

CONTRIBUTION TO THE
AGRICULTURAL SECTOR IN TRINIDAD
& TOBAGO DURING 1987



OFFICE IN TRINIDAD & TOBAGO

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ACKNOWLEDGMENTS

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TABLE OF CONTENTS

INTRODUCTION	8
1. IICA Office in Trinidad and Tobago	14
2. Current State of the Agricultural Sector	15
3. Activities in 1987	16
3.1 Program I: Agricultural Policy Analysis and Planning	17
3.2 Program II: Technology Generation and Transfer	17
3.2.1 Evaluation and Monitoring of Investments in Agricultural Research in Trinidad and Tobago	18
3.2.2 Exhibition on Appropriate Technology for Small/Medium Scale Farming, Fishing and Forestry Operations	18
3.2.3 Fruit Crop Development	18
3.3 Program III: Organization and Management for Rural Development	18
3.3.1 Training in Small Agribusiness Management	19
3.4 Program IV: Marketing and Agro-Industry	19
3.4.1 Agricultural Marketing	21
3.5 Program V: Animal Health and Plant Protection	21
3.5.1 Plant Protection Programme for the Caribbean Region	21
3.5.2 Animal Health	23
3.6 Establishment of a National Agricultural Bibliographic Information System for Trinidad and Tobago	23
4. List of IICA and Other Personnel Who Visited the Office and the Results of Their Visit	24

5.	Facilitation of Participation in International Events	26
6.	Provision of a Base for Contact with the Agricultural Sector in Latin America	27
7.	Future IICA Action in the Country. Outlook for New Projects	27
8.	List of Persons Participating in Training Programs	28
8.1	Seminar on Safe Use of Pesticides	28
8.2	Seminar on Post - Harvest handling of Fruits and Vegetables	29
8.3	Seminar on Diagnosis of Pests and Diseases of Food Crops in Trinidad and Tobago	31
8.4	Seminar on Small Agribusiness Training	33
8.5	Round-Table on New Strategic Directions for Agricultural Marketing in Trinidad and Tobago	34
8.6	Course on Organization and Management of Small Agricultural Libraries	35
8.7	Participants of National Course on Produce Handling "Reducing Food Losses from Farmer to Consumer" at CMA on July 13th, 1987	35
8.8	Report on Seminar/Workshop on the Development of Training Materials in Plant Protection	37
8.9	Seminar on Pawpaw Production in Trinidad and Tobago	38
9.	Publications	39

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 agriculture 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 29 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 programs: Agrarian Policy Analysis and Planning; Technology Generation and Transfer; Organization and Management for Rural Development; Marketing and Agro-industry; 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.

The Inter-American Conference of Ministers of Agriculture is a specialized agricultural conference, convened every four years by the Organization of American States. The most recent Conference, the ninth in the series, took place from August 31st to September 2nd, 1987, in Ottawa, Canada. Thirty-two countries of the Americas sent representatives, 22 of them, Ministers of Agriculture.

The agreements reached during this hemisphere-wide summit on agriculture are synthesized in the Ottawa Declaration which is reproduced below.

THE OTTAWA DECLARATION

1. Discussions during the Ninth Inter-American Conference of Ministers of Agriculture have been carried out in the steadfast conviction that we must seek out new directions that will lead to economic and social development for our peoples as a firm foundation for peace and democracy in our region, and firmly believing that dialogue and solidary action are the best tools at our disposal for accomplishing the common task to which we must all commit ourselves. Consequently, we support the efforts on behalf of peace throughout the hemisphere and the recent progress in this direction in Central America, as peace is one of the essential conditions for meeting the legitimate aspirations of the countries of Latin America and the Caribbean to socio-economic prosperity, which is a basic premise for agricultural production and development.

Inspired by these principles, we deem it timely to approve this declaration which sets forth our most pressing aspirations and concerns, as well as pointing out the areas and priorities where action is most urgently needed.

The majority of our countries are presently facing a crisis, the magnitude and extent of which had not been seen in the last ninety years. To deal with this crisis, we have to make profound changes in the traditional concepts concerning economics and development that have prevailed in our countries for many years.

These changes touch upon medium- and long-

term strategies, proximate economic policies, and the relative importance which the various sectors have in re-vitalizing our economics. The analysis of these topics, to which we have devoted a large part of our deliberations, represents without doubt, a significant step towards our taking those actions which will enable our countries to resume the path of growth and overcome poverty, malnutrition and resultant lack of development.

AGRICULTURAL MODERNIZATION: Key to a New Development Strategy

2. In the context in which our economies operate today and will continue to operate in the future, agricultural modernization and diversification must constitute a key element of strategies for economic revitalization and development in our countries. The increase in productivity which such modernization entails, together with wide distribution of its benefits, lay the groundwork for an approach to economic development capable of exercising a strong multiplier effect on the rest of the economy, while immediately benefiting the great mass of our poor and indigent who live in this same rural areas.

The Need for Change in External Conditions

3. Improvements in the international milieu are

critical to agricultural modernization and to the contribution of the sector to economic re-activation in the countries of Latin America and the Caribbean. Furthermore, the agricultural sector must be given high priority in each country.

4. It is vitally important to develop new alternatives for solving the foreign debt problem and to achieve an international consensus that will substantially remove restriction and distortions of agricultural trade and allow our countries to reap the benefits of their greater comparative advantages in agricultural production. We applaud the outcome of the GATT Meeting of Ministers at Punta del Este for providing a sound foundation for agricultural trade negotiations in the Uruguay round and the recent declaration by the OECD countries in favor of reforms in agricultural policies and normalization of trade practices. However, we are concerned by the contradiction between this progress on the rhetorical plane and the persistence and likely intensification of protectionist practices. We hereby manifest the urgent need for stated political will to be translated into effective action, as the Cairns group has repeatedly urged, and we agree that the present GATT round provides an exceptional opportunity to attain this objective.

5. The international community can, by facilitating a more liberalized and transparent agricultural trade environment, contribute to economic development and, by extension, encourage social peace and political stability in the countries of the hemisphere.

6. Similarly, the reactivation of the region's economy would bring about an increase of imports, thus exerting a beneficial effect on developed economies and on the other developing countries and favoring the re-establishment of the world economy.

Needed Adjustments in Overall Domestic Policies

7. Most of our countries have been undertaking profound, often painful changes to stabilize their economies and respond to the difficult trade and financial environment. We, the ministers of agriculture, re-assert our belief in the need to make these structural changes in the economies of our countries, as long as they allow for a suitable rate of growth and economic development and do not penalize the most vulnerable sectors.

8. Macro-economic policies are affecting agriculture to an ever-increasing degree. It is necessary to ensure that these policies are compatible with the objectives of agricultural modernization, and that they enhance relationships among the different sectors by eliminating biases and favoring the growth of agriculture and industry jointly. Thus we re-confirm the desirability of modifying the institutional mechanisms for formulating economic policy in many of our countries, in order to ensure that the public agricultural sector will play a suitable role in defining the overall economic policies that affect agriculture.

9. The modernization of the public sector is a necessary condition for agricultural modernization in many of our countries. Public services and government economic activity need to meet competitive standards, and the task of guiding agriculture must be performed efficiently. Among other activities we need to re-define areas of government action and improve ties of complementarity with the private sector. It is also important to revise legal standards that govern public sector activities, improve administrative and business skills for public management and encourage the decentralization of operations where this may be advisable. International technical and financial cooperation must grant high priority to cooperating with our countries in this important task.

Modification of National Sectoral Policies

10. For the majority of our countries, the incentive policies governing the operations of different economic agents must be re-adjusted to an overall economic context, characterized by increasingly competitive markets and the shortage of local resources. It is necessary to improve efficiency and competitiveness of agriculture, and for this purpose, sectoral policies on pricing, investment, and taxes should very clearly give priority to promotional activities, encourage mechanisms for healthy private competition, and favor an equitable distribution of earnings. The strengthening of local skills for analysis and evaluation of agricultural policies is a high-priority task which will require the support of international organizations.

11. It is essential for all countries of LAC to have the assurance of steady, growing access to technological innovations, as this will be an increasingly definitive factor in establishing competitiveness on external markets. The development of biotechnology, and other scientific and technological advances with an enormous potential impact on agricultural production signal the need to educate ourselves to make optimum use of emerging technologies. Despite any present difficulties, we must guarantee a sufficient, stable flow of budgetary resources for the institutions in our countries responsible for generation and transfer of technology. At the same time, we must improve their organizational structures and administration, enabling them to make more efficient and effective use of their human and financial resources. Similarly, we must deepen horizontal cooperation among our countries and with the international technical cooperation agencies and financial institutions, and must revise and restructure our ties with the international technological system so as to ensure more efficient, coordinated use of available resources. Joint action among the countries of Latin America and the

Caribbean is one of the best alternatives available to us for meeting this challenge which, because of its nature and magnitude, exceeds national capabilities.

12. Once again we wish to renew our commitment to do away with rural poverty. We are convinced that the poverty of a large part of the farmers in many of our countries cannot be overcome using isolated or partial measures, but rather through integrated action which allows these groups to join the process of modernization and development. Our efforts should be directed towards training and organization of the rural poor so as to allow them suitable access to the know-how and production factors--particularly ownership of land, appropriate technology and credit--which, together with support for adequate infrastructure and marketing support, make up the list of elements which can ensure sustained development. The design of specific strategies to facilitate this process is a central feature of the overall strategy for agricultural modernization, since increased earnings for small farmers will have a dynamic effect on the economy.

13. The elimination of poverty, especially in its most extreme forms, also requires specific measures aimed at increasing the food security of broad segments of the population, in the sense of ensuring continuous access to an adequate diet and proper nutrition. We know that one of the best ways of achieving this goal is through production programs which, while they increase the food supply, also help to increase the level of capitalization and the demand capacity of the poorest families, especially those of subsistence farmers, through job creation, organization, training and the establishment of infrastructure.

14. Realizing the significant role played by women in the overall development process of our countries, as a driving force in production and consumption by family units and as key agents in improving health, welfare and education, we welcome their growing participation in rural development programs and in the war on poverty.

15. Recognizing that young people make up an extensive and important segment of the rural population, as well as a vital force for progress in our countries, we must re-double our efforts to promote training and participation of rural youth in agricultural programs and production, bolstering their commitment to the agricultural sector and thereby contributing to the integrated development of the rural family.

16. International financial organizations should be encouraged to strengthen their contribution to the development of agriculture by increasing the flow of different types of financing. The sectoral adjustment programs being developed by some of these agencies can serve as a useful alternative for financing the changes required for agricultural modernization, provided they are made flexible and take into account the specific characteristics and needs of each country and the anticipated impact on different production groups. This is why it is essential for the public agricultural sector to be present in the design of sectoral adjustment programs. These programs must also include funds for technical assistance in policy preparation and implementation, as well as investment programs by which to implement the changes agreed upon.

The Role of International Cooperation and Regional Integration

17. International cooperation has the potential to make a substantial contribution to the development of agriculture in our countries, and this potential can be tapped if the numerous mechanisms already in existence today are reinforced by large contributions of technical, financial and other resources, and if the use of these resources is improved. We believe that the reduction of agricultural protectionism, and increased international cooperation could make an immeasurable contribution towards greater equity and rationality in international economic relations.

18. We would like once again to stress that regional economic integration in the countries of Latin America and the Caribbean, whether it is brought about through existing institutional mechanisms or by other means designed for this same purpose, is a key to solving the problems we share. Agricultural modernization in our countries will advance more quickly if we work together, combining our efforts so as to achieve together what we cannot achieve working alone. The reactivation of intraregional trade, agreement in trade negotiations, and horizontal cooperation in the field of technology are only a few of the many lines of action we must pursue as soon as possible. The regional cooperation agencies can and must play a fundamental role by supporting our shared efforts for agricultural modernization and economic and social development.

