

2006 Annual Report



IICA's Contribution to Agriculture and the Development of the Rural Communities in **Trinidad and Tobago**

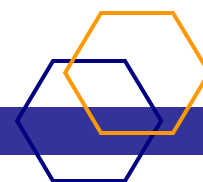


IICA



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Message from the Representative

The Inter-American Institute for Cooperation on Agriculture (IICA) Office in Trinidad and Tobago hereby presents the report of its contributions to the development of agriculture and rural life in Trinidad & Tobago in 2006. The report presents a clear picture of the work of the Office, the collaborative relationships with other key national, regional and international agencies and more significantly, the recorded and expected results of the actions of the Office and the impacts of these on our various clients and beneficiaries.



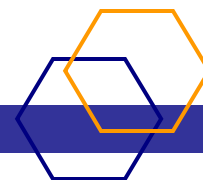
In 2006, the Office worked more closely with the Ministry of Agriculture, Lands and Marine Resources of Trinidad & Tobago, providing resource material and information that should be useful in guiding the policy and planning activities of the Ministry. 2006 was also a busy year for the Office, as it planned, organized and hosted a number of regional workshops, these usually in collaboration with other regional and international organizations.

Our staff, though small, continued to work assiduously towards achieving the goals and objectives set in our annual work programme, while at the same time responding accordingly to requests to participate in additional activities that impacted on the growth of the sector and its clients.

We trust that this report will update our stakeholders and clients on the work in which the Institute is engaged in Trinidad & Tobago and hope that it will also serve as valuable information for others seeking to have an idea of some of the work that is being done in the sector and what needs to be achieved in order to carry the sector forward.

IICA continues to look for creative ways in which to enhance our contributions to the agricultural sector in Trinidad & Tobago and looks forward to providing a more focused programme of technical cooperation in 2007.

Aaron H. Parke
IICA Representative in Trinidad & Tobago and
Coordinator, Caribbean Regional Agenda



2.0 Executive Summary

IICA's Contribution to the Repositioning of Agriculture and Rural Life

The Office presented the Ministry of Agriculture Lands and Marine Resources (MALMR), a package of research and information completed by the Institute that would seek to advance the development of the sector. These included: *Status and Outlook of Agriculture and Rural Life in Trinidad & Tobago* and the *True Contribution of Agriculture to the Economy of Trinidad & Tobago*. In addition, the Office presented to the Ministry, the report: *A Review of the Agricultural Incentive Programme for Agriculture, Forestry and Fisheries in Trinidad and Tobago* which was initiated in 2005. In accordance with institutional mandates, the Office reviewed the National Technical Agenda and synchronized it with Trinidad and Tobago's Vision 2020 Plan for Agricultural Development, thereby consolidating the work of the office in accordance with the goals of the Government of Trinidad & Tobago. A report to determine the impact of agricultural and macroeconomic policies was also prepared.

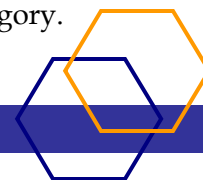
The Office provided logistical support and office space for the regional project to establish a Monitoring and Evaluation Agricultural Information System which seeks to consolidate and strengthen existing information processes and systems in Caribbean countries to satisfy the need for monitoring and evaluating progress in the Agro Plan 2003-2015 and the Jagdeo Initiative. A major workshop was held in collaboration with the Office of UN/ECLAC in Trinidad and Tobago and with funding from the CTA, in April 2006, in which

participants from across the region were sensitized to the project.

Promoting Trade and the Competitiveness of Agribusiness

IICA partnered with the Caribbean Industrial Research Institute (CARIRI) to organize and host the regional workshop in Tobago, *Optimizing the Benefits of Research and Development for the enhancement of Agribusiness in the Caribbean*, in order to establish a way forward for the coordination of research and development within the agribusiness sector. The workshop recommended the establishment of an effective Networking/Coordinating Mechanism for Research & Development that supports agribusiness development and involves all relevant stakeholders along the entire agri-food chain. Additionally, the workshop considered the modalities for priority setting in agricultural research and proposed elements of a regional agricultural research and development policy.

The Office continued to support the administrative operations of the CHBA Secretariat, specifically under projects funded by the European Union. These included the preparation of investor-friendly technology briefs and herbal business profiles for 4 major product categories; and collaborated with the CHBA to host two seminars entitled "Business Opportunities for the Caribbean Herbal Industry" in Guyana and Trinidad. The seminars provided over 60 participants with industry market research, information on commercial potential for Caribbean herbal products; technology to support commercial enterprises; Cost of Production and Critical Success Factors for each product category.



In its support to the Agribusiness development within the Ministry of Agriculture, Lands and Marine Resources, the IICA Office delivered a series of project management workshops, training a total of 50 agricultural and extension officers in 4 counties in North Trinidad and 10 planning officers in the Agricultural Planning Division. IICA's focus on agribusiness through training and internship, continued and the Office strengthened its relationship with the Faculty of Science and Agriculture of the University of the West Indies (UWI). Two students were hosted under the Agribusiness Internship Programme, with the focus on developing skills in the preparation of agribusiness investment profiles. The Office also participated in the Faculty's mock interview sessions and provided an annual award for the prize giving function of the Faculty.

The Office collaborated with CABA, CARDI, NAMDEVCO and the Ministry of Trade and Industry/Food and Beverage Industry Development Committee (MTI)/FBIDC, in organizing, promoting and hosting the First Caribbean Agri-Food Trade Convention (CAFTC), which was held in South Trinidad, in May 2006. The Office mounted a display on the work of IICA, which was accompanied by product displays from the CHBA and the NRWP. Support was also provided to NAMDEVCO in conducting a survey to determine the demand for fruits and vegetables in supermarkets.

The Office continued to promote agro-tourism linkages, providing administrative and logistical support through the first phase of the IICA. OAS project Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector in the Caribbean, which ended in November 2006. In an effort to widen IICA's contribution in this area of growing relevance, the Office revisited a

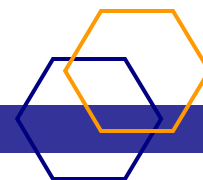
project of the Tobago House of Assembly – for which funding was approved in 2006 – and commenced work on a feasibility study to develop an agro-tourism attraction at Hope Farm in Tobago.

