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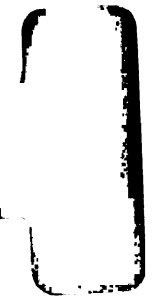
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**1992 - 1993
BIENNIAL REPORT**

IICA OFFICE IN JAMAICA



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WHAT IS IICA?

The Inter-American Institute for Cooperation on Agriculture (IICA) is the specialized agency for agriculture for 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 of Agricultural Sciences.

IICA was established as an institution for agricultural research and graduate training in tropical agriculture. In response to changing needs in the hemisphere, the Institute gradually evolved into an agency for technical cooperation and institutional strengthening in the field of agriculture. These changes were officially recognized through the ratification of a new Convention on December 8, 1980. The Institute's purposes under the new Convention are to encourage, facilitate and support cooperation among the 33 Member States, so as to better promote 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 1987-1993 Medium Term Plan, the policy document that sets IICA's priorities, stressed 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:

- Agricultural Policy Analysis and Planning
- Technology Generation and Transfer
- Organization and Management for Rural Development
- Marketing and Agro-industry
- 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.

To further reach its objectives of encouraging, promoting and supporting the efforts of the Member States in the area of agricultural and rural development, the Institute renders technical services aimed at strengthening national institutions involved in this sector and serves as a multinational body for cooperation among member countries. IICA also provides direct advisory services and consultancies, implements projects, and acts as a forum and vehicle for the exchange of ideas, experiences and cooperation between the countries, organizations and other entities active in the agricultural arena.

The contributions provided by the Member States and the ties IICA maintains with its seventeen Permanent 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 Member States of IICA are: Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, the Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United States of America, Uruguay and Venezuela.

The Permanent Observer Countries of IICA are: Arab Republic of Egypt, Austria, Belgium, European Communities, France, Germany, Hungary, Israel, Italy, Japan, Kingdom of the Netherlands, Portugal, Republic of Korea, Republic of Poland, Romania, Russian Federation, and Spain.

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IICA/Jamaica Report for the 1992 - 1993 Biennium

FOREWORD

I am very pleased to present the IICA/Jamaica's report for the 1992-1993 biennium. This report highlights the major technical cooperation thrust for the two years encompassed within an institutional consultation with the Government of Jamaica/Ministry of Agriculture and the Private Sector.

The Biannual Report presents an overview of IICA/Jamaica's technical cooperation achievements during 1992 and 1993, carried out jointly with national, regional and international organizations.

All the personnel from the IICA Office in Jamaica acknowledge and greatly appreciate the dedicated support and cooperation received from the Government of Jamaica, principally the Ministry of Agriculture, the sectorial national institutions, regional and international organizations, bilateral missions and collaborating agencies, diplomatic missions, and the entire agricultural and rural community, for making the execution of IICA's technical cooperation program in 1992-1993 feasible and possible.

My gratitude to all the Agricultural Community and others, who have supported our efforts to enhance a New Road to Agriculture in Jamaica.

*Dr. Armando Reyes-Pacheco
Representative*

SUMMARY

The IICA-Jamaica Office, within its financial limitations, achieved its targets for the 1992 - 1993 Biennium. Progress was made with continuing projects and a number of new ones were initiated.

Activities were largely in the broad areas of:

- *Technology Generation and Transfer; and*
- *Organization and Management for Rural Development.*

Continuing support was provided for national MINAG programs in Agricultural Extension under RADA, and Agricultural Research and Development under the Agricultural Research and Development Division (ARDD).

Considerable support was given to further enhance small-farmer On-farm Adaptive Research and Extension (OFAR/E) methodology, and special attention and support were pursued for:

- *Development of sustainable small-farmer agriculture on hillsides;*
- *Structural Adjustment in Agriculture;*
- *Rural Women's status;*
- *CARAPHIN activities for the control of pests and diseases of crops and livestock;*
- *Institutional Building, Training (in-service) for agricultural personnel;*
- *Evaluation of Environmental Impact of the Rio Cobre Watershed.*

A number of scholarships were provided for short-term courses and training abroad, in commemoration of the 50th Anniversary of IICA. Four (4) full scholarships (each for a 3-year period) were awarded to students of the College of Agriculture (COA)

AN OVERVIEW OF JAMAICA'S ECONOMY

In 1992 and 1993 Jamaica's economic environment continued to move towards a liberalized market economy, as the government intensified its adjustment program and implemented important policy actions. During 1992 major reforms applied under the Structural Adjustment Program (SAP), included the General Consumption Tax (GCT), the Common External Tariff (CET); Liberalization of Exchange Controls; Institutional Reform; Privatization and Deregulation. Consolidation of the measures applied gained momentum during 1993.