19. The difficulties which the relatively less-developed smaller countries of the region have in mobilizing the human and financial resources required for development of the agriculture sector is of particular concern to us. The small scale of the economies of many countries in Latin America and the Caribbean seriously limits their ability to gain suitable access to technology, manage the necessary investments to develop their productive and marketing infrastructure, and find solutions to a series of difficulties which prevent them from overcoming problems of rural poverty with which they are saddled.

Although each country is responsible for defining and implementing its own solutions to these problems, the introduction of joint undertakings in areas of common interest will assuredly become a key element in any strategy designed to make better use of the scarce resources available. Accordingly, we make a special appeal to the international financial and technical aid organizations, and to the other countries of the hemisphere, asking them to give special priority to supporting the smaller and relatively less-developed countries of Latin America and

the Caribbean and, above all, to fostering joint activities among groups of such countries at the sub-regional level. In addition, a recommendation supporting the development of a strategic plan for agricultural revitalization was made. This recommendation is also reported below.

RECOMMENDATION NO. X

STRATEGIC PLAN OF JOINT ACTION FOR AGRICULTURAL REVITALIZATION IN LATIN AMERICA AND THE CARIBBEAN

The Ninth Inter-American Conference of Ministers of Agriculture,

Considering:

That the declaration and recommendations developed in this, the Ninth Inter-American Conference of Ministers of Agriculture, cover a broad spectrum of issues and initiatives, and are addressed to various regions, subregions, organizations, as well as member countries;

That all the countries of the hemisphere agree on the need for reviving and modernizing agriculture, and that to this end, they have indicated their willingness to coordinate their work at the regional and subregional levels, and to increase North-South cooperation;

That increasingly, international technical and financial cooperation must be implemented on a multi-lateral rather than just a national basis, in order to ensure a greater impact on the regional economy and greater efficiency and a broader multiplier effect of the resources committed;

That specialized technical agencies, national governments, and other institutions have conducted

and continue to conduct technical studies on the problems of agriculture and rural development in the countries of Latin America and the Caribbean, providing an excellent basis for the design of joint action to revitalize the agricultural sector;

That there is an operational need for a framework that will provide consistency to existing and new initiatives to revitalize the agricultural sector in Latin America and Caribbean countries;

That such a framework would help to ensure that the translation of our recommendations into action is coordinated for maximum complementarity and synergy;

That there is a need to establish a framework that will give impetus to the further development of each of the program areas in IICA's Medium Term Plan; and

That the prioritization and coordination of actions under such a framework would facilitate the decisions of donor countries and international financial institutions, and serve to attract and make better use of funding.

RECOMMENDATIONS:

1. That the IABA charge IICA with developing, in collaboration with member countries and the other specialized agencies, a strategic plan of joint action in support of agricultural revitalization and economic development in Latin America and the Caribbean based on the foregoing guidelines, and with a focus on:

i) joint actions among countries, at the regional and subregional level, to resolve concrete problems;

ii) maximizing the complementarity and synergy of the diverse initiatives to revitalize the sector;

iii) the required technical and financial support from donor countries and agencies;

iv) suggested mechanisms for inter-institutional coordination;

v) setting of priorities for all joint actions and initiatives so to use available resources to the greatest advantage.

2. That the Draft Plan be submitted for the consideration of the Executive Committee at its regular meeting to be held in 1988 as a preliminary step to its implementation.

3. That the IABA request IICA to procure the resources needed to fund the design of the Plan.

1.

IICA OFFICE IN TRINIDAD & TOBAGO

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.

In 1984, the office was removed to its current location at Pannell Kerr Forster Building, Orange Grove Road, Tacarigua. The current staff of the office is as follows:

The International Professional Staff are:

a.

Dr. Chelston W.D. Brathwalte -

IICA Representative in Trinidad and Tobago and

Regional Plant Protection Specialist

b.

Dr. Warren Forsythe

Specialist in Generation and Transfer of Technology

c.

Mr. Hugo Caceres

Agricultural Information Specialist

d.

Dr. Rafael E. Salazar

Agricultural Marketing Specialist

These are supported by a General Services Staff consisting of the following:

a.

Mrs. Cathy-Ann Baksh

Executive Secretary

b.

Miss Mareena Fablen

Accounting Secretary

c.

Miss Francilla Stewart

Programme Secretary

d.

Mr. Edwin Franco

Driver/Messenger

e.

Mrs. Ruby D'Arceull

Office Assistant



Minister of Food Production, Marine Exploitation, Forestry and the Environment visited the IICA office in December of 1987. In the picture the minister poses with the staff of the IICA office in Trinidad and Tobago

2. CURRENT STATE OF THE AGRICULTURAL SECTOR

During 1987, the new Government of Trinidad and Tobago continued to develop plans and proposals for the revitalization of the agricultural sector. The Draft National Agricultural Development Plan 1988-1992 was released for public comment. The 319 page document defines the priorities for agricultural development in the Medium Term and set out proposals for implementation of these priorities. The plan seeks to put the agricultural sector in historical perspective and notes that "Now, in Trinidad and Tobago, over the last thirty years the problems of the agricultural sector have been identified and exhaustively documented." "The causes of the decline in agricultural production have been analysed substantially. In this connection, it is noteworthy that during these years, the economy of Trinidad and Tobago has experienced marked

cyclical movements. In fact, periods of boom and slump have succeeded each other without modifying to any significant extent the basic characteristics of, and trends in the agricultural sector.

Similarly, changes in our development approach during the First Five Year Plan based mainly on private initiative, to one of strong government intervention in the economy, during and since the Third Five Year Plan, do not appear to have had any discernible impact.

In this respect, however, we must be clear about what have been the effective limits on state action in this domain over the recent past. There are rigidities in the economic system and economic forces and interest groups which have coalesced around these rigidities. The most significant negative economic mechanism at present in operation is constituted by our marketing and distribution system and infrastructure which are, at the same time, a conse-

quence and a contributory cause of our inordinately strong national preference for imported agricultural goods and services. The effects of this have been strengthened by the operation of certain national macro-economic policies in the areas of finance, credit, exchange rate management, infrastructure development, etc. This mechanism, more than any other, can probably be assigned the principal responsibility for nullifying the increasingly strenuous state efforts on behalf of domestic agricultural production over the past decades. Indeed, together with the vested interests which have arisen around it, it may be said to have resulted in an import regime that was considered by the public administration as fostering and encouraging domestic agricultural production but has, in its practical application, had the opposite effect.

An examination of trends in agricultural production and incomes over the recent past thus forces us ineluctably to the conclusion that our present policies and institutional arrangements have been insufficient, either singly or in combination to counteract the inhibiting influence of the various constraints on growth in the sector. They have been unable to change the price signals in the marketplace where decisions of what, how, where and how much to produce are taken; insufficient also to correct the trends of the last few years, during which we have witnessed a slower rate of increase in prices, income and profits in agriculture than in other sectors of the economy. As a result both capital and labor have moved out of agriculture into more remunerative pursuits.

These considerations constrain us to a reassessment of the scope and objectives of national agricultural development policy and the mechanisms for bringing it into effect, both in relation to the problems and issues in the sector, and in the wider context of national economic policy and reality. In essence, our planning approach must be one which recognizes the limits on state action and gives effect

to its role as a facilitator of individual actions, thus it becomes of paramount importance that we provide an adequate and appropriate institutional and policy framework encompassing in particular the efficient planning, programming and coordination of investment programs and agricultural policies as well as effective public (farmers, merchants, entrepreneurs) participation in the planning and implementation of these programmes."

IICA's contribution to agricultural development are recognised in the sections on agricultural mechanization of tree crops and agricultural marketing of fresh fruits and vegetables.

The Director of the office has held several discussions with the new authorities in order to identify the specific areas for IICA's technical cooperation in the future. Among the areas identified so far are:

- 1) marketing and agro-industry
- 2) appropriate technology for small farmer production
- 3) training in small agribusiness enterprise management
- 4) plant protection and animal health.

Consultations are continuing with a view to identifying the specific areas of need within the broad subject areas defined and any other area of need.

3.

ACTIVITIES IN 1987

The IICA Office in Trinidad and Tobago continued in 1987 to provide technical cooperation in the five program areas of the new Medium Term Plan (1987-1991). These programs are as follows:

- I. Agricultural Policy Analysis and Planning
- II. Technology Generation and Transfer

III. Organization and Management

IV. Marketing and Agro-Industry

V. Animal Health and Plant Protection

3.1

PROGRAM I: Agricultural Policy Analysis and Planning

Purpose

Agricultural production, under present world economic conditions, is one of the keys to regenerating the potential for economic growth. Agriculture has been re-discovered as a means of putting new life into the economy, and this has underscored the importance of agrarian policies and the need to analyse them and adapt them to the new role that the sector can play.

The Agricultural Policy Analysis and Planning Program takes these factors into account. It is oriented toward cooperating with the countries to analyse and evaluate alternative models and strategies for agricultural development, improve analytical capabilities, and provide advisory services for the design and implementation of agrarian policy and for strengthening the organization and management of institutional systems for agricultural policy planning and implementation.

A forum for the discussions of policy options for the agricultural sector was held at the Faculty of Agriculture, The University of the West Indies, for five successive weeks during May and June, 1987. The topics dealt with were as follows:

- 1) What do you expect of our agriculture—Jobs? Security? Nutrition? Foreign Exchange?
- 2) Role of Interest Groups in Agricultural Policy

Formulation

3) Cheap Food Versus High Prices: A Conflict in Planning Agricultural Development

4) Land Use—Priorities and Conflicts

5) Research and Development Policy for Agricultural Development Towards the 21st Century

Activities Carried Out

The Director of the Office was moderator for the first session and attended all the other sessions and contributed to the discussions on the topics listed above.

It is felt that the proceedings of these meetings will impact on the decision-making process in the development of the new policy for agriculture in Trinidad and Tobago.

3.2

PROGRAM II: Technology Generation and Transfer

Purpose

The Technology Generation and Transfer Program has been introduced in response to two fundamental issues:

- 1) a recognition by the countries and the international technical and financial community of the importance of technology for productive development of the agricultural sector; and
- 2) a generalized conviction that the potential of science and technology can be fully tapped only in the presence of institutional infrastructure capable of developing appropriate technological replies to the specific conditions of each country. It is also essential to have a framework that will encourage and facilitate the incorporation of new technology into production processes.

The Technology Generation and Transfer Program will be designed to promote and support member country actions to improve technological policy design, strengthen the organization and management of national technology generation and transfer systems, and facilitate international technology transfer. This should lead to better use of available resources and a more effective contribution to solving the technological problems of agricultural production. Work will take place in a framework of equitable distribution of benefits and conservation of natural resources.

Special emphasis will be placed on supporting technology generation and transfer to reduce agricultural imports and boost exports of vegetables, fruits, and legumes.

Activities carried out

3.2.1

Evaluation and Monitoring of Investments in Agricultural Research in Trinidad and Tobago

The Office participated in a seminar on agricultural research in Trinidad and Tobago which was held from October 1st to 3rd, 1987. Dr. Eduardo Trigo, Director of Program II, Technology Generation and Transfer, presented an address on "Agricultural Research in small countries - some organizational alternatives."

