek to emphasise the practical techniques required for correct pest and disease diagnosis and will utilise local examples in the laboratory and in the field.

The course will be led by the specialists in pests and disease diagnosis and control from the University of the West Indies, the Caribbean Agricultural Research and Development Institute (CARDI), the Ministry of Agriculture, Lands and Food Production, IICA and other regional and national organisations.

Participants will be from Haiti, Suriname, Guyana, Jamaica, Grenada, St. Lucia, Dominica and Barbados. In addition there will be several local participants from the Ministry of Agriculture, the Food and Agriculture Corporation, UWI, Caroni (1975) Limited and agricultural organisations.

Tuesday July 22, 1986

Move to control plant pest

EARLY establishment of plant pathology diagnostic laboratories in each of the member territory represented at the recently-concluded training programme entitled "Diagnosis and Control of Pests and Disease Problems of Food Crops in the Caribbean", is likely to be the first tangible benefit to be achieved.

This was the general consensus expressed at the closing session of the programme at the University of the West Indies, St. Augustine.

Dr. Frederico Dao, Director, Plant Protection Programme, Inter-American Institute for Cooperation in Agriculture (IICA) and Dr. Chelston Brathwaite, IICA's Regional Director, were present to hear participants

speak in glowing terms of the usefulness and relevance of the programme, the first of its type conducted in the Caribbean.

It was felt that sev-

eral areas of application could be pursued which could result in the use of improved diagnostic and control techniques both in the field and laboratory.

Agriculture talks open in PQS Monday

THE DIRECTORS of the Caribbean offices of the Inter-American Institute for Co-operation on Agriculture (IICA) will meet in Port-of-Spain from November 10 to 13.

Objective of the meeting is to discuss strategies for the implementation of the new Medium Term Plan for the period 1987-1991, which was recently approved at the meeting of the Inter-American Board in Mexico City. The plan emphasises the application of appropriate technology as the key to the modernisation of the agricultural sector of the region.

The directors will discuss the implications of the plan in the context of operational details for 1987, collaboration with regional and national agencies and the implementation of multinational projects.

Thursday January 23, 1986

Agriculture official goes for training

BRIDGET POON, Agricultural Officer of the Planning Division of the Ministry of Agriculture, Lands and Food Production has left on a visit to Barbados and the United States.

In Barbados Miss Poon will examine the operations of the Barbados Agricultural Statistical Information Service (BASIS). In the United States, she will study the market news service of the Atlanta Municipal Market.

The training programme is being sponsored by the Inter-American Institute for Co-operation in Agriculture (IICA) in its efforts to assist the Ministry of Agriculture, Lands and Food Production in the establishment of a market intelligence system for food crops in Trinidad and Tobago.

Monday March 24, 1986 pg.3

Computer for agriculture in Dominica

ROSEAU, March 23, Carriacou — THE INTER-AMERICAN Institute for Co-operation in Agriculture (IICA) and the Caribbean Development Bank (CDB) are helping the Windward Islands to improve their marketing and production by building a computerised data bank, according to IICA's local co-ordinator Urban Martin.

Argentines tackle agriculture problems

By MANUEL PANTIN

CARIBBEAN delegates attending an Argentine-sponsored seminar in Port of Spain yesterday began discussing in working groups of five or six persons each the problems facing the agricultural and livestock sectors in the region and possible solutions.

Wayne Maughan, senior project analyst of the Trinidad and Tobago Finance Ministry, told the *Express* what "the Argentines seem to be trying to do is to put into a well-defined perspective the problems of the agricultural sector in the Caribbean."

"The Argentines want to have a clear definition of what the problems are. They are using a variation of log frames to zero in on the problems in the agricultural sector to see how they can assist in the way of technical cooperation."

The five-day Argentina-Caribbean Seminar for Agricultural-Livestock Development began on Monday at the Trinidad Hilton.

The Caribbean delegates on Tuesday began outlining in workshop sessions the problems the region faced in developing its agricultural and livestock sectors.

The Argentine delegation, headed by Ambassador Oscar Yujnovsky, will analyse the results of the conclusions reached by the working groups.

Eduardo Valera, of the Argentine Foreign Affairs Ministry, said the working groups were made up of delegates from various Caribbean countries with expertise in different fields.

He said the groups would discuss the different projects and define the problems which they hope to solve.

In the afternoon session yesterday, the working groups outlined their problems and debates were held with members of Argentina's National Institute of Agriculture and Cattle Technology (INTA) on how to clarify the problems, Valera added.