Strengthening Agricultural Health and Food Safety Systems

The Agricultural Health and Food Safety (AHFS) programme continued to provide training in topical areas of interest and importance to the development of AHFS in the region. The Office collaborated with several local, regional and international agencies to organize and host two major regional workshops: 1. Avian Influenza - which brought together 70 participants, including experts in the field and 2. Mites of Economic Importance to the Caribbean - in which 14 technicians were trained. Several other workshops held in collaboration with the Tobago House of Assembly (THA) and Florida Association of Voluntary Agencies for Caribbean Action (FAVACA) including Good Agricultural Practices (GAPS) and the Identification of Diseases in Bees. Under this programme, the Office also completed the Dairy Herd Health Manual which was distributed to schools, Ministry personnel and farmers.

The Office continued to support the country's participation in the Initiative of the Americas for Strengthening Sanitary Phytosanitary (SPS) Measures of the WTO, through the provision of relevant documents and reports and in supporting the attendance of the national representatives to the WTO/SPS Committee Meetings in Geneva. Four meetings were facilitated in 2006.

Promoting the Sustainable



Management of Natural Resources and the Environment

The Office continued its contribution to the development of the organic agriculture sector with the preparation of plans for development of 3 model organic farms, located on Government demonstration stations. This programme benefited from cross horizontal cooperation provided courtesy of the IICA Office in the Dominican Republic. An Agronomist from the MALMR was also sponsored by the Office to participate in a train the Trainers workshop in Organic Farming in the Dominican Republic.

Strengthening Rural Communities based on the Territorial Approach

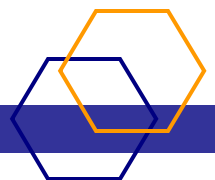
Support to the women's groups in rural communities continued through technical and administrative support to the Network of Rural Women Producers, in hosting regular and Annual General Meetings in Trinidad as well as in Tobago and in the reorganization of the NRWP micro-credit scheme, for which a system for the recollection of outstanding funds was initiated. The Office also hosted a special meeting of selected members of the Executive Committee of the CANROP in May 2006 and participated in the CANROP AGM in Guyana in July which included training for the use of the CANROP website.

Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life

Under the guidance of the completed Strategy for Biotechnology and Biosafety in the Caribbean, the Office led the preparation of project proposals to initiate the implementation of the strategy. Two projects focusing on capacity building and support to the establishment of the

Consultative Group for Agro-biotechnology in the Caribbean (CGABC) Secretariat were prepared for submission to donor agencies and another on commercialization of biotechnology products initiated. Furthering its work in this area, the Office spearheaded the organization of a regional Biotechnology workshop, hosted at the 6th Caribbean Week of Agriculture in Nassau, The Bahamas, which sought to maintain the momentum in this rapidly growing area of importance in the Caribbean region. The Office also collaborated with the University of the West Indies, St. Augustine in hosting a workshop on the commercialization of biotechnology improved anthurium varieties for revitalizing the cut flower industry in the Caribbean.

A study that surveyed machine and technology use in the agricultural sector of Trinidad and Tobago, was prepared to assess the level of capitalization and technology transfer in the farming sector in Trinidad & Tobago.



3.0 The State of Agriculture and Rural Life in Trinidad & Tobago in 2006

3.1 Gross Domestic Product

In 2005 the agriculture sector contributed TT\$572.3 million dollars or 0.74% of Gross Domestic Product (GDP). The value of the sector's share to GDP was 0.02 % more than the value of its share in 2004. However, the gap between the agriculture GDP and non-agriculture GDP continues to widen: In 2005, the petroleum, manufacturing and services sectors contributed 38.2%; 7.2% and 53.7% respectively of the GDP.



3.2 Growth Rate of Sectors

During the period 2003 to 2005, average annual growth rate of the agriculture sector was -6.40%. The non-agricultural sectors, on the other hand, experienced positive annual growth rates: petroleum (+5.47%); manufacturing (+ 6.61%) and services (+ 5.52%).

3.3 Employment

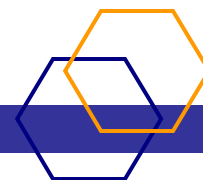
In 2005 there were 574,000 persons employed in Trinidad and Tobago. The number of persons working in the agriculture sector in that year was 25,000 or 4.4% of the total labour force. The number of persons employed in the agricultural sector, in fact has been decreasing over the years. By comparison, a larger number of persons are employed in the non-agricultural sector, including manufacturing (9.9%); construction (17.7%); other services (57%) and community, social and personal services (31.1%).

The downward trend in the number of persons employed in the agricultural sector has been consistent over the past few years. The boom in other sectors of the economy, where wages are higher, is currently attracting workers away from the agriculture sector. Concomitant with falling agricultural employment has been decreases in the productivity (or GDP per worker) of agricultural labour.

The Agricultural Sector Report of 2004 indicated that approximately 83% of the persons involved in agriculture were male and 17% female.

3.4 Land and Land Use and Irrigation

The Agricultural Census conducted in 2004 indicated that there were 18,968 agricultural holdings in Trinidad and Tobago. Of the 18,968 holdings, 18022 or 95.0% of them were in



Trinidad and 946 or 5% were in Tobago. The total number of holdings recorded in 2004 was 37.4% less than the number of holdings recorded in the last agricultural Census of 1982.

The majority of holdings (96%) were less than 10 hectares: Twenty two percent of the holdings were less than 0.5 hectares, 65.1% were between 0.5 and 4.9 hectares and 8.9% were between 5 and 9.9 hectares. Only 4% of the agricultural holdings in Trinidad were greater than 10 hectares. In Tobago, 98.2 % of the holdings were less than 10 hectares. In both Trinidad and Tobago combined, over 95 % of all holdings were less than 10 hectares.

The Agricultural Census also indicated that 72.4% of all farmers in Trinidad were engaged in crop production and 16.1% of them were involved in mixed farming activities. Ten percent of farmers were involved in livestock activities and the remaining 0.8% was involved in other activities such as apiculture, aquaculture and horticulture. In Tobago, 38.9% of farmers were engaged in crop activity. A further 30.6% had mixed farms and 28.5% of them had livestock.



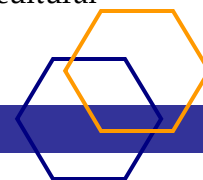
In 2005, an additional 161 land leases, amounting to 231 hectares, were granted to farmers for agricultural production. In addition, 7000 former workers of Caroni 1975 Ltd were given leases for crop and livestock activity on 2 acre plots of land. The State is currently developing the necessary infrastructure to facilitate production on those lands. The State has proposed establishing 15 large farms, minimum 100 acres, in joint venture partnerships with the private sector for production of vegetables, food crop and livestock. The farms are to be established on lands formerly owned by the state-owned Caroni 1975 Ltd.

An additional 74 kilometres of access roads were constructed by the state in farming communities in 2005. A further 150 hectares of land were brought under irrigation in the same year.