The Office is currently implementing a short-term action in support of this project area in which support is being provided to the Faculty of Agriculture of the University of the West Indies. This support is being used to carry out an inventory of agricultural research resources in Trinidad and Tobago including professional expertise, areas of research emphasis and physical resources. An analysis of the cost of agricultural research in development in Trinidad and

Tobago has been carried out and an analysis of the impact of agricultural research on development including cost benefit analysis is now being proposed. A project on "The development of an appropriate methodology for monitoring investments in agricultural research in Trinidad and Tobago" has been prepared for implementation in 1988.

3.2.2

Exhibition on Appropriate Technology for Small/Medium Scale Farming, Fishing and Forestry

Operations

IICA has been invited by the Ministry of Food Production, Marine Exploitation, Forestry and the Environment to participate in a committee for organizing an exhibition on "Appropriate Technology for Small and Medium Scale Farming, Fishing and Forestry" which is to be held early in 1988.

3.2.3

Fruit Crop Development

The Ministry of Food Production has shown an interest in the development of the fruit crop sector. The IICA Office facilitated the visit to Trinidad and Tobago of Dr. Rafael Marte, Fruit Specialist in the IICA Office in Barbados. During his visit, Dr. Marte presented a seminar on "Techniques of growing papayas for profit" and supplied seeds of two new cultivars of papaya to Trinidad and Tobago national institutions.

3.3

PROGRAM III: Organization and Management for Rural Development

Purpose

Broad sectors of the rural population in Latin America and the Caribbean operate under severely

restricted access to basic production resources (land, water, capital) and services (technical assistance, marketing, education, health). These resources and services are essential if the rural family is to escape from poverty, organize with other families to incorporate itself into the social and political fabric of the countries, and begin to feel the benefits of development.

The purpose of this program is to support the Member States in defining rural development policies and programs and strengthening institutions responsible for carrying out these policies and programs through concrete action. Efforts will be oriented toward:

- 1) identifying the problems of poor rural populations and designing and implementing policies to overcome rural poverty;
- 2) improving the performance of institutional systems for rural development and achieving integrated delivery of services for the population;
- 3) strengthening capabilities for the preparation and management of rural development programs and projects; and
- 4) performing action to promote and strengthen farmer organizations and improve business management skills.

Activities carried out

3.3.1

Training in Small Agribusiness Management

A project proposal to facilitate the development and management of small agribusiness enterprises in Trinidad and Tobago has been prepared. A training course on small agribusiness management was held from October 11th to 16th in cooperation with the Ministry of Food Production. The course was designed:

- a. to develop the management skills of field officers whose responsibilities include the development

of income-generating projects, or who are required to act as advisors to community-based agribusiness enterprises.

- b. to develop training and advisory capability in small agribusiness management in selected institutions in Trinidad and Tobago.

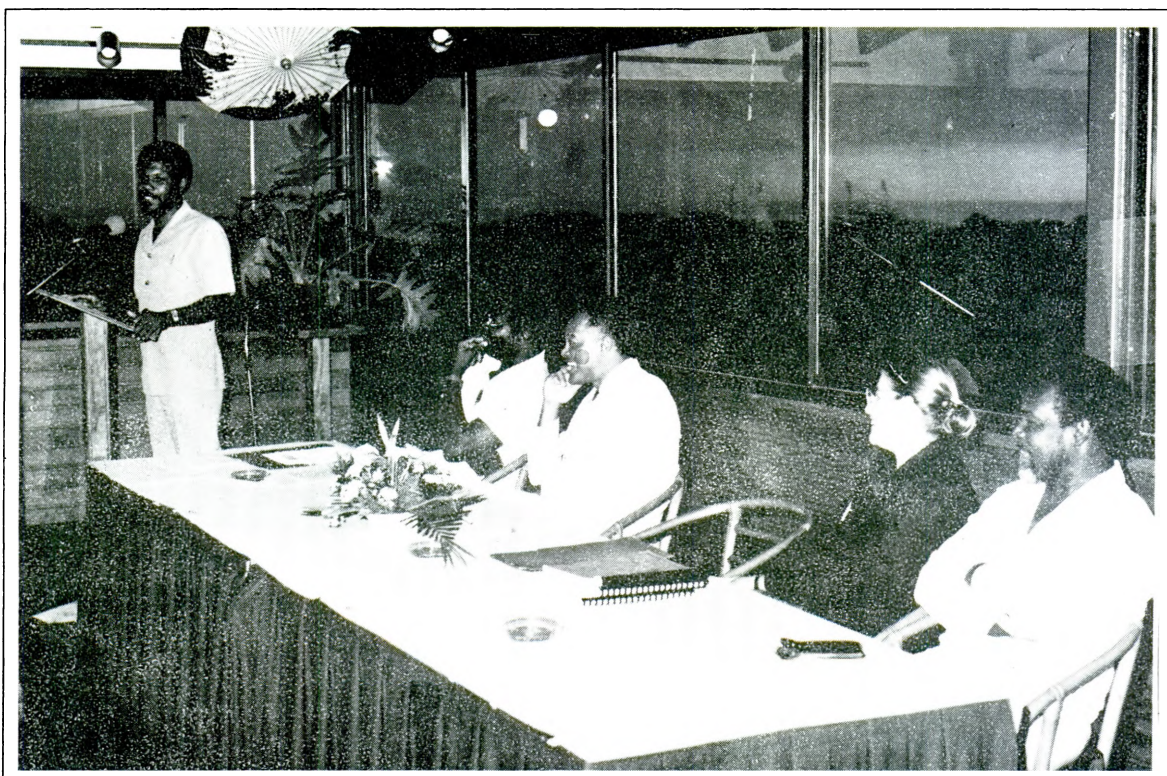
Twenty-five participants from the Ministry attended the course. They were all evaluated and certificates were presented. It is hoped that this project will become operational in 1988. Currently training manuals are being adopted for use in Trinidad and Tobago.

3.4 PROGRAM IV: Marketing and Agro-Industry

Purpose

The Marketing and Agro-Industry Program is based on two fundamental characteristics of the present situation in the countries of Latin America and the Caribbean. The first is the growing complexity of marketing systems and the greater needs of processed foods, both of which derive from urbanization trends and the resulting functional, spatial and temporal lags between production and consumption. The second feature is the newly emerging importance of international agricultural trade in general, and particularly of non-traditional products, in response to needs for growth in the economies of the region. In recent years, extensive opportunities have begun to open in the international and intra-regional markets. However, these opportunities can be tapped only if physical and institutional infrastructure is available. This is not presently the case in all countries.

The purpose of the Marketing and Agro-Industry Program in this framework is to support the countries in their efforts to increase the efficiency of their marketing processes. The program will also work to improve the effective participation of agricultural



The Honourable Minister of Food Production, Marine Exploitation, Forestry and the Environment addresses the closing ceremony of the course on Small Agri-Business Development which was held at the Kapoc Hotel from October 13th - 15th, 1987. Seated left to right are: Dr. Chelston W.D. Brathwath, IICA Representative in Trinidad and Tobago, Mr. Eden Shand, Parliamentary Secretary, Ministry of Food Production Marine Exploitation, Forestry and the Environment, Mrs. Jan Hurwitch-MacDonald, IICA Representative in Jamaica and Horatio Nelson, Director of Extension in the Ministry of Food Production.



Some participants at the opening of the Seminar on small Agri-business Development. In the front row are Dr. Vincent Moe, Director of Veterinary Services and Mr. Winston Rudder, Head, Agricultural Planning Division, Ministry of Food Production, Marine Exploitation, Forestry and the Environment.

products in international, bilateral and multilateral trade in the region and the world. This will be done by improving the design of information channels and systems, increasing investments in rural agro-industry and promoting non-traditional agricultural export.

Activities carried out

3.4.1

Agricultural Marketing

In continuation of the conjunctural action on "Support for the Improvement of Food Crop Marketing in Trinidad and Tobago" approved in the 1986 budget, the office continued to support the agricultural sector in the area of agricultural marketing particularly in postharvest technology. Two publications were finalized. These were "Post-handling Systems for Tropical Crops--Mango" and "A Training Guide on Post-harvest Technology" in cooperation with the Caribbean Industrial and Research Institute (CARIRI).

The new specialist in Agricultural Marketing, Dr. Rafael Salazar arrived in Trinidad and Tobago on November 9th and has been reviewing the status of agricultural marketing in the country with a view to the preparation of a project for agricultural marketing. A Round Table on "Agricultural Marketing in Trinidad and Tobago" was held from December 7th to 9th to develop strategic plans for the future.

The workshop identified specific areas of work for the proposed new organization and presented an analysis of the proposed goals within the context of the overall plan for the Agricultural Sector - The National Agricultural Development Plan - 1988-1982.

3.5

PROGRAM V: Animal Health and Plant Protection

Purpose

The Animal Health and Plant Protection Pro-

gram will target problems of pests and diseases that reduce agricultural production and productivity and limit marketing.

Appropriate physical and institutional infrastructure, technically capable and highly responsive, is needed for solving these problems. Effective, lasting actions must be taken to control major pests and diseases and prevent them from spreading.

The Animal Health and Plant Protection Program will cooperate with the countries in strengthening specific national institutions in this field. It will seek to increase their capability and effectiveness in reducing economic losses caused by pests and diseases during agricultural production and marketing, preventing the introduction of exotic pests and diseases, and controlling the spread of diseases already in the countries.

Activities carried out

3.5.1.

Plant Protection Programme for the Caribbean Region

3.5.1.1.

Activities carried out in Trinidad and Tobago

- 1) A seminar on the safe use of pesticides was held on April 28th and 29th in cooperation with the Pan American Health Organization (PAHO) and the Ministry of Food Production, Marine Exploitation, Forestry and the Environment. Fifty-four persons were trained.
- 2) A seminar on reducing post-harvest losses in fruit and vegetable marketing was held on July 13th and July 21st in collaboration with the Ministry of Food Production, Marine Exploitation, Forestry and the Environment and the Caribbean Industrial Research Institute (CARIRI).

- 3) A seminar on the diagnosis of pests and diseases

of food crops in Trinidad and Tobago was held in cooperation with the Ministry of Food Production, the Faculty of Agriculture of the University of the West Indies and the Agricultural Development Bank from September 1st to 12th, 1987.

Twenty-five extension officers were trained. Losses due to plant pests and diseases are high in Trinidad and Tobago 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 Trinidad and Tobago. The objectives of this course were:

(a) To increase the level of skills of persons responsible for the diagnosis and control of plant pests and diseases in Trinidad and Tobago.

(b) To provide the basis for the development of a Manual on the Diagnosis of Plant Pests and Diseases in Trinidad and Tobago.

4) Mr. Sherwin Lewis, the Head of the Division of Plant Quarantine was supported to attend a meeting in the Dominican Republic for Plant Quarantine Administrators from July 20th to 24th, 1987.

5) A seminar/workshop on Autotutorials Training in Plant Protection was held at the University of the West Indies from May 13th to 14th, 1987 in cooperation with the University of Florida.

6) The Director of Research, Dr. Ronald Barrow was supported to attend the Fifth Meeting of Directors of Plant Protection in Latin America and the Caribbean held in the Dominican Republic from November 8th to 14th, 1987.

3.5.1.2.

Other Activities in Plant Protection

1) A visit was made to Jamaica from August 16th to

22nd and plans were developed for the preparation of a policy document on pesticide use in Jamaica as a basis for the development of a policy on registration use and disposal of pesticide.

2) Two technicians from Suriname were facilitated to carry out training in the diagnosis and control of diseases of coconut at the Central Experiment Station at Centeno, Trinidad and Tobago.

3) A new project document entitled "Strengthening plant protection systems to facilitate regional and extra-regional trade in agricultural products" was prepared and submitted to IICA Headquarters for approval.