"We have a computer in the hotel into which all details of the different sectors'

findings will be fed," he said. "The computer contains data on INTA's expertise and the input should indicate what type of solutions can be found."

INTA expert Eugenio Cap said at the end of the academic part of the seminar that the working groups were set up "so we can cut across commodities and organisations and have a definition of areas and countries."

"The next step will be discussions of the results of the brainstorming session and quantification of the problems," he added.

"We will examine how money is being lost or earned, the imports bill, the future trend and try to define what strategy we must use to solve the problems," he said.

Ambassador Yujnovsky, International Cooperation Undersecretary of the Foreign Affairs Ministry, outlined on the opening day the cooperation programmes Argentina had with Caribbean countries like Trinidad and Tobago, Guyana and Jamaica and

South American countries like Peru and Brazil.

The delegates will have another workshop session today and would try to arrive at a definition of the End Of Project Status (EOPS) and the identification of external linkages.

After a field trip today, the delegates will hold further workshop sessions tomorrow and prepare the final document.

Three INTA experts, Cap, Mario Casas and Blas Bravo are attending the seminar. Their organisation was set up in 1956 to expand the development of agricultural research and accelerate the process of technological change for the benefit of Argentine farmers and their families and the agricultural industry.

The 12 Caribbean countries attending the seminar are Antigua and Barbuda, Bahamas, St Kitts-Nevis, Barbados, Dominica, Grenada, Guyana, Jamaica, St Lucia, St Vincent, Trinidad and Tobago and Suriname.

Monday July 7, 1986

Plant pests

A ONE week regional course on the diagnosis of plant pests and diseases of food crops, will open on Monday to help decrease losses in the Caribbean due to an inability to spot problems.

The course will be opened by the Permanent Secretary in the Ministry of Agriculture Lands and Food Production, Dr. E. Patrick Alleyne at the Faculty of Agriculture University of the West Indies starting at 9 a.m.

The seminar has been sponsored by the Inter-American Institute for Co-operation on Agriculture (IICA) the Ministry of Agriculture and the Faculty of Agriculture.

Monday July 14, 1986

Spence heads team to Costa Rica meeting

PROFESSOR John Spence, head of the Department of Plant Science and Biochemistry at the University of the West Indies, is leading a group of agriculturists to review the work of the Inter-American Institute for Cooperation on Agriculture (IICA).

Professor Spence a Trinidadian heads the technical group at the sixth annual executive meeting of IICA in Costa Rica. The meeting opens today and is to end on

Friday.

The group will review the programme of the IICA and prepare guideline for operations. It will include Professor Emilio Madrid from the Catholic University of Chile, Dr Domingo Marts of the National Agricultural Council of the Dominican Republic, Dr. Gerard Ouellette, agricultural consultant, Dr. John Pino of the Inter-American Development Bank and Dr. Jose Salazar of the Bank of Bogota Colombia.

Wednesday, August 13, 1986 pg.17

BRIDGETOWN, Tuesday (CAN) — Caribbean Community countries which are members of the Inter-American Institute For Cooperation in Agriculture (IICA) can expect a small increase in technical assis-

IICA TO INCREASE AID

tance from the organisation, according to its director-general, Martin Pinero.

He told a news conference here that the eight English-speaking mem-

bers of IICA normally receive 22 per cent of the institute's annual \$15 million (US) budget, but they will get a 2 per cent increase.

The World At Large By MANUEL PANTIN

Argentina assists in reducing food imports

ARGENTINA, one of the world's major food producers, is willing to assist Caribbean states in their effort to reduce their food imports bill, according to Carlos Ferro, Argentine Ambassador to Port of Spain.

To this end, it is sponsoring an Argentina/Caribbean seminar for agricultural-livestock development, which begins today at the Trinidad Hilton, Port of Spain and ends Friday.

The seminar will bring together delegates from 12 Caribbean countries and Argentine experts, including three from Argentina's National Institute of Agriculture and Cattle Technology (INTA in Spanish), who will discuss ways of cooperating in the development of the agricultural and cattle sectors in the region.

According to a statement from the Argentine Foreign Ministry released by the Argentine Embassy, the Caribbean delegates would outline the problems affecting the region's agricultural and cattle sectors and would receive advice from the Argentine experts.

It said an essential point of the meeting will be the follow-up of technical assistance already given as well as the determination of new actions that would allow a permanent relationship in the agricultural and cattle sectors or any other sector that may be considered of interest.