3.5 Agricultural Production

Production of many vegetables and food crops declined in 2005 when compared to their average production during the 2003 to 2004 period. Decreases in production were recorded for tomatoes, cabbage, pumpkin, sweet potatoes, rice paddy, cocoa beans, coffee beans, oranges and grapefruit. The largest decreases in output were recorded for cabbages, pumpkins, rice, oranges and grapefruit. The significant decreases in the production of rice and citrus can be explained by the closure of Caroni 1975, a major producer of those commodities. Heavy flooding in many parts of the agricultural producing areas had also seriously affected the production of vegetables and food crops in many vegetable and food crop producing areas over the last two years.

The rice industry is also affected by uncertainty that looms over continued operations of the Rice Mill, operated by the National Flour Mill, a State controlled Enterprise. The entire agricultural



sector is further beleaguered by an acute shortage of labour. Most persons are attracted to work in other higher paying sectors of the economy, particularly in the booming construction and services sectors.

In the livestock industry, only the pork and broiler industries have shown any improvement in output in 2005 when compared to their respective levels of production in 2004. Production of broilers and pork was respectively 17.62% and 1.55% more in 2005 than in the previous year. Decreases in production, on the other hand, were recorded for beef, table eggs, milk and sheep and goat meat. Lack of adequate levels of investment and satisfactory policies and programmes for development of those sectors can largely be ascribed for the declining state of those sectors. Praedial larceny of sheep and goats also pose a continued threat to the viability and attractiveness of that enterprise. The recent announcement by the government to remove the 40% surcharge on poultry parts and to reduce the Common External Tariff on a range of food items may also negatively impact on the production of some locally produced commodities in the near future.

3.6 *Prices of Agricultural Commodities*



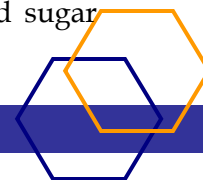
Retail price index of food moved from 122.3 in 2004 to 150.4 in 2005, an increase of 22.97%. These increases in the Food Index are largely a result of increases in the price of vegetables. The average whole sale price of tomatoes and cabbages increased by 26.6 % and 15.77 % respectively in 2005 when compared to their respective average wholesale prices for the period 2003 to 2004. Price increases of other commodities were as follows: pumpkin (9.40%); cauliflower (43.06%); cassava (10.08%); dasheen (24.72%) and sweet potato (31.39%).

The sharp increase in the price of vegetables and food crops has been identified as a major contributor of the inflation that is now affecting the economy. The government has since responded by proposing to establish large vegetable farms, deigned to increase the supply of food in an effort to cap spiralling food prices.

3.7 *Agricultural Trade*

The value of food exports (TT\$1.7 billion) in 2005 were 102.18% more than the average value of food exported during the period 2003 to 2004. The value of food imported (TT\$ 2.96 billion) in 2005 was 46.66% more than the average value of food imported for the period 2003 to 2004. During 2000 to 2004, exports of food, expressed as a percentage of total food imports plus exports had shown a declining trend. This declining trend suggested that the country was becoming a larger net importer of food. The trend was reversed in 2005 as a result of improvements in food exports in that year.

The categories of foods that made up the bulk of food exports in 2005 were beverages (38.12%); cereal and cereal preparations (18.12%); fruits and vegetables (13.06%) and sugar and sugar



preparations. (11.41%).The categories of food imports that made up the bulk of food imports were fruits and vegetables (19.55%); cereals and cereal preparations (16.56%) and dairy products and eggs (12.89%).

3.8 *Agricultural Health and Food Safety*

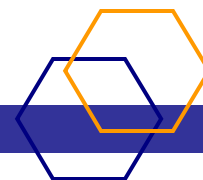
The most significant development in Agricultural Health and Food Safety concerns the heightened awareness of Avian Influenza (AI). In this regard, the Government has recently taken the important initiatives of developing an Avian Influenza Contingency Plan as well as in appointing the National Avian Influenza Management Committee. IICA and the FAO have been listed as the Institutions to provide advisory support. Activities to be carried out in 2007 include a desktop simulation exercise and the development of a public awareness campaign. Special emphasis has been given to enhance food safety in the country with major initiatives launched by the Food and Beverage Committee and CARIRI, where a Food Safety Centre has been established.

The Animal Health and Production Division and Crop Research Divisions of the Ministry of Agriculture Land and Marine Resources are among the principal custodians of agricultural health and food safety in the country. The Ministry over the past few months has been taking steps to improve the institutional and legislative arrangements pertaining to the administration of health and food safety. These initiatives include, inter alia, continued work by the National Health and Food Safety Committee for the establishment of a National Health and Food Safety Agency; Revision of the Animal Diseases and Importation Act. The Division of Animal Production and Health also has other programmes in place for safeguarding livestock and their products.

The Crop Research Division's major focus on health and safety hinges on the institutionalization and enforcement of quarantine measures and the conduct of risk analyses to determine the incidence of plant pest and disease. Specifically, the Division is currently pursuing several action plans to contain the spread of pests and diseases. These action plans include programmes to:

- reduce the spread of the citrus Black Fly in citrus
- contain the spread of the Black Sigatoka Disease in banana and plantains. The disease is now widespread in Trinidad, (except for the northern Range and Mayaro) but is not present in Tobago.
- control the coconut moth
- contain the Red Palm Mite which attacks coconuts and bananas.
- contain the Red Fire Ant: a pest of public health importance
- detect exotic fruit flies such as the Mediterranean Fruit Fly
- prevent the introduction of the Giant African Snail and Paw Paw Mealy Bug

The Ministry is also actively pursuing several other initiatives either to promote food safety or to comply with international requirements. The Ministry for example continues to promote Integrated Pest Management (IPM) as a means of reducing pesticide use and recently embarked on biorational spraying programmes, based on spraying at particular pest threshold levels. Legislation is also being drafted to ensure that citrus plants sold are of good quality and free of specific diseases.



The Legislation is being drafted along the lines of the FAO Plant Protection Legislation. Procedures were also put in place to ensure that pallets used in the export trade were ISPM 15 compliant. Food safety is also promoted by the MALMR, in conjunction with the Ministry of Health, by conducting education programmes that target persons who handle or cut up vegetables in supermarkets and by certifying farms that wish to export produce to Barbados or supply certain local supermarkets

3.9 Prognosis for the Sector

The agriculture sector will continue to face severe challenges to meet the growing demand for food within the context of severe labour shortages; curtailment of investments in the sector; increasing incidence of praedial larceny and further liberalization of the market. The possibility exists however that recent initiatives such as Government's joint venture partnership with the private sector to produce food on large commercial farms will boost food supply significantly. Food produced by the 7000 Former Caroni 1975 workers on their 2 acre plots is also likely to contribute to the food security effort in the next 2-3 years.