The basic strategy can be summarized as one designed to stabilize the economy and create a suitably balanced economic environment for sustainable economic growth within an open-market, export-led, and Private Sector dominated economy. The principal policy instruments have included market-determined interest rates, removal of price controls and the elimination of subsidies. On a national basis these instruments were intended to reduce and possibly eliminate public (GOJ) direct involvement in production activities, while pursuing mainly policy guidance and leadership-oriented functions.

Within this macroeconomic environment the economy grew by 1.2% in 1992 to J\$17,667.3 million, (constant prices, 1986) while recording its sixth successive year of positive growth, following a somewhat decreasing trend since 1977 to only a marginal increase in 1991.¹

¹ Beginning in 1991, determination of GDP in real terms has been based on constant prices 1986, instead of 1974. GDP constant values for the intervening years have been revised, accordingly. Justification for this change of base year has been attributed to the impact of a number of factors on economic performance, and particularly on the GDP structure in 1986 which reflected salutary intervening structural changes since 1974. The re-classification ensuing from a number of new sub-sectors and the contingent changes in the sub-categories of such sectors as Manufacturing, Agriculture, Storage and Communication has accommodated the incorporation of sub-sectors into appropriate sectors.

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Jamaica's mean population increased by 1.0% to 2,448,200. The average annual employed labour force for 1992 was 905,700 which was 0.3% less than that for 1991. The per capita GDP of J\$7,200 (constant prices, 1986) was marginally (0.4%) higher than that for 1991.

The main contributors to the 1992 growth were the Agricultural Sector (12.9%), and the Distributive Sector (11.6%). The GDP for the total Goods Producing sectors grew by 1.8% as a result of the improved performance of Agriculture (12.9%); Manufacturing (1%); Construction and Installation (0.4%), while that for Mining and Quarrying declined by 2.5%.

The total Services Sector's GDP grew by 6.0%; Basic Services by 4.7%; Other Services by 6.3%; the Distributive Trade Sector increasing by 11.6%. For the Basic Services GDP, Electricity and Water increased by 4.5%, while Transport, Storage and Communication grew by 4.9%.

Among the most significant improvements of the economy in 1992 compared with 1991 were:

- Jamaica's economy grew by 1.2% to J\$17,667.3 million, constant prices, 1986.
- Inflation rate at the end of 1992 was 40.2% compared with 80.2% at the end of 1991.
- Exchange rate was stabilized at J\$22.20 to US\$1.00.
- Balance of Payments - Current account realized a surplus of US\$46.6 million compared with a 1991 deficit of US\$211.7 million.
- Net International Reserves (NIR) increased by US\$337.2 million compared with the deficit of US\$105.2 million in 1991.

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- **External medium and long-term public debt decreased by 4.7% to US\$3,678 million. However, the Debt Service Payment increased by 5.1% to US\$637.9 million; and Debt Service Ratio moved from 26.7% in 1991 to 27.1% in 1992, thereby increasing the rate of repayment. Jamaica benefited from the re-scheduling and forgiveness of some of its debts.**
- **Trade Deficit was reduced by 4.8% from US\$ 424.3 million to US\$403.9 million in 1992.**
- **Merchandise Trade improved by 5.6% over the 1991 deficit of US\$677.9 million to US\$639.9 million.**
- **Merchandise imports decreased by 7.4% to US\$1,692.8 million.**
- **While merchandise exports decreased by 8.5% to US\$1,052.8 million - Major decreases: Bauxite, 21.4%; Alumina 13.2%; Sugar 5.6%, Banana 12.3%, the Non-traditional exports increased by 30.8%.**
- **Tourism remained the main foreign exchange earner, estimated gross earnings for 1992 increasing by 11.3% to US\$850 million.**
- **Unemployment grew from 15.4% to 15.7% due to increase in Labour Force by 0.22%.**
- **GCT rates for scheduled items increased from 10% to 12.5%.**

The expected scenario for 1993 was a 3.5% GDP growth rate, inflation at about 30%, also the current account deficit of the balance of payments was targeted at 1.7% of GDP and a surplus of 0.1% in net international reserves.