"The mechanism for technical cooperation will be analysed at a bilateral level as well as at cooperation level between Argentina and international organisations in the region: United Nations Development Programme (UNDP), Caribbean Common Market (Caricom), the Caribbean Industrial Research Institute (Cariri), the Caribbean Food Corporation (CFC), the Organisation of Eastern Caribbean States (OECS), the Economic Commission for Latin America (ECLA) and others," it added.

The Argentine delegation will be headed by Oscar Yujnovsky, International Cooperation Undersecretary of the Foreign Affairs Ministry, and will include Ambassador Ferro, the INTA experts, Eduardo Iglesias, Director of the Central America, Mexico and Caribbean Department and an official of the International Cooperation Undersecretary.

Up to late yesterday, it could not be confirmed, who would represent Trinidad and Tobago at the seminar.

The Argentine statement said that Caricom, the Inter-American Institute for Cooperation on Agriculture (IICA) and UNDP would collaborate in the event.

A UNDO official told the *Express* that the international organisation was contributing the air fares and meeting accommodation expenses of the participants and an IICA official said his organisation was

providing logistic support.

"A representative of CIDA from Canada will be invited to participate as an observer in order to study 'institu' the possibilities of carrying out joint cooperation in the Caribbean region," the statement said.

Ambassador Ferro told the *Express* that the seminar, similar to one held in the Argentine capital of Buenos Aires in November of last year, formed part of Argentina's desire to develop closer ties with Caribbean countries.

"We have a similar programme with Central American countries," he added, "and we believe this seminar will be as successful as the one held in Argentina last year."

He said the seminar was another example of the technical and cultural exchanges between Argentina and the Caribbean countries. "So is the soccer match in Port of Spain next week between the Argentinos Juniors and the Defence Force teams," he added.

Ferro said Caribbean countries had to import most of their food and Argentina, which produces all the food needed by its 30 million inhabitants, could assist the region in developing its agricultural sector.

Argentina, which exports wheat to the Soviet Union, and beef to many countries, including corned beef to Trinidad and Tobago, earns about \$10 billion a year from the export of beef and agricultural products.

"This represents about 80 per cent off the country's foreign exchange earnings," Ferro said.

He said that INTA was created in 1956 to "drive the development of agricultural research and extension to accelerate the process of technological change for the benefit of farmers and their families and the agricultural industry."

The 12 Caribbean countries in the seminar are Antigua and Barbuda, Bahamas, St. Kitts-Nevis, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Lucia, St. Vincent, Suriname and Trinidad and Tobago.

EXPRESS Wednesday December 3, 1986 Page 33

Argentina brings aid

BRIDGETOWN (CANA) — Argentina will host a five-day meeting in Trinidad and Tobago this month to hear what kind of support it can provide to the development of Caribbean agriculture, informed sources said today.

The seminar, to be held from December 8 to 12, is supported by the United Nations Development Programme (UNDP) and the Inter-American Institute for Co-operation on Agriculture (IICA).

Participants will come from agriculture ministries in 12 countries, namely Guyana, Antigua, Barbados, Dominica, Grenada, Jamaica, Trinidad and Toba-

go, St. Kitts-Nevis, St. Vincent and the Grenadines, St. Lucia, Bahamas and Suriname.

Representatives from the secretariats of the Caribbean Community (Caricom) and the Organisation of Eastern Caribbean States (OECS), the Caribbean Food Corporation, and the Economic Commission for Latin America and the CARIBBEAN (ECLAC) will also attend.

The proposal by Argentina takes place amid moves by IICA to encourage an exchange of technical and other expertise between countries of the Caribbean and Latin America to boost regional agriculture.



PRESENT at the Argentine-Caribbean seminar for Agriculture and Livestock Development on Monday were, from left: Hugh Greenidge, Dr. Jorge Werthein, Dr. Mario Casas, Dr. Carlos Ferré, the Argentine Ambassador to Trinidad and Tobago, Ambassador Oscar Yujnovsky, Patrick Alleyne and Dr. Chelston Brathwaite. Photo: SOOKDEO BANEY

Argentina wants to play its part

By MANUEL PANTIN

AN ARGENTINE/Caribbean seminar for Agricultural-Livestock Development which got underway at the Trinidad Hilton on Monday is tangible proof of a clear initiative by the Argentine Government to play its part in the South-South approach to development, according to Trinidad and Tobago official Dr E.P. Alleyne.