4) A new project document entitled "Support for a program to control pests and diseases for coconut and oil palm in Suriname" was prepared for the IICA Office in Suriname.

5) The specialist visited St. Lucia from October 19th to 22nd, 1987. The specialist presented an address and chaired a session of the meeting of Heads of Pesticide Control Boards in St. Lucia, Grenada and Dominica. The specialist also held meetings with IICA national plant protection specialists in St. Lucia, Dominica and Grenada.

6) The specialist visited the Dominican Republic from November 8th to 14th and participated in the 5th meeting of Directors of Plant Protection of Latin America and the Caribbean. The specialist made contributions with respect to the organization, preparation of documents, presentation of reports and organization of the meeting of Directors of Plant Protection of the Caribbean Area.

7) A project proposal for the establishment of a Plant Protection Center for the Caribbean has been prepared in cooperation with the Commonwealth Agricultural Bureau International and the Faculty of Agriculture of the University of the West Indies. The

proposal has now been submitted to the CARICOM Secretariat for financing under LOME III of the agreement with the European Economic Community.

8) Assistance was provided to the office in Suriname in arranging for Dr. Reginald Griffith, consultant, to provide assistance in the analysis of the situation with Spear rot and Hart rot diseases of coconut and oil palm. Assistance has also been provided to Barbados to facilitate a study tour to examine the situation with Onion blast disease. Arrangements were made for training of an officer from Guyana in Trinidad and Tobago on control of Hart rot disease of coconut.

9) The material which will form the basis of the draft document on Pest of Crops in the Caribbean 1880-1980 is being prepared.

10) The draft manual on diagnosis of pests and diseases is complete and is being sent for printing soon.

11) The 1987 newsletter was completed and 600 copies were distributed to Plant Protection personnel in the region.

3.5.2.

Animal Health

The office facilitated participation of Dr. Vincent Moe, Director of Veterinary Services and Dr. Edward Cazabon, Veterinary Pathologist, to attend the Sub-regional meeting of the Inter-American Commission on Animal Health which was held in Guyana from 8th to 10th April, 1987.

Discussions were also held with officials of the University of Guelph with respect to the establishment of a joint project on Livestock Development in the Caribbean with financial assistance from the Canadian International Development Agency (CIDA).

The office also facilitated participation of Dr. Ernest Caesar in a seminar on Animal Health Emer-

gencies which was held in Barbados from 7th to 11th September, 1987. The office continued to support the initiatives of the Blue tongue survey and Mr. Paul Gibbs consultant with the project visited the office during the semester.

3.6

Establishment of a National Agricultural Bibliographic Information System for Trinidad and Tobago

Lack of an efficient agricultural information system has been recognised as a limiting factor for agricultural development in Trinidad and Tobago. In continuation of the project initiated in 1984, the following actions were carried out during this period:

1) An agreement was finalised between the Central Experiment Station and the office whereby IICA provided to the library technical assistance to catalogue 800 documents.

2) Assistance was provided to the Fisheries Division of the Ministry and 200 copies of a "Bibliography of shark and related species" have been prepared.

3) A short course on the organization and management of small agricultural libraries was held at the Ministry of Food Production, Marine Exploitation, Forestry and the Environment from August 24th to September 4th, 1987. The course was attended by eighteen participants from various sections of the Ministry.

4) A final report on the project was prepared by the specialist in which the achievements of the project to date were detailed. These are as follows:

(a) Professional librarians from the Eastern Caribbean Institute of Agriculture and Forestry, and CARDI were trained on advanced systems of library organization, library management and the production

of bibliographic data bases.

(b) Training of an officer of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment on aspects of mass media communication and public relations.

(c) Assistant librarians from the libraries of the Central Experiment Station, the Fisheries Division, the Forestry Division, the Veterinary Diagnostic Laboratory, the Agricultural Planning Division, the Lands and Survey Division, the Crop Research Division and the Sugar Feeds Centre were trained on subjects of organization and management of small agricultural libraries through a short course.

(d) Assistant librarians from the Central Experiment Station, the Agricultural Planning Division and the Eastern Caribbean Institute of Agriculture and Forestry were trained on the AGRIS system methodology for the analysis of documents and the registration of bibliographic data.

(e) The libraries of the Central Experiment Station, the Forestry Division, the Eastern Caribbean Institute of Agriculture and Forestry and the Fisheries Division were assisted in the cataloguing classification and registration of their book and periodical collections.

(f) The services of the libraries of the Central Experiment Station and the University of the West Indies were supported through the provision of microfiches, short bibliographies and computer searches of AGRINTER and AGRIS data bases.

(g) The national agricultural bibliography of Trinidad and Tobago covering the period 1960-1985 was compiled, published and distributed.

(h) The Central Experiment Station and the Fisheries Division were assisted and supported in the production of reference sources dealing with the shark

literature, the periodical collections and an index to the annual research reports.

(i) The IICA Offices in Suriname, Jamaica and the Dominican Republic were assisted through the elaboration of project proposals for the establishment of national document centers, national agricultural information systems and specialized sources of information.

(j) The IICA Office's library was organized and information made to the local community of users.

These activities developed by the project contributed to the achievement of the general objective through:

(a) Improvement of skills of the Ministry of Food Production Library personnel.

(b) Improvement in the organization of library collection and services.

(c) Improvement in cooperation among the different libraries of the Ministry of Food Production.

(d) Establishment of mechanisms for improving internal flow of information and exchange.

(e) Improvement of coordination among the Ministry's libraries.

4. LIST OF IICA AND OTHER PERSONNEL WHO VISITED THE OFFICE AND THE RESULTS OF THEIR VISIT

VISITORS AND TECHNICAL CONSULTATIONS

Dave Hutton - UWI Faculty Representative in Jamaica

visited May 13th, 1987 and agreed on cooperative relations between IICA and UWI-Jamaica.

Manuel E. Ruiz - Specialist with RISPAL visited June 8th, 1987 and discussed RISPAL project and relevance to Trinidad and Tobago.

Lennox Lewis - Deputy Director of Caribbean Industrial Research Institute visited June 16th, 1987 and discussed further cooperation between IICA and CARIRI.

Yvonne R. Davidson - Extension Division, Ministry of Food Production, Marine Exploitation, Forestry and the Environment visited July 7th, 1987 and discussed cooperation in small agribusiness management course.

Sam Scott - Consultant in Agricultural Marketing visited July 24th, 1987 and provided assistance in training in postharvest technology.

Patricia Y. Milton - Technician, Ministry of Agriculture-Suriname visited September 15th, 1987 and acquired training in coconut pest and disease diagnosis and control.

Tura Nandeu - Technician, Ministry of Agriculture-Suriname visited September 15th, 1987 and acquired training in coconut pest and disease diagnosis and control.

Paul Gibbs - Consultant, Blue Tongue Study, Animal Health visited September 15th, 1987 and discussed progress of the work in Trinidad and Tobago.

Janice Londen - Consultant Sociologist, IICA Office in Jamaica visited September 18th, 1987 and discussed sociological problems of training farmers in the Caribbean.

George Buckmlre - Director of IICA Office in Guyana visited October 1st, 1987 and discussed CARICOM

agreement for 1988 as small business year.

Eduardo J. Trigo - Director of Program on Technology Generation and Transfer visited October 2nd, 1987 and presented paper at Meeting on Agricultural Research in Trinidad and Tobago.

Jan Hurwitch-MacDonald - Director of IICA Office in Jamaica visited October 12th, 1987 and presented course on small agribusiness management.

Dick Donaldson - Peace Corps Volunteer-IICA Office in Barbados visited October 12th, 1987 and presented aspects of small agribusiness course.

Govindra Rishi - Consultation to CARLI farmer cooperative visited October 28th, 1987 and discussed support for small business training programme.

Karen Peterson - Inter-American Development Bank, Washington, D.C. visited October 29th, 1987 and discussed assistance to Trinidad and Tobago.

Ranjit Singh - Lecturer in Agricultural Economics, University of the West Indies visited October 30th, 1987 and discussed and contributed to formulation of project document on agricultural research methodology.

Joan G. Browne - Administrator, IICA Office in Jamaica visited from November 16th to 20th, 1987 and provided assistance in Administration to IICA, Jamaica.

Gustavo Cubillos - IICA Specialist with RESPAL in Guatemala visited November 20th, 1987 and was facilitated with visa to Guyana.

Manuel E. Ruiz - IICA Specialist with RISPAL in Costa Rica visited November 20th 1987 and was facilitated with visa to Guyana.

E. Julien Duncan - Botanist, University of the West

Indies visited November 27th, 1987 and provided support to IICA Office in Guyana on tissue culture.

Betsy Mac Gregor - Veterinarian, University of Guelph, Ontario, Canada visited November 28th, 1987 and discussed the project proposal for livestock development in the Caribbean.

Guldo Marcelle - Chairman, Pesticide Control Board, Grenada visited December 2nd, 1987 and discussed cooperation and support for pesticide use in Grenada.

5. FACILITATION OF PARTICIPATION IN IN- TERNATIONAL EVENTS

• Dr. Vincent Moe participated in the Sub-regional meeting of the Inter-American Commission of Animal Health (COINSA) from April 8th to 10th, 1987 in Guyana.

• Dr. Edward Cazabon participated in the Sub-regional meeting of the Inter-American Commission of Animal Health (COINSA) from April 8th to 10th, 1987 in Guyana.

• Dr. Reginald Griffith provided technical services in Entomology and Plant Pathology to the IICA Office in Suriname from April 25th to May 11th, 1987 in Suriname.

• Prof. John Spence participated in seminar on the "Modernization of Technology in the commercial and economic context in Latin America and the Caribbean" from May 6th to 9th, 1987 in Costa Rica.

• Mr. Sherwin Lewis attended a one week training programme for identifier/specialist offered by the United States Department of Agriculture from July

18th to 25th, 1987 in the Dominican Republic.

• Hon. Lincoln Myers represented the Government of Trinidad and Tobago at the Ninth Inter-American Conference of Ministers of Agriculture and the Fourth Regular Meeting of the Inter-American Board of Agriculture from August 30th to September 5th, 1987 in Ottawa, Canada.

• Dr. Ernest Caesar attended the Regional Workshop on Animal Health Emergencies from September 7th to 11th, 1987 in Barbados.

• Dr. Fritz Elango presented a paper at the meeting on Root Crop Research in the Caribbean from September 14th to 18th, 1987 in St. Vincent.

• Dr. Gene Pollard presented a paper at the meeting on Root Crop Research in the Caribbean from September 14th to 18th, 1987 in St. Vincent.

• Dr. Eduardo Trigo presented an address at the meeting on Agricultural Research on Trinidad and Tobago from October 1st to 3rd, 1987.

• Dr. Julien Duncan, Consultancy re establishment and operation of a Tissue Culture Laboratory, costs and their implications from November 16th to 20th, 1987 in Guyana.

• Dr. Ronald Barrow, Trinidad and Tobago's delegate to the meeting of the Directors of Plant Protection of IICA from November 8th to 14th, 1987 in the Dominican Republic.