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Perhaps the most relevant macroeconomic reform thrust in 1992-1993 has been in the trade and finance regime, including a free market determined exchange rate system. While the government's policy reforms have not yet successfully controlled inflation, estimated to be 40% and 30% for 1992 & 1993 respectively, Jamaica has set the stage to make substantial progress in reducing trade imbalances through its structural adjustment program. It must be recognized, however, that the implementation of the structural adjustment program has also led to weakened public sector financing and thus services, which has caused some economic dislocation.

The economic program for 1994 aims at further expansion in real GDP and employment, and strengthening the balance of payments position. These ends will be achieved by a reduction in overall public sector deficits and design of monetary and wage policies to contain the growth of domestic costs and demand. The government also intends to take measures to improve fiscal management on a more permanent basis. In short, Jamaica is expected to continue its achievement of macroeconomic stability, as a necessary condition for sustainable growth.

AGRICULTURE IN JAMAICA

Background

Agriculture remains one of the important economic sectors of Jamaica, "Land of Wood and Water". However, the progressive broadening and modernization of the economy and the re-definition of some sectors and sub-sectors have led to a significant contraction in the contribution of the Agricultural Sector to national economic development. Agriculture is, however, more important to the country than GDP statistics indicate.

The island has a land area of approximately 4,250 sq. miles (11,020 square kilometers - 1,102,000 hectares) and a population density of 570 per square mile. Only about 15% of the land is classified as being flat or nearly flat, fertile and arable, on slopes of less than 5°, and therefore suitable for intensive cropping. Nearly 30% is found on slopes 5° to 20° and requires appropriate soil conservation measures to ensure sustainable production of annual (short-term) crops. An additional 25% which has slopes 20° to 30° should be used for perennial tree-crops and forestry. The remaining 30% has slopes steeper than 30° and appropriately should be kept in permanent vegetative cover in order to protect the environment.

The country has a steep and rugged topography, a wide range of micro-climates, very variable rainfall depending on proximity to the higher mountain peaks, the Blue Mountain Range (highest peak 7,360 feet - 2,244 meters) being the steepest.

Some of the flat lands are supplied with water from rivers and streams for irrigation purposes, used largely for what is known as "plantation" agriculture (sugar cane, banana etc.) However, most of the agriculture is rain-fed.

Patterns of land-use vary considerably resulting in several mixed cropping systems particularly among small farmers in the hillsides. Livestock is reared under both extensive and intensive systems. There is relatively only a small degree of mixed farming involving both crops and livestock.

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The patterns of land use followed are claimed to have resulted in continuous watershed degradation, particularly in respect to land destruction, soil erosion, water pollution, destruction of wildlife and its habitat, as well as coastal and marine resource degradation. The island has been conveniently zoned into 35 watersheds, essentially units which can be used for structured development, thereby stemming the watershed degradation which is taking place annually.

Land in Agriculture

The area of land in farms has been decreasing progressively on an annual basis. Agricultural Census (taken every 10 years) for 1978/79 reported approximately 1.33 million acres (537,250 hectares) in farms with the following distribution pattern as illustrated in Table 1.

Table 1
Jamaica: Farm and Land Size 1978-1979

Percentages of

Farm Size	Farms	Land
Under 5 acres	81.9	16.0
5 < 25 "	16.2	19.3
25 < 100 "	1.3	8.1
100 < 500 "	0.44	12.3
Over 500 "	0.16	44.3

Source: Adapted from STATIN- Agricultural Census, 1978/79

This highly skewed land tenure pattern; with its associated problems of location and agro-socio-economic limitations essentially constitute Jamaica's structural agricultural problem.