Dr Alleyne, Permanent Secretary, Ministry of Agriculture, Lands and Food Production, told the seminar a similar meeting held in Argentina last year was organised with the assistance of the United Nations Development Programme (UNDP) "and within the context of what is known as TCDC (Technical Cooperation among Developing Countries)".

Dr Alleyne said with the assistance of the Food and Agriculture Organization (FAO), in particular, "we have seen concrete proof of TCDC activity in the Caribbean through networking arrangements in watershed management and fisheries development. "We are happy to see, however, recognition and acceptance of what we may call this South-South approach to development from some of our larger and continental South American neighbours," he added.

"This seminar is tangible proof of a clear initiative by the Government of Argentina to play its part in this regard," he said.

Dr Alleyne said he agreed activity over the five days of the seminar represented a follow-up from the Buenos Aires meeting and was intended to provide a forum for wide-ranging discussion such as would allow for a clear examination of the possibilities in the area of technical assistance in the agricultural sector.

He said the food import bill was over EC\$2,000 million in 1984. "This fact," he added, "together with traditional nutritional concerns, signified that all meaningful initiatives aimed at improving the performance of the regional agricultural sector are to be viewed

positively."

Ambassador Oscar Yujnovsky, leader of the Argentine delegation, told the representatives of 12 Caribbean countries attending the seminar that Argentina wished to cooperate with regional countries in developing their agricultural resources.

Yujnovsky, International Cooperation Undersecretary of the Foreign Affairs Ministry, said he wished to stress that Argentina was cooperating with Caribbean countries and not advising them, and both parties could achieve results through mutual participation in projects.

He said Argentina was cooperating in a similar fashion with Brazil and the two countries were working towards establishing a common market.

With this aim in view, he added, Argentine President Raul Alfonsín would be arriving in Brazil talks

Dr Jorge Werthein, Director of External Relations of the Inter-American Institute for Cooperation on Agriculture (IICA) headquarters in Costa Rica, told the meeting his organisation applauded the initiative taken by Argentina in arranging the seminar.

"We are pleased to cooperate with the United Nations Development Programme, the Caribbean countries and all other agencies in these efforts which seek to provide a mechanism for the exchange of technological know how and experiences between Latin America and the Caribbean," he said.

Among the Argentine delegation are three experts from the National Institute for Agricultural Technology (INTA), whose activities include the planning, evaluation and management of research and experimental stations and farms as well as extension services in the different climatic zones of Argentina.

Besides Trinidad and Tobago, other Caribbean countries attending the seminar are Antigua and Barbuda, Bahamas, St. Kitts/Nevis, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Lucia, St. Vincent and Suriname.



From south to south

A SOUTH to South conference on technical cooperation ends today at the Trinidad Hilton. The Argentinians, whose forte is football and beef, came this time to share knowledge in the latter with Caribbean friends at a seminar on Agriculture and Livestock Development.

At the opening session of the conference, Dr Mario Casas, Vice President of the Argentine National Institute of Agriculture and Cattle Technology, is greeted by the host, Dr Patrick Alleyne, Permanent Secretary in the Ministry of Agriculture, Lands and Food Production, while Dr Chelston Brathwaite, director of the Trinidad and Tobago office of the Inter-American Institute for Co-operation on Agriculture, waits his turn. Photo: SOOKDEO BANEY.

Agriculture seminar bids to reduce food import bill

By MANUEL PANTIN

TRINIDAD and Tobago is very satisfied with the progress of an Argentine-sponsored seminar in Port of Spain which is seeking ways in which the South American republic can cooperate with Caribbean countries in the development of their agricultural and livestock sectors.

Dr Vincent Mos, Director of Veterinary Services in the Ministry of Agriculture, Lands and Food Production, told the Express yesterday the seminar at the Trinidad Hilton had served as a forum for addressing some of the problems of agricultural development within Caricom and nationally.

"I am very satisfied with the progress being made," he said, adding "I have found the Argentine project formulation thought provoking. It is a useful tool that we can apply to projects for formulation of our own ministry and in the presentation of projects to our decision-makers."

The Argentina-Caribbean Seminar for Agriculture and Livestock Development, which began Monday and ends tomorrow, continued yesterday with working groups of Caribbean delegates discussing problems of the region's agricultural and livestock sectors and possible solutions.

Ambassador Oscar Yujnovsky, head of the Argentine delegation, told the Express the idea behind the seminar was to come up with possible projects for cooperation. "It is then up to the respective governments to analyse the projects and decide if they wish to pursue the matter further and what we can do together," he said.