There is also the possibility that in the medium term, there will be some resurgence of the cocoa industry, in response to recent increases in the guaranteed price of cocoa beans (from \$14 per kg to \$18 per kg) and loan facilities offered to cocoa farmers, with the Cocoa and Coffee Board acting as guarantors for the loan.

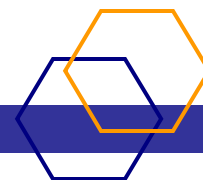
4.0 Results of the implementation of the National Technical Cooperation Agenda in Trinidad & Tobago in 2006

IICA's Contribution to the Repositioning of Agriculture and Rural Life

In 2006, the IICA Office in Trinidad & Tobago strengthened its relationship with the Ministry of Agriculture, Lands and Marine Resources (MALMR) as well as with other local, regional and international agencies, as it continued to make its collaborative contribution to the repositioning of agriculture and rural life in Trinidad & Tobago. Guided by the Jagdeo Initiative, the Office continued its efforts to assist in reducing the key binding constraints identified therein. With regard to addressing these constraints¹, the work of the office through direct intervention, support or collaborative efforts in 2006 contributed towards alleviating the following and are further addressed in this report:

1. Limited financing and inadequate new investments
2. Outdated/inefficient Agricultural Health & Food Safety Systems (AHFS)
3. Inadequate Research and Development
4. Fragmented and disorganized private sector
5. Weak and non-integrated information/intelligence systems
6. Weak linkages/participation in markets

¹ See Appendix I.



On the basis that good policy direction must be fed by information and dialogue, the Office engaged in research and studies that would seek to provide useful knowledge and information to assist the Ministry to advance the development of the sector. Two publications: *Status and Outlook of Agriculture and Rural Life in Trinidad & Tobago* and the *True Contribution of Agriculture to the Economy of Trinidad & Tobago*, were completed and presented to the MALMR, offering a comprehensive overview of the agriculture sector in Trinidad & Tobago and its potential for growth. At the request of the Ministry, the Office also completed the document *A Review of the Agricultural Incentive Programme for Agriculture, Forestry and Fisheries in Trinidad and Tobago* which was initiated in 2005. The document is currently under review by the Ministry and other stakeholders. A revised National Technical Agenda for the Office was prepared and synchronized with Trinidad and Tobago's Vision 2020 Plan for Agricultural Development. The new agenda outlines the scope of work of the Office over the next 4 year period and seeks to consolidate the work of the office as it moves toward developing the New Agriculture, while meeting the objectives for sustainable agricultural development in Trinidad & Tobago.

The Office was represented on several national agricultural development committees, in the areas of Biosafety, National Agricultural Health and Food Safety, Caroni Agricultural Development, National Agricultural Awards.

While exercising its commitments to the repositioning of agriculture and rural life in Trinidad & Tobago, the IICA Office in Trinidad & Tobago, has the privilege of managing several regional programmes and events. In 2006, many of the activities of the office were regional in scope and this assisted in expanding the outlook and contribution of the office and its staff.

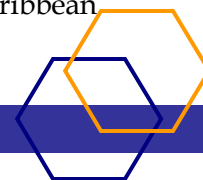
The Office provided logistical support and office space for the regional CTA-funded project to establish a Monitoring and Evaluation Agricultural Information System (MEAgroInfoSys) which seeks to consolidate and strengthen existing information processes and systems in Caribbean countries to satisfy the need for monitoring and evaluating progress in the Agro Plan 2003-2015 and the Jagdeo Initiative. IICA, with funding from the CTA and in collaboration with the UN/ECLAC, hosted three regional meetings under this project in 2006:



Participants during a session at the Regional Consultation for the MEAgroInfoSys in April 2006

- Pre-Implementation Planning Meeting: February 2006
- Regional Consultation: April 2006
- Training Workshop: July 2006

Continued administrative and logistical support was also provided by the Office to regional chapters of the Alliance for the Sustainable Development of Agriculture and the Rural Milieu and their national chapters, *viz.* the Caribbean Agribusiness Association (CABA), the Caribbean



Agricultural Forum for Youth (CAFY), the Caribbean Council of Higher Education in Agriculture (CACHE), the Caribbean Network of Rural Women Producers (CANROP) and the Caribbean Regional Agricultural Policy Network (CaRAPN). Additionally, the Office continued to produce issues of IICA's regional publications inclusive of: *AgriView*, *In a Nutshell*, *Tropical Fruits Newsletter* and played a major role in managing the websites:



www.iica.int/trinidadandtobago



www.carapn.net



www.caribbeanherbs.net

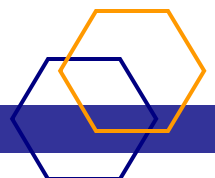


www.canrop.org

These websites provide a wealth of information and views on a variety of issues and initiatives in agriculture and rural life in the Caribbean, as well as information about the Office and its programmes and by extension the Institute as a whole.

Promoting Trade and the Competitiveness of Agribusiness

Against a background of rising food prices in Trinidad & Tobago, which increased rapidly in 2006, IICA continued to address issues that would seek to place emphasis on developments within the agribusiness sector in Trinidad & Tobago, with the belief that an enhanced agribusiness sector can significantly reduce rising food prices and contribute to food security.



Research & Development...

Efforts to promote trade and agribusiness competitiveness through the application of research and development in the Caribbean, was the major focus of a workshop organized by IICA and the Caribbean Industrial Research Institute (CARIRI). The regional workshop *Optimizing the Benefits of Research and Development for the enhancement of Agribusiness in the Caribbean* was held in Tobago on May 3-4, 2006. The workshop was organized to establish a way forward for the coordination of research and development within the agribusiness sector. It also considered the modalities for priority setting in agricultural research and proposed elements of a regional agricultural research and development policy.



Representatives from regional organizations in a working group during the R&D workshop in Tobago in May 2006.

Forty representatives from the private and public sectors and academia from 13 countries in the Caribbean and the United States participated in the workshop, which recommended the establishment of an effective Networking/Coordinating Mechanism for R&D that supports agribusiness development and involves all relevant stakeholders along the entire agri-food chain.

Developing the herbal sub-sector...



Herbal Business Profile
Oleoresins and Essential Oils



HERBAL TEA

Introduction

One of the major activities open for the expansion of the Caribbean herbal business is 'Herbal Tea'.