6. PROVISION OF A BASE FOR CONTACT WITH THE AGRICULTURAL SECTOR IN LATIN AMERICA

The Trinidad and Tobago office of the Inter-American Institute for Cooperation on Agriculture acts as a link between the agricultural sector in Trinidad and Tobago and that in other Latin American and Caribbean countries. This is evidenced by the establishment of contacts for individuals and institutions here with CATIE (Tropical Agricultural Research and Training Centre in Turrialba Costa Rica), CIAT (International Centre for Tropical Agriculture, Cali, Colombia) and CIP (The International Potato Centre at Lima, Peru), and with Ministries of Agriculture and Universities in Dominican Republic, Haiti, Mexico, Uruguay, Argentina, Venezuela and Brazil. The Office also serves as the point of contact for the Inter-American Agricultural Information System (AGRIN-TER) and has been involved in supplying bibliographies and output services from this system to persons and organizations in the agricultural sector in Trinidad and Tobago. During the period of this report the following were facilitated:

(a) Bibliography on Post-harvest Technology of Flowers for the Post-harvest Unit, Ministry of Food Production, Marine Exploitation, Forestry and the Environment

(b) Bibliography on Research Evaluation in Latin America for the Department of Agricultural Economics, University of the West Indies.

(c) Information on cassava processing in Colombia for the Food and Agriculture Corporation.

(d) Investigation on the availability of large quantities of pigeon pea seeds from Dominican Republic for

the Central Marketing Agency.

7. FUTURE IICA ACTION IN THE COUNTRY. OUT- LOOK FOR NEW PROJ- ECTS

As a result of consultation with the national authorities and in concert with the objectives of the Medium Term Plan, the following new projects are proposed for implementation in the office during 1988.

- 1) Technical support to improve Food Marketing systems in Trinidad and Tobago.
- 2) Strengthening rural development programmes through human resource development for improved management of small rural enterprises.
- 3) Development of an appropriate methodology for evaluation of the allocation of resources to agricultural research.

8. LIST OF PERSONS PARTICIPATING IN TRAINING PROGRAMS

8.1 Seminar on Safe Use of Pesticides held at the Kapok Hotel from April 28th to 29th, 1987.

NAME	PLACE OF WORK
Raffick Ali	- Ministry of Health, Welfare and the Status of Women
I. Ackbar	- " "
Allan Best	- " "
Margaret Clarke	- " "
Rosita Deleon-Pitt	- " "
Partap Moonsie	- " "
S. Roche	- " "
Cassey Emrit	- " "
Gordon James	- " "
Fuad Khan	- " "
Patricia Thorne	- " "
Zainool Khunja	- " "
Cyrilla Kowry	- " "
Krisendeo Maharaj	- " "
D. Latcham	- " "
Sheila Proctor	- " "
Ralphin Sookram	- " "
Alimuddin Juman	- " "
Gillian Ferguson	- " "
Garth Rajnauth	- " "
Chanderbhan Shripat	- " "
John Alleyne	- " "
Vishnu Ramlogan	- " "
Pauline Dowlath	- " "
Kamaldeo Maharaj	- " "
Samlal Narine	- " "
Lutchman Singh	- " "

Kent Villafana	-	Ministry of Health, Welfare and the Status of Women
Theon White	-	" "
Liaquat Ali-Khan	-	CIBA Geigy Limited
Randolph Chandrakate	-	Trinidad and Tobago National Petroleum Marketing Co. Ltd.
Peter Corbie	-	" "
Joe George	-	National Union of Government and Federated Workers
Cherry Ibrahim	-	Tracmac Chemicals
Tim Ince	-	" "
Michael Isava	-	Empire Sales and Agencies
Noreen Jack	-	Ministry of Health, Welfare and the Status of Women
Rupert King	-	Port Authority of Trinidad and Tobago
Suresh Maharaj	-	Geo. F. Huggins & Co. Ltd.
Trevor Thomas	-	" "
Ravindranath Maharaj	-	The West Indian Tobacco Co. Ltd.
Wayne Pereira	-	Goellnicht & Stollmeyer (Marketing) Ltd.
Victor Pires	-	Caribbean Chemicals & Agencies Limited
Gloria Maharaj-Batson	-	Caroni (1975) Limited
Raymond Manuel	-	" "
Herman Pulwarty	-	" "
Ken Roberts	-	" "
Deen Saidwan	-	Input Supplies Agrochemicals, Wyatt & Co. Ltd.
Richard Warren	-	Trinidad and Tobago Solid Waste Management Co. Ltd.
Conrad Ruiz	-	Tunapuna Farm & Garden Supplies Ltd.
Mohammed Halim	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Sharida Hosein	-	c/o Inter-American Institute for Cooperation on Agriculture
Selwyn Sukhu	-	National Food Crop Farmers' Association
Sylvia Carter	-	c/o Bureau of Standards

8.2

Seminar on Post-harvest Handling of Fruits and Vegetables held at CARIRI on July 21st, 1987

Imtiaz Ali	-	
Shamshudeen All	-	
Morris Acanne	-	
Junnette Alladin	-	Woodcon Products Limited
Emmanuel Alleyne	-	Alleyne Farm Products Limited

Ishmat Baksh	-	Airline Caterers Limited
Eardley Barrett	-	
Louis Bertrand	-	Caribbean Market Research Limited
Irma Bishop	-	
Joan Wilson	-	
Kathleen Bissoon	-	
Roland Bhola	-	
Basil Bonair	-	
Neil Cezair	-	International Import & Export Limited
Chase	-	
Valentine Charles	-	Ministry of Food Production, Marine Exploitation Forestry and the Environment,
Country St. Patrick		
John Rambert	-	Ministry of Food Production, Marine Exploitation Forestry and the Environment,
Country St. Patrick		
Ucklin Chan Poon	-	Management Development Centre
Annette Cabralis	-	
Lennox Checkley	-	Export Development Corporation
Cyni Seyjagat	-	" "
Valentine Davis	-	
Pone Daylal	-	
Ivan Dade	-	
Sham Bissessar	-	
Mervyn Dedier	-	
Prakash Hamarine	-	PH Enterprises
Ramdath Singh	-	
Kumar Harry	-	
Michael Hart	-	Climate Control Limited
Terrence Haywood	-	National Food Crop Farmers Association, CAURA
Edward Herbert	-	Visi Limited
Edme Henry	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Neil Gopie	-	
Elizabeth Johnson	-	
Robert Jankeesingh	-	
Megnath Gosein	-	Agricultural Development Bank
Ricardo Lucas	-	Airline Caterers Limited
Brian Jackson	-	
George McLean	-	International Import & Export Limited
Francis D. McCarthy	-	

Fritz Allan Minty	-	FAM Marketing
Gordon Oxley	-	FAM Marketing
Millette Carlton	-	
Nizoon Mohammed	-	
Reshard Abdel Mohammed	-	
Keith Murray	-	
Sheik Muzaffarr	-	
Arshad Mondro	-	
Marcus Mykoo	-	
Lloyd Nagee	-	San Fernando Technical Institute
Ganish Phelry	-	
Dhanrajie Phelry	-	
John Rambert	-	
Julien Richards	-	
Ramberan Ragoonanan	-	Mayaro Co-operative
Baldeo Singh	-	North Eastern College
Ramdath Singh	-	
Patrick Sun Kow	-	Farm Fresh Foods Limited
Earlyn Sambury	-	Central Marketing Agenc
Kelvin Scott	-	Palo Seco Agricultural Enterprises
Errol Williams	-	
Judy Williams	-	
Saheed Mohammed	-	
Lloyd Joseph	-	
Christopher Innocent	-	
Mervyn Dedier	-	
John Thompson	-	
Gerald Samaroo	-	

8.3

Seminar on Diagnosis of Pests and Diseases of Food Crops in Trinidad and Tobago held at the University of the West Indies, St. Augustine from September 1st to 12th, 1987.

Diana Archibald	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Carlyle C. Brewster	-	" " "
Simeon Broomes	-	" " "

Indra Chankasingh	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Winnifred Doobay	-	" "
Carl Duncan	-	" "
Charles Emmanuel	-	" "
Bhaskaranand Hanooman	-	" "
Roy F. Job	-	" "
Mohan Lookkhor	-	" "
Jagdath Maharajh	-	" "
Arthur Martin	-	" "
Brian Augustine Mejias	-	" "
Sherman Pierre	-	" "
Ramsawack Ramdath	-	" "
Evans Ramkhelawan	-	" "
Bishnoo Ramlogan	-	" "
Anand Rampersad	-	" "
Bobby Ramsaran	-	" "
Leroy Romain	-	" "
Sundar Seecharan	-	" "
Gloria Simon	-	" "
Ralph Narine Sookoo	-	" "
Anselm Walters	-	Agricultural Development Bank
Paul Williams	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment

List of Lecturers

Mr. George Bala	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Dr. Chelston W.D. Brathwaite	-	Inter American Institute For Cooperation On Agriculture
Dr. Richard A.I. Brathwaite	-	The University of the West Indies
Mr. Puran Bridgemohan	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Dr. Friz Elango	-	The University of the West Indies
Dr. Selwyn Griffith	-	" "
Miss Mona Jones	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Mr. Charles Kennard	-	Caroni Research Station
Mr. Steve Maximay	-	Agricultural Development Bank
Ms. Lilory McComie	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Miss Cynthia Persad	-	" "

Dr. Gene Pollard	-	The University of the West Indies
Mr. Garth Rajnauth	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Mr. Dhaneish Ramdin	-	" "

8.4

Seminar on Small Agribusiness Training held at the Kapok Hotel from October 13th to 15th, 1987

Abdool Aleem	-	Community Development Division
Christina Ali	-	St. Joseph's Convent
Stephanie Carraspe-Hunte	-	Servol Life Centre
Yvonne Davidson-McKenzie	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Chanderjit Deonarine	-	" "
Ramanan Harry	-	" "
Elbert Johnson	-	" "
Matthew Lee	-	" "
Charmaine Lewis	-	" "
Ashmead Mohammed	-	4-H Farmers Club
Faizal Mohammed	-	Junior Achievement
Opio Morani	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Kawal Narine	-	" "
Trevalyne Paul-Tuitt	-	4-H Centre
Osmond Peterson	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Ramsawack Ramdath	-	" "
Govindra Rishi	-	Caribbean Agrarian Land Improvement Investment Co-operative Society Ltd.
Neerle Robertson	-	Agricultural Development Bank
Camla Sankar-Mohan	-	4-H Farmers Club
Manoo Sharma	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Somarpersad Siew	-	" "
Krishendath A. Sooknanan	-	" "
Colin Tang Choon	-	Industrial Development Corporation
James A. Williams	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Emmanuel Yee Mon	-	" "
Gabriel Watts	-	Co-operative Department

8.5

Round-table on New Strategic Directions for Agricultural Marketing in Trinidad and Tobago held at the Hilton Hotel from December 7th to 9th, 1987

Steve Reid	-	Barbados Marketing Corporation
James Nurse	-	Agricultural and Management Consultants Limited, Barbados
Lloyd Rankine	-	The University of the West Indies
Carlyle Pemberton	-	The University of the West Indies
Morgan Job	-	The University of the West Indies
Meghnath Gosein	-	Agricultural Development Bank
Louis Bertrand	-	Agricultural Information System
Laura Roberts-Nkrumah	-	Food and Agriculture Corporation
Matthew Lee	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Bridget Poon	-	" "
Majeed Mohammed	-	" "
A. Charles	-	Management Development Centre
Trevor Percival	-	Organization & Management Division
Joseph Weir	-	Digi-Data Systems Limited
Patricia Lee Browne	-	Ministry of Planning and Mobilization
Joseph Pires	-	Chamber of Commerce
Terrance Haywood	-	National Foodcrop Farmers Association
Dennis Ramjattan	-	Princes Town Co-operative
R. Ramnasibsingh	-	Caroni Limited
Lester Francis	-	CARIRI
Albert Vincent	-	Central Marketing Agency
Carl Mohammed	-	" "
George G. Brathwaite	-	" "
Theodore U. Ferguson	-	" "
Ramdath Balkissoon	-	" "
Jacqueline Ganteaume-Farrell	-	" "
Lennox H. Sealy	-	" "
Earlyn Sambury	-	" "
Warren Thompson	-	" "
Chelston W.D. Brathwaite	-	Inter-American Institute for Cooperation on Agriculture
Rafael E. Salazar	-	" "