They will then have the opportunity to visit (the Argentine capital) Buenos Aires to discuss these issues again," he added.

In a paper presented yesterday at the seminar, Kenrick Jordan of the Caricom Secretariat, said the Secretariat was cooperating closely with the commodity research network activities being pursued by the Economic Commission for Latin America and the Caribbean (ECLAC).

Jordan said at present the Caribbean region imported about EC\$2 billion worth of food and exported about \$EC 1 billion. "The negative balance was some 30 per cent of the regional current account deficit in 1983," he added. "Reducing the food deficit can make a significant contribution to economic progress within the region," he said.

He said Barbados spent EC\$211 million for food imports in 1984, Jamaica EC\$573 million and Trinidad and Tobago EC\$463 million. "The policies and efforts of these countries will be important in reducing the food import bill," he added.

Page 36EXPRESS Monday July 28, 1986

New plan for agriculture

MEMBER countries of the Inter-American Institute for Co-operation on Agriculture (IICA) have recommended a new medium-term plan of action for agriculture in the Caribbean and Latin America, according to a statement from the local office of IICA.

The IICA statement said that three objectives were proposed for the application of the 1987 to 1991 action plan when IICA states met in Costa Rica last week.

These were: Facilitate the development of the agricultural and livestock breeding sector as a source of

economic growth in its double role of providing food for internal consumption and as a principal source of foreign exchange.

Explore the modernization and the increase of productive efficiency of the

Focus on Caribbean

agricultural and livestock breeding sector, by means of a greater incorporation of appropriate technology.

Advances the process of regional integration, through promoting joint action.

IICA said that the plan specifically recommended the concentration of II.

CA's activities into a reduced number of programmes of high technical hierarchy that respond to important aspects of agricultural development and of rural well-being. (CANA)

Page 18 EXPRESS Wednesday, December 10, 1986

Delegates outline problems faced in agricultural sector

By MANUEL PANTIN

CARIBBEAN delegates attending an Argentine-sponsored seminar in Port of Spain yesterday began outlining the problems they face in developing their agricultural and livestock sectors.

On the second day of the Argentina-Caribbean seminar for Agriculture and Livestock Development at the Hilton Hotel, Jamaican delegate Paul Jennings described the cattle industry in his country.

Jennings, principal research Livestock Officer, Ministry of Agriculture, said the cattle industry contributed about \$28 million (US) to Jamaica's domestic economy annually from the production of 45 million litres of milk and 13.8 million kilograms animal live weight.

He said the industry was targeted for accelerated development as a major plan of Jamaica's current drive toward food self-sufficiency.

"Along with breed development," he added, "the Ministry of Agriculture has since the early '40s maintained parallel research work in pasture and animal husbandry aimed at fully exploiting the productive potential of livestock."

The seminar began yesterday with speeches by members of the Argentine delegation and Dr E.F.

Alleyne, Permanent Secretary, Trinidad and Tobago's Ministry of Agriculture, Lands and Food Production, Dr Jorge Wertheim, Director of External Relations, Inter-American Institute for Co-operation on Agriculture (IICA) and Hugh Greenidge, resident representative of the United Nations Development Programme (UNDP). The Chairman was Chelston Brathwaite, Director, Trinidad and Tobago Office, of the IICA.

A member of the Argentine delegation, Eugenio Cap, of the National Institute of Agriculture and Cattle Technology (INTA), told the Express yesterday that delegates from Jamaica, Barbados and Guyana presented profiles of their agricultural sectors and pinpointed the most important constraints they faced.

He said the Argentine delegation came to Trinidad and Tobago with a flexible programme.

"We have found that being rigid doesn't work," he added. "What we are trying to do now is to collect information from the (Caribbean) delegates and feedback."

He said part of the Argentine delegation's aim was to bypass problems connected with rules and strictures and deal directly with people.

"We are extremely flexible," he added.

"What is written on paper isn't as important as what is left in the minds of people from a technical standpoint," he said.

Cap said the Caribbean representatives were responding very well. "We are impressed with the high level of technical knowledge being displayed," he added.

Wednesday, December 10, 1986



DR ALLEYNE GREETES IICA CHIEF

DR PATRICK ALLEYNE (second from right), Permanent Secretary in the Ministry of Agriculture, greets Dr Jorge Wertheim, Director of External Relations of the Inter-American Institute for Co-operation on Agriculture (IICA). Centre is Dr Mario Casas, Vice-President of the National Institute of Agriculture and Cattle Technology (INTA). Dr Carlos Ferro, Argentina's Ambassador to Trinidad and Tobago, is second from left, while Dr Chelston Brathwaite, IICA Director, is at right. Photo by KRISHNA MAHARAJ.