The consumption of herbal teas is expanding globally and for research, herbal and food tea consumption was reported at 20% based on the last ten years according to a herbal consumer report in the US market with sales estimates of US\$4.7 billion (2002-2004). Consumer trends which are expanding the market are the presence of diet and detox teas with 'natural' ingredients and the interest in 'high quality' teas. The market is also being driven by health claims towards more specific 'body benefits' in addition to relaxation and 'stress relief' which is becoming an important part of the overall tea product presentation (1). In the U.S. market, blends are emerging with combinations of various herbs and spices. Some blends are marketed as Ready-to-Drink (RTD) teas, or iced packaging providing health benefits.

Herbal teas actually contain no real tea (Camellia sinensis) leaves. These are usually made up of blends, spices, herbs, berries and other non-caffeinated plants. These may also be referred to as blends and sometimes classified as 'herbal tea' or 'herbal blend'. For the purposes of this report, the term 'herb tea' will refer to a wider variety of pure botanical extracts containing caffeine.

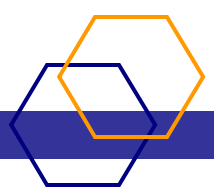
In the Caribbean there is already a rich tradition of herbal tea use and this is presented in the Herbal Tea magazine which was published by the Caribbean Herbal Business Association (CHBA). The magazine 'Herbal Business Profile' contains information on the production, processing, packaging, distribution, marketing and retailing of herbal products and the role of various stakeholders in the industry.

Herbal teas can be packaged in loose form or in tea bags. The form of packaging will depend on the type of consumer group that is being targeted. However, Ready-to-Drink (RTD), commercial and packaging are trends which are driving the market forward.

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The Office continued its support to the development of the herbal business sub-sector through the provision of financial and administrative support to the Secretariat of the Caribbean Herbal Business Association (CHBA) which is hosted in the Trinidad and Tobago Office. Specific support was provided for the completion of the Pro-Invest funded project on market and technology research on herbals of economic importance. The research identified market opportunities and appropriate technologies for developing a range of herbal products. Also completed were investment opportunity profiles for dried herbs and spices; essential oils; herbal beverages and cosmeceutical products. The Office collaborated with the CHBA to host two seminars entitled "Business Opportunities for the Caribbean Herbal Industry" in Guyana and Trinidad in July and November 2006 respectively. The seminars provided over 60 participants with information on industry market research and commercial potential for Caribbean herbal products; technology to support the commercial enterprises, Cost of Production as well as Critical Success Factors for each product category. The Office also provided some editorial and design input into the development of *Caribbean Herbal Business*, an industry development magazine of the CHBA, to be published in early 2007. The magazine will promote the current and potential business and investment opportunities in the Caribbean herbal industry.

technology brief



Capacity building...

Also in its support to Agribusiness development, the IICA Office designed a comprehensive programme in project management skills development and delivered training in this area to 60 extension and planning officers of the MALMR.

The training was carried out over a 7 week period, across five regions in Trinidad & Tobago. As a result of the training, farmers and officers of the MALMR will have increased their ability to develop projects and prepare documents in support of loan applications for financial and other institutions.



Officers of the Ministry of Agriculture receiving training in Project Management, from IICA staff.

...Investment profiles

2006 marked the 4th year of IICA's arrangement with the Faculty of Science and Agriculture of the University of the West Indies (UWI), to host students in its summer Agribusiness Internship Programme. Two final year students of the Faculty spent an eight week period with IICA, developing skills in the preparation of agribusiness investment profiles. Profiles on the dairy industry and bodi (*Vigna unguiculata*) and were completed under this assignment.

The development of investment profiles/proposals to increase the level of investments in rural areas for development of enterprises was also on the agenda in 2006.

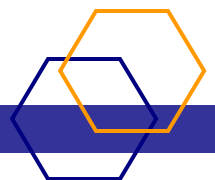
The Office was instrumental in preparing a project document on behalf of the Rio Claro Railway Road Action Committee which was successful in securing grant funds from the Community Development Fund for production of broilers, in support of their application to secure grant funds from the Community Development Fund (CDF).



Members of the Rio Claro Railway Road Action Committee meet with IICA staff at the community centre.

...Developing the Agri-Food Trade

The first Caribbean Agri-Food Trade Convention (CAFTC) was held in South Trinidad in May 2006. The three-day event was initiated by the National Agricultural Marketing Development Company (NAMDEVCO) and supported by the Caribbean Agribusiness Association (CABA), the Caribbean Agricultural Research and Development Institute (CARDI), the Ministry of Trade and Industry/Food and Beverage Industry Development Committee (MTI)/FBIDC and IICA. The event was successful in bringing together over 40 producers, agroprocessors and buyers from across the region. IICA also participated in the event with a booth highlighting the work of



the Institute as well as displays by the Office: the Caribbean Herbal Business Association (CHBA) and the Network of Rural Women Producers (NRWP).

Support was also provided to National Agricultural Marketing Development Company (NAMDEVCO), to conduct a study to measure the demand for fruits, vegetables in major supermarkets to further enable farmers to be in a better position to plan and organize production to supply that market. A total of 145 supermarkets participated in the survey.

Agro-tourism linkages...

The Office continued to promote agro-tourism linkages, providing administrative and logistical support through the first phase of the IICA. OAS project, *Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector in the Caribbean*, which ended in November 2006. Under this project, a study identifying an inventory of existing and potential agri-tourism products and services in Trinidad and Tobago was completed. Additionally, a national survey was conducted to determine the quantity and value of agricultural products traded within the tourism sector. Both studies form the information base of the wider regional project and will be useful in guiding national efforts at developing agro-tourism related activities.

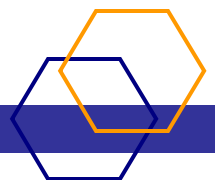
In an effort to widen IICA's contribution in this area of growing relevance, the Office revisited a project to assist the Tobago House of Assembly (THA) in developing a framework for development of an Agro-Tourism facility at Hope Farm in Tobago. The area identified for development into a tourism attraction is largely home to a bayleaf plantation. A team from the IICA Office invited consultants to assist in review and preparation of the project, which will be completed in early 2007 for presentation to the THA.



IICA staff and consultants on a site visit to the Hope Farm bay leaf plantation in Tobago.

...Policy and planning

The Office conducted an assessment of agricultural policies and their impact on agricultural development in Trinidad & Tobago, to identify the mix of policy instruments, both agricultural and macroeconomic, used over the past 25 years that had a positive impact on the agricultural sector. It is expected that the identification of those policy instruments will facilitate and inform the selection of future sectoral and macro policies for the agricultural sector.



Strengthening Agricultural Health and Food Safety Systems

Capacity Building...