8.6

Course on Organization and Management of Small Agricultural Libraries held at the Agricultural Teacher Education Centre (ATEC), Centeno from August 24th to September 4th, 1987

Ms. Ingrid Andrews	-	Forestry Division, MFPMEFE
Mr. Russell Borde	-	Research Division, MFPMEFE
Mr. Floyd Bushell	-	Agricultural Planning Division, MFPMEFE
Ms. Marilyn Drayton	-	ECIAF
Ms. Kayshree Heetai	-	Research Division, MFPMEFE
Ms. Wendy MacIntyre	-	Fisheries Division, MFPMEFE
Mr. Edward Marchan	-	Veterinary Laboratory, MFPMEFE
Ms. Theresa Modeste	-	Research Division, MFPMEFE
Ms. Yolanda Morean	-	" "
Ms. Kim Poon	-	Sugarcane Feeds Centre
Ms. Elizabeth Stewart	-	Lands and Surveys Department, MFPMEFE

8.7

Participants of National Course on Produce Handling "Reducing Food Losses From Farmer To Consumer" at the Central Marketing Agency on July 13th. 1987

COUNTY ST. GEORGE EAST

Theresa Felix	-	Part Time Farmer
John Eugene	-	Farmer
Mervin Didier	-	"
S. Jaikran	-	"
Terrance Haywood	-	"
Bhesham Deonarine	-	Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Tajmul and Carmein Hosein	-	Farmer/Clerk
Ramdeo Ramarace	-	Farmer
John Conogan	-	"
Jones Constantine	-	"
Jirjodhan Mahabir	-	"
Ragoonath Khemraj	-	"
Selyn Sukhu	-	Member of the National Foodcrops Farmers' Association

COUNTY CARONI

Hemraj Ramkissoon - Farmer
Pooram Ramdath - "

COUNTY VICTORIA

Davanand Ramsamooj - Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Winstom Young - Farmer
Vishnu Ramgoolam - "

COUNTY ST. PATRICK

Valentine Charles - Farmer
John Rambert - Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Chamrika Benny - " "
Ramcharan Nanajit - Farmer
Laura Woodly - "

COUNTY MAYARO

Seepersad Samaroo - Farmer
Pamila Shullere - "
Lenard Edwards - "
Deodath Ramjattan - Ministry of Food Production, Marine Exploitation, Forestry and the Environment

COUNTY ST. ANDREW/ST.DAVID

Dhuraptie Ramrattan - Farmer/Wholesaler
Patrick San Kow - Marketing Manager, Farm Fresh Food Limited

8.8

Report on the Seminar/work shop on the Development of Training Materials in Plant Protection given by Dr. Carl S. Barfield from the University of Florida from May 13th to 14th, 1987

The seminar/workshop was held in the Department of Agricultural Extension, Faculty of Agriculture, the University of the West Indies (UWI), St. Augustine and was attended by personnel from the Ministry of Food Production, Marine Exploitation, Forestry and the Environment; Caroni Research Station and the Faculty of Agriculture.

The seminar entitled "The Development of Auto-tutorials for Enhancing Pest Management Instruction" was given in the morning session of Wednesday 13th. Dr. Barfield gave an account of the type of decisions people in pest management have to make based on what is known about the ecology of the crops and the pests involved. He pointed out the difficulties encountered by the farmer, extension agent or research scientists in getting all the relevant information about the incidence of pests and pest damage and showed how computer simulation could help to reduce not only the time taken to study the situation but also the cost of such a study. He also explained how computer aided instruction could give students who cannot get actual field experience, a

realistic view of the types of constraints a farmer is subjected to. After this presentation questions were asked about all aspects of this teaching device.

For the rest of the day and again on Thursday interested persons were given the opportunity to look at the training materials. These materials consisted of slides and text of lessons on Economic Threshold in theory and practice, and on concepts and Methods of Sampling. There were also computer programmes on many topics including sampling, pesticide technology, sprayer mechanics, effects of temperature on development of poikilotherms and integrated pest management.

The most popular lesson among the participants was on sampling. Each lesson stated the concepts, explained the theory behind these concepts and had a quiz at the end to test the student's understanding of the lesson. This proved to be very informative and helped in the understanding of the realities of an agricultural system.

The workshop was very informative and enjoyable. The general consensus was that Computer Aided Instruction could be used effectively to supplement conventional teaching and training methods to aid in the understanding of technical concepts.

As a result of this workshop, arrangements have been made with Dr. Pollard to receive some of these training materials to incorporate in the syllabus of his courses at the University.

List of Participants at the Seminar given by Dr. Barfield

Sharida Hosein	-	IICA
R.F. Barnes	-	Dept. of Plant Science and Biochemistry, UWI
G.V. Pollard	-	" "
Catherine Wren-Smith	-	Dept. of Agricultural Ext., UWI
Leroy Romain	-	Farmer's Training Centre, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Mona Jones	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Cynthra Persad	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
M. Yaseen	-	Commonwealth Institute of Biological Control
Lilory Delire McComie	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Wallace G. Des Vignes	-	Caroni Research Station
C.K. Mahadeo	-	Caroni Research Station
Charles Schotman	-	FAO
Chelston Brathwaite	-	Inter-American Institute for Cooperation on Agriculture
Garth Rajnauth	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Carlyle Brewster	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment
Dave G. Hutton	-	Faculty of Agriculture, Representative, UWI, Mona, Jamaica
G. Ferguson	-	Central Experiment Station, Ministry of Food Production, Marine Exploitation, Forestry and the Environment

8.9

Seminar on Pawpaw Production in Trinidad and Tobago

Dr. Rafael Marte, Fruit Specialist of the IICA Office in Barbados visited IICA in Trinidad and Tobago

on May 11th, 1987, held discussions with officials of Caroni Limited, FAC with respect to cooperative efforts in pawpaw production. The meeting was well received and Dr. Marte was invited back to give a seminar on pawpaw at a later date. Those attending were:

Chelston W.D. Brathwaite	-	Inter-American Institute for Cooperation on Agriculture
D.A. Buxo	-	Caroni (1975) Limited
E.M. Rampersad	-	" "
Victor Ho-A-Shu	-	" "
Seunarine Raghoo	-	" "

Eric Emmanuel	-	Food and Agriculture Corporation
Wallace Des Vignes	-	Caroni (1975) Limited
K. Boodram	-	" "
P. Jordan	-	" "
Lincoln Goberdhan	-	" "
K. Imambaksh	-	" "
George Mason	-	" "
R. Marte	-	Inter-American Institute for Cooperation on Agriculture

9. PUBLICATIONS

1. A Manual on Post-harvest Handling Systems for Perishable Food Crops - Mango. IICA Miscellaneous Publication No. A2/TT-87-001.

Improvement in food self-sufficiency and food security in Trinidad and Tobago will depend to some extent on improvements in the marketing system for food crops. In 1985, the Government of Trinidad and Tobago requested IICA's assistance in the preparation of project proposals for establishment of a marketing system for food crops which would embrace aspects of packaging, handling and postharvest technology.

A mission visited Trinidad and Tobago from August 25th to 31st, 1985 and prepared "Proposals for the Improvement of domestic marketing of fruits and vegetables in Trinidad and Tobago."

On the subject of Research and Training the mission observed that "a national course in postharvest technology and marketing seems necessary."

In pursuing the implementation of the proposed national course in postharvest technology, it became clear that local materials for use in postharvest training were extremely limited. In view of this, IICA sought to assist in the preparation of local training material for use in a national course in postharvest technology and marketing. This publication on the postharvest technology of mango (*mangifera indica* L.) is the first result of joint efforts by IICA and

scientists of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment to prepare local materials which can be utilized in training programmes designed to improve the marketing systems and reduce postharvest losses in food crops.

2. Guidelines for the Identification and Diagnosis of Damage in Crop Plants caused by Pests, Diseases, Weeds and Nutrient Disorders. IICA Miscellaneous Publication No. A2/TT-87-002.

The aim of this document is to satisfy the need for a source of information which could form the basis for training courses on the identification of plant, pests and diseases of crops of economic importance in the Caribbean. It is believed that the inability to accurately identify pest species and to diagnose disease problems in the field is one of the most important limiting factors in the effective pest control in the Caribbean. This document resulted from presentations at a regional seminar on the subject which was designed to increase the level of skills of persons responsible for the diagnosis and control of plant, pests and diseases in various countries of the region.

The document was prepared by Chelston W.D. Brathwaite (IICA), Gene V. Pollard, Fritz Elango, Richard A.I. Brathwaite and Selwyn M. Griffith of the Faculty of Agriculture of the University of the West Indies, St. Augustine, George Bala and Cynthra Persad of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment and Syed Haque

of the Caribbean Agricultural Research and Development Institute (CARDI).

3. Training Guide on Post-harvest Handling of Tropical Produce. IICA Miscellaneous Publication No. A2/TT-87-003

CARIRI and IICA have jointly produced a package for training farmers, wholesalers and retailers in practical methods and techniques to be used in handling fresh produce to maximise product quality at point of sale.

This package can be used by trainers with experience in post-harvest technology or by groups seeking a better understanding of the handling requirements of fresh produce. The audio taped commentary provided with the 35mm slides will allow the package to stand alone. The equipment required for use of the package is:

- (a) 35mm slide projector and audio cassette player;
- (b) if automatic projection and commentary are required, use of a sound/slide projector, i.e. Bell and Howell Ring Master of Kodak Carousel will be necessary;
- (c) projection screen or clean white wall.

Topics covered include:

(a) **Overview of Post-harvest Technology** stressing practical methods and technology for maximising product quality of tropical fruits, vegetables and root crop.

(b) **Harvesting and Field Handling** methods of harvesting and use of tools to obtain the goals of harvesting are illustrated.

(c) **Cooling, Storage and Post-harvest Technology** — effects of temperature, methods of cooling and

various treatments on product quality are illustrated.

(d) **Packaging, Handling and Distribution** — Choice of packaging for bulk and retail markets is reviewed.

Each part consist of 35mm colour slides, printed commentary and audio cassette stored in a clearly labelled folder. The Manual was prepared by Mrs. Ena Harvey, Food Technologist at CARIRI.