Praise for Argentina at opening of farm seminar at Hilton

THE GOVERNMENT of Argentina was applauded for its pursuit of technical co-operation among developing countries at the opening of the Argentina - Caribbean Seminar for Agriculture and Livestock Development.

The seminar opened at the Trinidad Hilton Hotel on Monday morning and will run until Friday it is being attended by representatives of eight Caribbean countries including St. Lucia, Barbados, Guyana and Jamaica.

Also being represented are the Ministry of Foreign Affairs of Argentina, the United Nations Development Programme and the Inter-American Institute for Co-operation in Agriculture. The Government of Trinidad and Tobago sponsored the seminar.

The aim of the seminar is the discussion and examination of areas of possible technical co-operation between Argentina and the Caribbean.

Dr Patrick Alleyne, Permanent Secretary in the Ministry of Agriculture, Lands and Food Production, opened the seminar. He referred to the formidable human resources gathered at the seminar from the Caribbean Food Corporation, the Economic Commission for Latin America and the Caribbean (ECLAC) and the National Institute of Agriculture and Cattle Technology, Argentina.

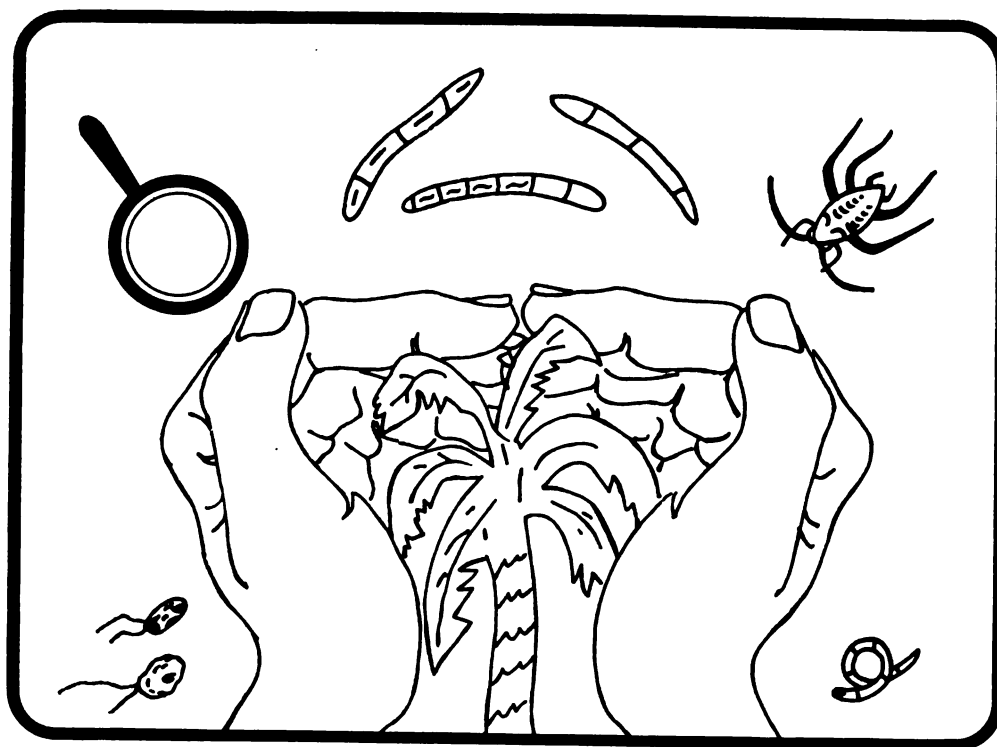
With reference to Trinidad and Tobago, Dr Alleyne suggested the seminar discuss the management and cooperation techniques for forage material for cattle. Local farmers have thought it sensible to depend largely on concentrated feed due to generous Government subsidies, he said. However, because of the downturn in the economy, forage management had become a crucial issue. The Permanent Secretary made this suggestion in the light of the food import bill for the Caribbean region.

The ability of the seminar to recognise specific projects on which resources can be gathered and focussed will be of great importance in the thrust for intensifying agricultural development, according to Dr Alleyne.

Dr Jorge Wertheim, Director of External Relations at IICA, assured the meeting that the Institute attached priority to technological development and improvement in the generation and transfer of technology. This policy was the reason for co-sponsoring the seminar, he said.

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