The Office played a pivotal role in the organization and hosting of several local and regional training events in the area of agricultural health and food safety. Key collaboration with local, regional and international agencies yielded the successful staging of two major regional workshops:

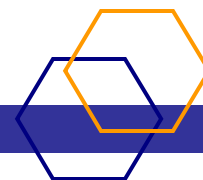
1. *Joint Meeting: Animal Disease Surveillance and Preparedness - Focus on Avian Influenza (AI) in the Caribbean.* Was hosted in collaboration with the CARICOM, CPA, CARIBVET, CIRAD, FAO, IICA, LLPB, PAHO and USDA from April 3-7, 2006 at the Ambassador Hotel in Port of Spain, Trinidad. Seventy participants (including experts on the subject), from government agencies, private sector organizations and academia from within the region and internationally, participated in the intense five-day meeting, which resulted in the drafting of recommendations for the region to develop a regional strategy for with Avian Influenza.
2. *Workshop on Mites of Economic Importance to the Caribbean Region,* held on September 26-27 at the MALMR Central Experiment Station in Centeno, Trinidad. The workshop was a joint effort of the MALMR, CARDI and IICA, with financing from the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS). 14 technicians from Barbados, Dominica, Saint Lucia and Trinidad & Tobago were trained.

Four workshops on Good Manufacturing Practices (GMP) and Good Agricultural Practices (GAPS) were held in both Trinidad and Tobago, in collaboration the Tobago House of Assembly (THA) and the Florida Association of Voluntary Agencies for Caribbean Action (FAVACA), targeting 200+ farmers and technical personnel. Additionally the Office collaborated with the THA to host a one-week workshop on Pests and Diseases of Economic Importance to Honey Bees in Tobago and the Rest of the Caribbean, in November 2006. Thirty participants benefited from a series of practical sessions, which included field visits to a number of stations on the island of Tobago.

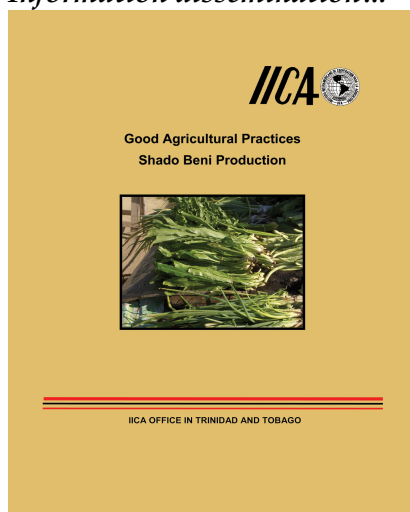


Participants at the workshop on Diseases of Economic Importance to Honey Bees in Tobago and the Rest of the Caribbean.

The Office continued to support the country's participation in the Initiative of the Americas for Strengthening Sanitary Phytosanitary (SPS) Measures of the WTO, through the provision of relevant documents and reports and in supporting the attendance of the national representatives to four meetings of the WTO/SPS Committee Meetings in Geneva in 2006.



Information dissemination...



GAPS in Shado Beni

Through its AHFS programme, the IICA Office in Trinidad & Tobago added to the growing pool of publications on Good Agricultural Practices (GAPS), producing three for Melongene (*solanum melongena.*), Pumpkin (*Cucurbita maxima* Duch.) and Shado Beni (*Eryngium foetidum*). Additionally The Dairy Herd Health Manual was completed distributed to schools, Ministry personnel and farmers.

The Herd Health Manual and all 3 GAPS publications are available on the IICA Trinidad & Tobago website at: www.iica.int/trinidadandtobago.

Promoting the Sustainable Management of Natural Resources and the Environment

The Office continued its contribution to the development of the organic agriculture sector with support to the development of plans for 3 model organic farms, located on Government demonstration stations at Rio Claro, El Reposo and La Reunion. An Agronomist from the MALMR was also sponsored by the Office to participate in a train the Trainers workshop in Organic Farming in the Dominican Republic.

Strengthening Rural Communities based on the Territorial Approach

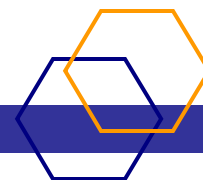
Development of rural microenterprises...



Members of the NRWP participate in their AGM in December 2006

IICA continued to support the development of women's groups in rural communities, through technical and administrative support to the Network of Rural Women Producers (NRWP). The Office provided office space for regular meetings of the Network and hosted the Annual General Meeting of the groups in Tobago in September, at which a new executive was elected and one in Trinidad in December 2006. At the AGM in Trinidad, an interim committee was established to review and amend the constitution of the network as needed and to develop a medium term plan and work programme for 2007.

The committee will sit for a period of four months after which a general meeting will be held in May 2007. The Network is moving forward with a renewed vision and greater commitment to promote the NRWP and attract new members into its folds.



Prior to the AGM in Trinidad, a strategic stakeholders meeting was held in August, as part of the reorganization of the management of the network. This meeting allowed the Executive of the NRWP to get a clearer understanding of their expected role in community and allowed the executive of the NRWP to get a clearer understanding of what is expected role in the community. The meeting also provided the opportunity for the identification of groups with whom collaborative work may be undertaken in the coming year.



Members of the Tobago chapter of the NRWP at the Tobago meeting in September 2006.

The Office effected a reorganization of the NRWP micro-credit scheme, for which a system for the recollection of outstanding funds was initiated. A subvention of TT\$25,000.00 was received from the Government of Trinidad & Tobago, courtesy the MALMR in February 2006. Preliminary guidelines for managing these funds were drafted, including assisting with travel of members to regional workshops and hosting of local training of programmes over a one-year period.

Capacity building...

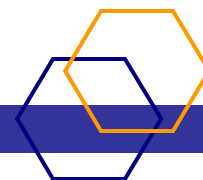
The Office contributed to the development of the regional women's network the Caribbean Network of Rural Women Producers (CANROP), by hosting a special meeting of selected members of the Executive Committee in May 2006 and facilitated the participation of four members of the Trinidad and Tobago chapter to attend the CANROP's 5th AGM and Institutional Awareness Workshop in Guyana, in July 2006, at which members also benefited from training in the use and management of the CANROP website.

The Office facilitated the participation of one member from the Tobago chapter of the Network at a one-week Organic Farming training exercise in Grenada in May, 2006 in Grenada. Participants of that workshop were introduced to the genesis of organic agriculture and the Internet as a source of information, as part of product development in this area.

Introducing Technology and Innovation for the Modernization of Agriculture and Rural Life

Advances in Agro-biotechnology...