4. Caribbean Plant Protection Newsletter 1987. IICA Miscellaneous Publication No. A2/TT-87-004

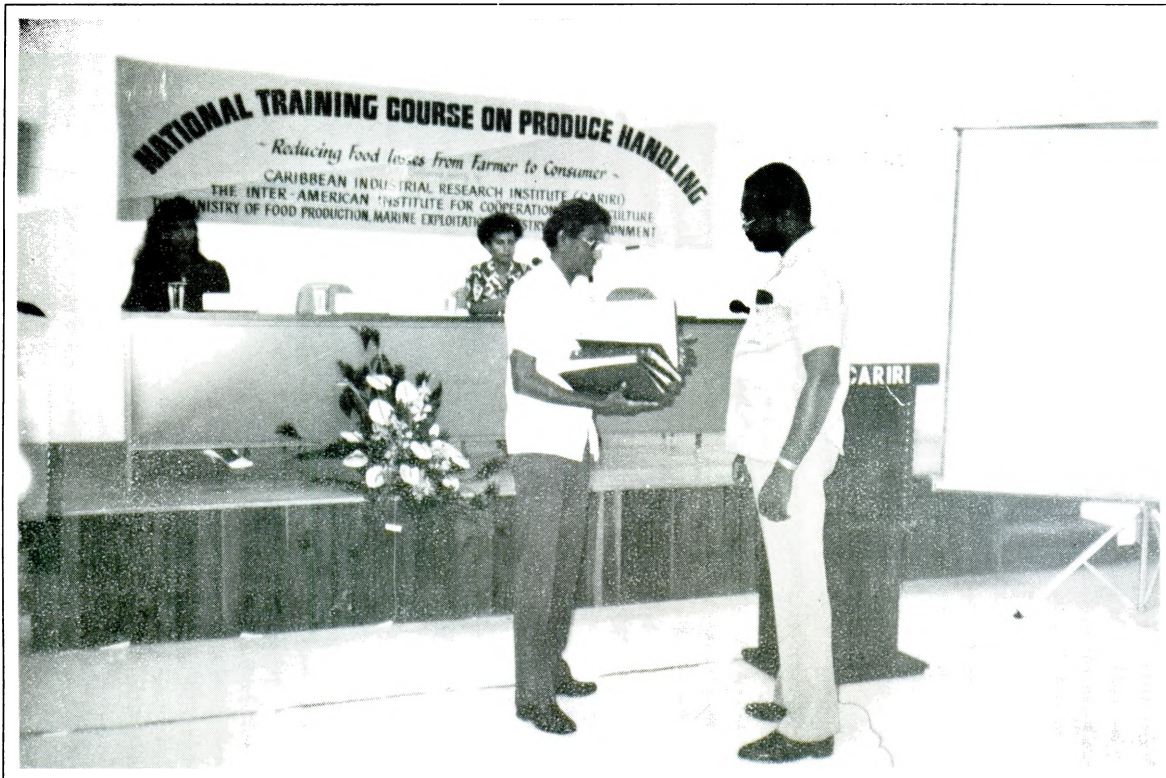
This edition of the Newsletter which began in 1981 contains articles on Pesticides and Pesticide Application, Plant Quarantine News, Relevant Abstracts, Current Topics and Letters to the Editor. The document which is 40 pages was distributed to over 500 organizations and individuals throughout the Caribbean and Latin America.

5. Bibliography on Soil and Water Resources and Management in the Caribbean. IICA Miscellaneous Publication No. A2/TT-87-005

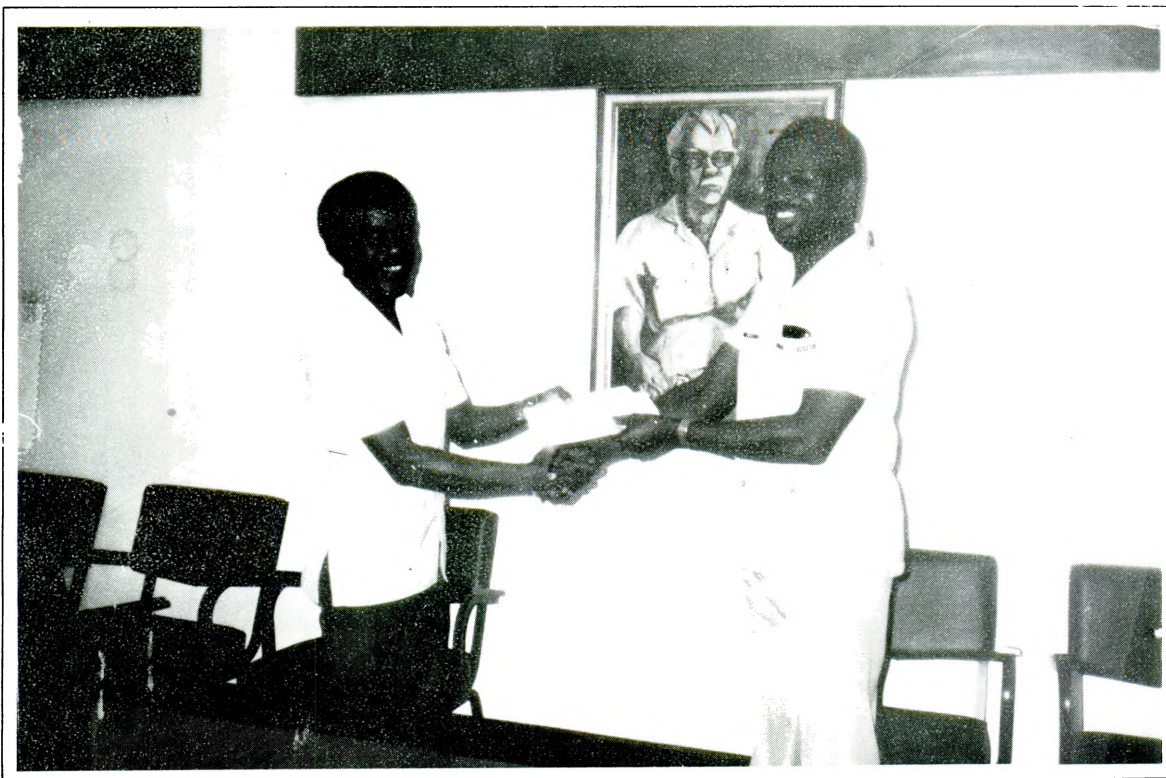
This document is currently in the draft form and will be published in 1988.



Dr. E. Patrick Allyne presents a certificate to Mr. Roy Job of Tobago at the completion of the National Training Course on the Diagnosis of Pest and Diseases of Food Crops In Trinidad and Tobago held at the University of the West Indies September 1st - 12th, 1987.



A National Farming Course on Produce Handling was held and a manual on Postharvest Handling of Tropical Produce was prepared by the Agro-Industrial Products Programme of CARIRI (Caribbean Industrial Research Institute) and the IICA Office. In the picture Dr. Desmond All, Deputy Director of CARIRI presents a copy of the document to the IICA Director in Trinidad and Tobago, Dr. Chelstom W.D. Brathwalte



The Director of IICA Office in Trinidad and Tobago presents a copy of IICA medium Term Plan to Dr. Frank Gumbs of the Faculty Of Agriculture of the University of the West Indies.



The Inter-American Institute for Cooperation on Agriculture (IICA) and the Faculty of Agriculture of the University of The West Indies signed a cooperation agreement during 1987. The picture shows Dr. Chelston W.D. Brathwaite and Dr. Frank Gumbs, Dean, Faculty of Agriculture, University of the West Indies signing the Agreement.

Support for CARDI critical for regional development of agriculture

By REUDON EVERSLEY
OTTAWA, Sept 13, Cana—
WITH CARIBBEAN Community countries looking more to agriculture to stimulate economic recovery, Governments are seeing a key role in their plans for the Inter-American Institute for Cooperation on Agriculture (IICA).

Caricom Agriculture Ministers, at a meeting here last week, identified strong IICA support for the Caribbean Agricultural Research and Development Institute (CARDI) as critical to the overall success of strategies for the region's agricultural development.

They also cited a need for more technical assistance from the Costa Rica-based agency, tailored to meet the specific needs of individual member countries.

"In view of the recent reorganisation of CARDI to make it more responsive to the region's agricultural needs, we see a role for IICA in helping to strengthen CARDI," Antigua and Barbuda's Agriculture Minister Hilroy Humphreys said.

"We see research as vital to the push we are seeking to give agriculture in the region, and we see an important role here for IICA. IICA can help in developing links between CARDI and research agencies in Latin America, because as we see it, it would be a waste of time for CARDI to be doing research, say, on carrots when the same research has already been carried out in Latin America."

Explore Possibilities

Last week's conference, sponsored by IICA and the Organisation of American States, brought together Agriculture Ministers from the Caribbean, Latin America, Canada and the United States, to explore possibilities for joint action to

promote agricultural development.

IICA, a technical agency of the Inter-American system, contends that because agriculture has shown "relative immunity" to the current economic crisis in Latin America and the Caribbean, it holds the best scope for regional economic revitalisation.

With this in mind, the OAS-affiliated organisation has embarked on a five-year programme, providing member states with opportunities to cooperate in upgrading and modernising their agriculture sectors.

Five key areas are emphasised: technology transfer; agrarian policy planning and analysis; rural development management; marketing and agro-industrial development; and animal health and plant protection.

Teach Spanish

The nine Caricom countries belonging to IICA have endorsed the programme as a whole, but have expressed particular interest in three areas: technology transfer, marketing and agro-industrial development, and animal health and plant protection.

"If IICA gets the necessary support which I believe it will get for the plan, then I believe regional agriculture will get a boost," said St Vincent and the Grenadines Agriculture Minister Marcus DeFreitas.

Linked to the transfer of technology aspect of the plan, IICA will launch a programme next year to teach Spanish to Agriculture Ministry technical officers within Caricom.

The objective is to open the way for Caribbean agriculturalists to visit their Spanish-speaking Latin American counterparts to share ideas on new develop-

ments within the industry.

"...We are hoping to do the same for the Latin Americans to teach them how to speak English," said IICA's director of external relations, Dr Jorge Werthein.

The programme, which is in response to requests from regional Governments, will be supported by the Government of Spain and the OAS.

Beneficiaries will be Barbados, St Lucia, Dominica, Grenada, Jamaica, TRINIDAD AND TOBAGO, Guyana, as well as St Vincent and the Grenadines and Antigua and Barbuda, who were both admitted as IICA's newest members last week.

St Kitts and Nevis announced during the conference that it plans to become an IICA member by the end of the year.

Dominica's Agriculture Minister Charles Maynard lauded IICA's work, but cited a need for more attention to be paid to the small Eastern Caribbean states which depend almost 100 per cent on agriculture.

For example, he would like to see more programmes related to pest and disease control since export agriculture is enhanced by healthy produce. He also mentioned business management training, especially for young farmers.

Maynard said IICA can also help identify opportunities for Eastern Caribbean countries to jointly market their produce overseas. He felt this approach would be most effective, citing the success the Windward Islands have had with bananas.

St Vincent and the Grenadines said it was eager to obtain IICA assistance to identify South and Central American exotic fruit varieties that could be grown locally.

TRINIDAD GUARDIAN, Monday, September 14, 1987 Page 3

Group ready to deal with plant pests, diseases

TWENTY-FIVE officers of the Ministry of Food Production, Marine Exploitation, Forestry and the Environment now form a cadre of professionals who will be able to deal effectively with plant pests and diseases affecting food crops, as a result of two weeks of training at the Crop Science Building, University of the West Indies (UWI), St Augustine.

Chesteron Brathwaite, Director of the Inter-American Institute for the Caribbean in Agriculture, expressed this confidence during comments on Friday evening when the programme, jointly sponsored by IICA, UWI and the Food Production Ministry, closed with the distribution of certificates of participation.

The course included theory, practice and field visits,

and exposure to a team of resource personnel from major agencies and institutions, according to Dr Brathwaite. For the first time, agricultural extension officers would be expected to provide correct and timely solutions to farmers' problems, he said.

Available Services

Patrick Alleyne, Permanent Secretary in the Ministry of Food Production, standing in for Minister Lincoln Myers, advised graduates there was the need for "doers not talkers in every aspect of agriculture," and that they would be expected not only to apply their expertise in providing inputs as resource personnel in

the field, but also to demonstrate that they can think in economic terms that are directly related to the provision of goods and services to the society.

While commending IICA's contributions to the local agricultural sector and the economy as a whole, Dr Alleyne said this country had not fully exploited the available services and facilities of many regional institutions and was "serving a warning" for the future.

One of the programme's main achievements was the production of a manual on the diagnosis and treatment of plant diseases among food crops.

Also present at the function was Dr Frank Gomes, Dean of the Faculty of Agriculture.

Myers gets look at IICA operations

FOOD Production Minister Lincoln Myers paid his first official visit to the Trinidad office of the Inter-American Institute for Cooperation on Agriculture at Orange Grove, Tacarigua, recently.

Chief Technical Officer, Mannie Dookeran, Dr Dave Duggal, and Director of the Engineering Services Division, Dr Chelston Brathwaite, conducted the Minister on a brief tour of the Institute's offices to outline some of the current projects being undertaken on behalf of the Government.

The Minister also met Dr P. Alcazar, a marketing consultant on contract with IICA.

IICA's marketing and agro-industry programme is designed to meet this country's effort to improve the efficiency of its marketing systems, and to gain more effective participation in the bilateral and multilateral international trade of agricultural products in the

region and internationally, the Minister was told.

The Ministry of Food Production regards the need for complex marketing systems and the greater necessity for food processing industries as urbanisation advances, as high priorities in its agricultural development plan now being implemented.

Disease Control

Dr Brathwaite told the Minister that his organisation had collaborated with his Ministry to provide training for more than 200 trainees in the areas of pesticide management, plant protection, pests and disease control, small agribusinesses, post-harvesting methods, procedures and techniques.

Minister Myers seemed particularly interested in several publications prepared by the regional institution.



FOOD Production Minister, Lincoln Myers, shows keen interest in one of IICA's publications which were on display for his visit. At right is Dr Chelston Brathwaite, Director of the Institute. Photo by JOHN KASSIE.

EXPRESS Friday, July 17, 1987 Page.11

Myers for agriculture conferences in Canada

MINISTER of Food Production, Marine Exploitation, Forestry and the Environment, Lincoln Myers and Permanent Secretary in the Ministry, Dr Patrick Alleyne, will represent Trinidad and Tobago at two meetings in Ottawa, Canada, later this year.

The first meeting, the Ninth Inter-American Conference of Ministers of Agriculture, will be held from August 30 to September 1 and will discuss the topic "Agricultural Modernisation, International Trade and Price Policy in the framework of regional integration and present international conditions."

At this conference, held every five years, the biggest problems affecting the agricultural sectors of member countries are studied.

The officials will also attend the Fourth Regular Meeting of the Inter-American Board of Agriculture from September 2 to 5.

★ Saturday, November 21, 1987 Farming sector to benefit from \$25m IADB loan

APPROXIMATELY US\$25 million is to be injected into the local agriculture sector on completion of current negotiations between the Ministry of Food Production, Marine Exploitation, Forestry and Environment and the Inter-American Development Bank (IADB).

Extensive discussions towards this end have already been held with a five-member mission from IADB which visited Trinidad last month to examine the operations of the Agricultural Development Bank (ADB).

ADB General Manager Roy Phillips said on Thursday that the bank is also negotiating with IADB for a loan and Phillips hinted that "there should be

some good news out of the IADB negotiations by the first quarter of 1988."

Declaration

IADB involvement stemmed from discussions during Food Production Minister Lincoln Myers' attendance of the Ninth Inter-American Ministers Meeting of the Inter-American Board of Agriculture, Inter-American Institute for Co-operation on Agriculture (IICA) in Ottawa, Canada recently.

A declaration signed at the meeting focuses on areas for development including the need for agricultural modernisation and the importance of international co-operation and regional integration.

25 slated to attend UWI course on pests

EDEN SHAND, Parliamentary Secretary in the Ministry of Food Production, Forestry and the Environment, will formally declare open a two-week course in the "Diagnosis of plant pests and diseases of foodcrops in Trinidad and Tobago", tomorrow morning at 9 a.m. at the Crop Science Building, UWI, St. Augustine.

Field Work

Joint sponsors of the programme are the Inter-American Institute for Co-operation in Agriculture, UWI Faculty of Agriculture and the Food Production Ministry, which will share funding and facilities for the 25 Agricultural Extension Officers who will attend.

Main objectives of the course are to introduce diagnostic skills in field work into the job responsibilities of participants and to develop a working reference manual in plant pests and diseases.

Programme sessions have been provided for a theoretical orientation on the main principles of the

subject, practical laboratory sessions, field visits, and a plant clinic.

Food crops to be examined are rice, bananas, cocoa, coffee, citrus, mango, papaw, legumes, cucurbits (cucumber, melon, pumpkin, squash) and root crops (dasheen, cassava, yam, ginger and sweet potato).

Organisation of this course meets a recommendation included in the Draft Agricultural Development Plan recently released for comment by the Minister of Food Production, Marine Exploitation, Forestry and the Environment.

Scientists form plant protection forum

TRINIDAD AND TOBAGO has a Plant Protection Society comprising plant pathologists, entomologists, nematologists, virologists and weed scientists, from public sector research organisations.

The society aims at providing a forum for discussion and exchange of ideas and information on latest development technologies and research in plant protection, so as to provide an improved service to farmers and the community.

Participating in the initial meetings to formalise the body in preparation for drafting a constitution, were professionals and agricultural scientists from the University of the West Indies, Central Experimental Station, Centeno, Caroni Ltd, Agricultural Development Bank and Caribbean Research and Development Institute at St Augustine.

Members adopted a system of rotating chairmen to facilitate the change of meetings at locations throughout the country, whenever current research papers are presented for discussions.

The society hopes to attract leading agricultural scientists from developed countries, for special lecture sessions later in the year.

The newly-organised society hopes to work closely with the Caribbean Society for Plant Protection, and the Inter-American Institute for Co-operation in Agriculture.

TRINIDAD AND TOBAGO

★ Wednesday, April 29, 1987

250 die from Gramaxone intake

By KRISHENDAYE RAMPERSAD

MORE THAN 250 people lost their lives as a result of Gramaxone ingestion between 1983 and 1986, Health Minister Emanuel Hosein told a pesticide management conference at the Kapok Hotel, Port-of-Spain, yesterday.

And Minister of Food Production, Marine Exploitation, Forestry and the Environment, Lincoln Myers, expressed concern over the uncontrolled use and disposal of pesticides in Trinidad and Tobago.

He said that "in many instances, pesticides are sold by small formulations and distributions to vegetable farmers especially, whose sophistication about chemicals and understanding of label instructions are limited."

He also expressed concern about pesticides which are banned or untested in North America and are exported to the South where regulations are weak or non-existent, because of what he called "the North-South export-import cycle."

Dr Hosein said he is looking forward to clear-cut guidelines for the public on the use, dangers and procedures associated with pesticides from participants in the workshop.

He reprimanded medical personnel who treat people for pesticide intake but do not attempt to investigate the root causes of such "accidents."

"As professionals we must recognise our responsibility to the farmers and the population at large," he said.

Director of the Inter-American Institute for

Co-operation in Agriculture (IICA), Chelston Braithwaite, told participants that resolution of the problems associated with pesticide misuse at a national level can only be obtained by the collective energies, will and wisdom of all involved.

Dr Braithwaite pointed out that the success of modern pesticides in controlling crop pests have led to their widespread use and the myth that reliance on them is the only way to effectively keep pest populations below damaging levels.

His institution, he said, believes public education, legislative and registration procedures and a national policy on pesticide use are vital in the battle against misuse.

Pest Control

"It is important to recognise that non chemical approaches to pest control be investigated so that they may be incorporated into crop production schemes for the control of pests," he said.

Thus, there will be a reduction in the quantity of chemical pesticides used and a reduction in the potential contamination of the environment, he said, adding:

"It is important in the final analysis that we seek to determine carefully the cause of our production problems so that solutions can be found which are compatible with the environment, good management and sound business principles."

Myers calls on planners to give more

THE ROUND-TABLE on New Strategic Directions for Agricultural Marketing in Trinidad and Tobago has proposed a new organisation to govern the agricultural marketing system in the country.

The new organisation will be capable of generating revenue.

Chairman of the board of directors of the Central Marketing Agency, Albert Vincent, told the closing session of the three-day round-table on Wednesday that although "this new organisation cannot be totally self-financing, it will have the capability to generate revenue."

The Housewife

Addressing the table, Food Production Minister, Lincoln Myers said much of Government's hope lies in the direction of the agriculture sector and called on planners, extension officers and farmers "to give a bit more of

themselves, of their efforts than what they are giving now."

"I want to see transformation of the sector in such a way that we have food at affordable prices and farmers have a reasonable income."

Mr Myers advised the planners that attention must be turned to the housewife who has great influence on taste patterns of the country.

He added: "If we are going to survive in the export market we must be able to ensure that the standard of the products we put on sale on the international market must be able to compete with the best in the world. One bad ship-

ment of any commodity can ruin the whole trade."

The Minister said the Government "cannot entertain any 'slackers' in the Ministry, in the CMA, in farming, particularly where the State has provided infrastructure and monies."

Mr Vincent revealed that the new agency will sell its services, such as in dissemination of information and for use of the wholesale market, so as to generate income.

He said they agreed that the new organisation will have to create and maintain an environment consistent with marketing.

Shand sees need for reduction in use of pesticides



Horatio Nelson (standing) of the Ministry of Food Production addresses yesterday's opening of the national course on plant pests and diseases at the Faculty of Agriculture, UWI. Seated left to right are: Dr Chelston Brathwaite, Director of the Inter-American Institute for Co-operation in Agriculture; acting Food Production Minister Eden Shand, and Winston Rudder, acting Permanent Secretary in that Ministry. Photo by JOHN KASSIE

GREATER biological control through effective strategies for an integrated pest management system was identified as one of the most critical issues requiring attention in the country's thrust to increase food production within the next five years.

Eden Shand, acting Minister of Food Production, Marine Exploitation, Forestry and the Environment, yesterday identified that need to participants of a national training course on the "Diagnosis of plant pests and diseases of food crops in Trinidad and Tobago," at the Faculty of Agriculture, University of the West Indies (UWI), St Augustine.

Referring to one of the key objectives of the Draft Agricultural Development Plan, in respect of the availability of agricultural products for export, Shand warned that every effort must be made to reduce the suspected high levels of pesticides now used in agriculture.

Several countries in Latin America, he added, have suffered from excessively high pe-

residues, which in the long run have affected exports with losses running into millions of dollars.

Controls would ultimately ensure closer monitoring of the use of the right chemicals in the right quantities, and respect and concern for the health and safety of consumers who use "contaminated" produce.

New Varieties Of Crops

Greater biological control, it was suggested, would be effected through the use of natural parasites, variations in planting time, and the introduction of new varieties of crops for better and larger yields, supported by improved "cultural" practices.

Ministry officials confirmed there is no available data on the extent of losses suffered through pests and plant diseases in the Trinidad and Tobago, but sources said investigations could show a 50

percent loss.

Shand acknowledged that the present small cadre of professionally trained staff was unable to cope with the multitude of problems encountered among farmers in the field. He hoped the acquisition of these skills by extension officers would improve the situation, with technical support available from the Diagnostic Laboratory at the Food Crop Division at Centeno.

Among the resource personnel making presentations at the course are Dr Chelston Brathwaite, Director of the Inter-American Institute for Co-operation in Agriculture; Cynthia Persad and George Bala, plant pathologists of Centeno; Drs Gene Pollard, Richard Brathwaite, Fritz Elango and Selwyn Griffith of UWI, and representatives of the Agricultural Development Bank.

Food Production Minister Lincoln Myers, who is out of the country, is expected to be present at the evaluation and closing ceremony of the course on September 11.

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IICA'S CON
AGRICULTURE
AND TOE

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

IICA Office in Trinidad and Tobago

Pannell Kerr Foster Building, Orange Grove Road, Tacarigua
Telephone: 645-1058