In an effort to initiate the implementation of the Strategy for Biotechnology and Biosafety in the Caribbean, the Office prepared two projects focusing on capacity building and support to the establishment of the Consultative Group for Agro-biotechnology in the Caribbean (CGABC) Secretariat. These will be submitted to donor agencies in the near future. Another project on commercialization of biotechnology products was initiated and will be completed in early 2007.



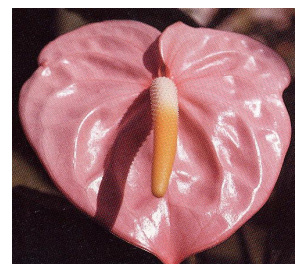
The Office spearheaded the organization of a regional Biotechnology workshop, hosted at the 6th Caribbean Week of Agriculture in Nassau, The Bahamas, which sought to maintain the momentum in this rapidly growing area of importance in the Caribbean region. Participants from all over the region and internationally, participated in the two-day workshop, which was led by a field of experts in the area of Research and development in biotechnology.



Dr. Pathmanathan Umaharan, UWI and Mr. Aaron Parke, IICA



Additionally, IICA supported the University of the West Indies, St. Augustine which hosted a workshop on the commercialization of biotechnology-improved Anthurium varieties for revitalizing the cut flower industry in the Caribbean in September 2006.



Machinery and technology use...

Furthering its contribution to the modernization of the agricultural sector in Trinidad & Tobago, the Office conducted a machinery and technology use survey, to assess the level of capitalization and technology transfer in the farming sector. The document, which is available on the IICA Trinidad & Tobago website, provides information on the extent to which machinery and various technologies are used in the different subsectors of the agricultural sector. The research can be useful in developing a strategy for increasing the level of mechanization and technology use in the sector.

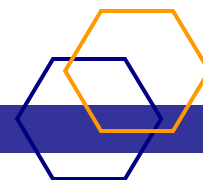
5.0 Results of Inter-Agency Cooperation

Cooperation with the FAO

The Joint Meeting Animal Disease Surveillance and Preparedness Focus on Avian Influenza (AI) in the Caribbean was held in collaboration with the FAO as well as several other regional and international agencies and institutions: Caricom Secretariat (CCS), Caribbean Poultry Association (CPA), CaribVET Network, CIRAD, Livestock and Livestock Products Board (LLPB), PAHO, The French Embassy, United States Department of Agriculture (USDA).

Cooperation with other regional and international organizations

One of the strengths of IICA's work in Trinidad & Tobago, is the collaborative arrangements that it has with other regional and international organizations, to manage its projects, events and activities. Throughout 2006, the Office participated in joint activities in cooperation with/with support from a number of agencies and institutions.



CARIRI

IICA Joined forces with CARIRI in 2006 to address the issue of Research & Development for agribusiness in the Caribbean region. A major exploratory workshop was co-hosted by both institutions in Tobago in May 2006. CARIRI was a principal consultant on the herbal marketing and technology project that produced investment opportunity profiles to promote investment in the sub-sector

CTA

Many of the regional CTA-funded IICA projects and activities were managed out of the IICA Office in Trinidad & Tobago during 2006. Most of these projects focussed on information and communication management, products and services and the networking process. These included:

- The MEAgroInfosys Project
- Regional workshop, “Dissemination of Agricultural Policy Information in the Mass Media”, held at the 6th Caribbean Week of Agriculture in Nassau, The Bahamas, on October 2-3, 2006. The workshop sensitized media personnel to some of the major issues and initiatives in agricultural policy in the Caribbean and opened the dialogue and interest on these topics – for greater coverage in the media. More work is planned in this area in 2007 – through collaboration with IICA, the Association of Caribbean Media Workers (ACM) and the CTA.
- Publication of issues of *In a Nutshell* and *AgriView*
- Management of the CARAPN and the network’s website.



(l.- r.) Vonulrick Martin, OAS, Washington D.C.; Rose Blenman, CARICOM Secretariat, Guyana and José Fonseca, CTA, The Netherlands serving as panellists at a discussion forum held during the Media workshop at the CWA in The Bahamas, October 2006.

OAS

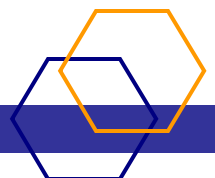
IICA worked closely with the Trinidad & Tobago office of the Organization of the American States (OAS) on the administration of Phase I of the OAS-funded project “Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector in the Caribbean”.

USDA

The IICA Office in Trinidad and Tobago continued to receive support from the USDA-APHIS in the organization and hosting of capacity building activities in the area of agricultural health and food safety.

UWI

IICA’s close working relationship with the Faculty of Science and Agriculture (FSA) at the University of the West Indies, resulted in the continuation of the Agribusiness Internship Programme in 2006. The Office also participated in the Faculty’s mock interview sessions and provided an annual award for the prize giving function of the Faculty.

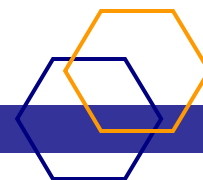


IICA also continued to collaborate with the UWI and receive support from them in matters relating to Biotechnology, inclusive of the 2 workshops that were held as well as technical assistance in the development of the Caribbean Programme for Biotechnology and Biosafety.

6.0 New Opportunities for Technical Cooperation

IICA will continue to work closely with the OAS and other local tourism entities in developing the agenda for Agro-Tourism in an effort to further promote awareness of this area of great potential in repositioning agriculture in Trinidad & Tobago. Regionally, phase II of the regional project “Strengthening of the Tourism Sector through the Development of Linkages with the Agricultural Sector in the Caribbean”, which is funded by the OAS and managed by IICA, will continue in 2007.

Opportunities for developments in the herbal sub-sector exist in Trinidad & Tobago. The Institute will continue to support the efforts of the CHBA in promoting the business opportunities identified for the herbals in Trinidad & Tobago and by extension in the Caribbean. There are also opportunities to work with entities to increase value-added and for the further development of niche products as well as for providing support to the commercial farming thrust recently announced by the Government of Trinidad and Tobago.



8.0 Publications

Francis, D; K. Belgrove (Eds.). 2006. In a Nutshell – Your Future, Agriculture and Youth. Trinidad & Tobago: IICA.

Francis, D; Rampersaud, R. (Eds.). 2006. In a Nutshell – Repositioning Agriculture and Rural Life. Trinidad & Tobago: IICA.

IICA Office in Trinidad & Tobago. 2006. Good Agricultural Practices – Chadon Beni Production. Trinidad & Tobago: IICA.

IICA Office in Trinidad & Tobago. 2006. Good Agricultural Practices – Melongene Production. Trinidad & Tobago: IICA.

IICA Office in Trinidad & Tobago. 2006. Good Agricultural Practices – Pumpkin Production. Trinidad & Tobago: IICA.

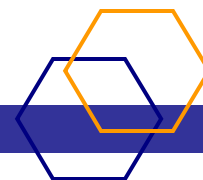
IICA Office in Trinidad & Tobago. 2006. Impact of Agricultural and Macroeconomic Policies on Agricultural Development. Trinidad & Tobago: IICA.

IICA Office in Trinidad & Tobago. 2006. A Review of the Agricultural Incentive Programme for Agriculture, Forestry and Fisheries in Trinidad and Tobago. Trinidad & Tobago: IICA.

IICA Office in Trinidad & Tobago. 2006. Survey of Machine and Technology Use in the Agricultural Sector of Trinidad and Tobago. Trinidad & Tobago: IICA.

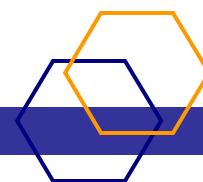
Parke, A.; Francis, D. (Eds.) AgriView. Vol. 12, No. 1, 2006

Parke, A.; Francis, D. (Eds.) AgriView. Vol. 12, No. 2, 2006



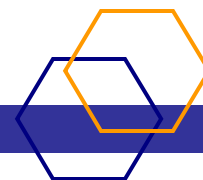
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Lisa Britto	Secretary
Janelle Archibald	Secretary
Edwin Franco	Driver/Messenger
Glenda Charles-Ash	Office Attendant



List of Acronyms

ACM	Association of Caribbean Media Workers
AHFS	Agricultural Health and Food Safety
CABA	Caribbean Agribusiness Association
CAFTC	Caribbean Agri-Food Trade Convention
CANROP	Caribbean Network of Rural Women Producers
CARAPA	Caribbean Association of Researchers and Herbal Practitioners
CARAPN	Caribbean Regional Agricultural Policy Network
CARDI	Caribbean Agricultural Research and Development Institute
CARIBVET	Caribbean Animal Health Network
CARICOM	Caribbean Community
CARIRI	Caribbean Industrial Research Institute
CDE	Centre for Development of Enterprise
CDF	Community Development Fund
CFNI	Caribbean Food and Nutrition Institute
CGABC	Consultative Group on Agrobiotechnology for the Caribbean
CHBA	Caribbean Herbal Business Association
CIRAD	French Agricultural Research Centre for International Development
CPA	Caribbean Poultry Association
CPBB	Caribbean Programme on Biotechnology and Biosafety
CTA	Technical Centre for Agricultural and Rural Cooperation
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FAVACA	Florida Association of Voluntary Agencies for Caribbean Action
GAPS	Good Agricultural Practices
GDP	Gross Domestic Product
GMP	Good Manufacturing Practices
IICA	Inter-American Institute for Cooperation on Agriculture
IPM	Integrated Pest Management
LLPB	Livestock and Livestock Products Board
MALMR	Ministry of Agriculture, Lands and Marine Resources
MTI/FBIDC	Ministry of Trade and Industry/Food and Beverage Industry Development Committee
NAHFSA	National Agricultural Health and Food Safety Agency
NAMDEVCO	National Agricultural Marketing and Development Company
NRWP	Network of Rural Women Producers
OAS	Organization of American States
PAHO	Pan American Health Organization
SPS	Sanitary Phytosanitary
THA	Tobago House of Assembly
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
USDA-APHIS	United States Department of Agriculture, Animal and Plant Health Inspection Service
UWI	University of the West Indies
WTO	World Trade Organization



The Jagdeo Initiative

In an effort to enhance the positioning of agriculture in domestic and international markets, President Bharrat Jagdeo of Guyana, CARICOM Head with Lead responsibility for agriculture is spearheading a process that seeks to achieve a resurgence of the regional agricultural potential. This process is titled the 'Jagdeo Initiative' (The Initiative). The Initiative will build on past efforts in a more coherent, comprehensive and long-term development framework that takes into consideration the changed global environment and creates an enabling economic and business environment for competitive and sustainable agriculture and rural development.

The Ten Key Major Binding Constraints and the Main Interventions Proposed

The ten Key Binding Constraints are neither new nor novel and span the range from resource inputs necessary for increased agricultural production and productivity to the administrative and institutional framework needed to facilitate change. Institutional capacity in particular, has become a critical determinant of competitiveness.

- 1. Limited Financing and Inadequate New Investments**
 - Develop an Agricultural Modernization Fund (AMF) within the CSME Regional Development Fund.
 - Conduct a 2005-2015 Regional Agricultural Potential and Food Needs Study to identify opportunities.
- 2. Outdated and Inefficient Agricultural Health and Food Safety (AHFS) systems**
 - Establish the Caribbean Agricultural Health and Food Safety Association (CAHFSA) and rationalize existing National Agricultural Health and Food Safety Systems infrastructure and services.
- 3. Inadequate Research and Development**
 - Improve coordination, integration, utilization and strengthen the research and development capacity in the region, including development a Caribbean Regional Policy, Strategy and Programme on Biotechnology and Bio-Safety and Inventory and Assessment of Research and Development projects to identify the gaps.
- 4. Fragmented and Disorganized Private Sector**
 - strengthen private sector organisation and organisations;
 - realign MoAs/related departments to better manage and facilitate the multifunctional/multidimensional nature of the 'new' agriculture;
 - continue the restructuring of the agricultural curricula of the university, tertiary, secondary and vocational institutions in order to foment entrepreneurial thinking and consciousness.
- 5. Inefficient Land and Water Distribution and Management systems**
 - Countries should provide incentives for improved land and water management as a major mechanism to address inefficient land and water distribution and management.
- 6. Deficient and Uncoordinated Risk Management measures**
 - Develop an integrated and coordinated regional approach to mitigation and relief, including insurance scheme.
- 7. Inadequate Transportation Systems**
 - Establish and Upgrade Freight and Port Infrastructure. Establishing critical physical infrastructural requirements and services
- 8. Weak and Non-integrated Information and Intelligence systems**
 - Consolidate and link various information systems,
 - Evaluate the role of overseas services and Embassies
 - Strengthen & link industry information systems
- 9. Marketing: Weak Linkages and Participation of Producers in Growth Market Segments**
 - Facilitate access to EXIM-type financing,
 - Establish Central Packing Houses,
 - Support national distribution channels and strengthen joint promotion and marketing
- 10. Lack of Skilled and Quality Human Resources**
 - Deliver training at the secondary, vocational and tertiary levels and on-site specialized institutions.