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Main characteristics of the small hillsides farms are the high degree of land fragmentation; inappropriate legal entitlement to land (this problem is currently being addressed under the Land Titling Project); low fertility levels of much of the soils used for farming; degradation of watershed areas and soil-loss due to unsound land use practices and management. Much of the hillside lands, particularly those in shorter-term crops should not be used unless first subjected to appropriate soil conservation measures including improved cropping systems.

Nevertheless, much of the land in hillside farms is responsive to good management. Variable climatic conditions accommodate the production of a wide range of short, medium and long-term crops, especially tropical fruit crops for which Jamaica might have a competitive edge. Livestock - dairy and beef cattle, poultry, pigs and goats - might also be produced successfully.

There is a high unfilled demand for agricultural land, but the real demand is less. There exists idle and under-used agricultural land on farms of all sizes. In addition, a significant acreage of prime agricultural land moves into non-agricultural uses annually. The Land Development and Utilization Commission (LDUC) created in 1966 to ensure greater and fuller use of agricultural land has only been partially successful in meeting its objectives. However, its legal jurisdiction does not cover land in the 50 to 100 acres (20 to 40 hectares) size group of farms on which there exists significant levels of land idleness.

The estimated 20% of farms owned/operated by women is declining. These farms are mainly in the under 5 acres (2 hectares) size group, with about one-half being less than one acre (0.4 hectare) in size. Women farmers are generally older than the norm, some acquiring land through widowhood. Women play an important role in managing farm businesses and in actual farming operations.

The Inheritance Laws contribute highly to an already intensive land fragmentation scenario, being most noticeably responsible for the land distribution situation relating to the farms (parcels) of under 5 acres (2 hectares).

Agricultural Sector Performance

Significant changes in performance took place when the base year for determining real prices for the total economy was changed as of 1991 from constant prices 1974 to constant prices 1986.

The Agricultural sector GDP, constant prices 1986, for the year 1992 was J\$1,217 million consisting of Domestic Agriculture (65.4%); Livestock and Hunting (16.0%); Export Agriculture (13.1%); Fishing (4.3%); Forestry and Logging (1.2%).

The Sector's GDP contribution to national GDP has decreased progressively since 1988 from 8.8%, constant prices 1974, to 6.9% constant prices 1986, in 1992. With the change in the base year contingent revisions were made to cover the GDP for the entire economy for the interim period 1986 to 1990 as reflected in Annexes I and II. Corresponding contributions of Agricultural sub-sectors to national GDP were: Domestic Agriculture, 4.5%; Livestock and Hunting, 1.1%; Export Agriculture, 1.0%; Fishing, 0.3%; and Forestry, 0.1%.

For the seven (7) year period 1986-1992 the Domestic Agriculture sub-sector's GDP, constant prices 1986, exceeded 50% of the total Agriculture Sector GDP, averaging 58.1% over the period. On a commodity basis main contributors to the Agricultural Sector GDP were: sugar cane, 8.5%; other export crops, 4.6%; root crops, 29.6%; other domestic food crops, 35.9%; livestock (cattle, poultry, pigs, goats), 16.0%; fishing, 4.2%; and forestry, 1.2%.

Detailed performance of the Sector according to its sub-sectors is presented in Annex II.

Support Services

The main institutional support services provided for the Agricultural Sector by the public sector under the aegis of MINAG include:

- **Extension and Training through the Rural Agricultural Development Authority (RADA);**
- **Agricultural Research and Development services (R&DD);**
- **Veterinary Services and Livestock Development Services (this portfolio has been modified under the SAP by releasing certain aspects to the Private Sector);**
- **National Irrigation Commission to harmonize and absorb all public irrigation systems;**
- **Credit systems: continuing improvement of structurally and financially weak PC Banks; rationalizing and adjusting interest rates which are generally considered to be too high;**
- **Technical assistance and other services provided by the Agricultural Marketing Corporation (AMC) for facilitating domestic trading in foodstuffs;**
- **Plant Quarantine which includes Plant protection services.**

Agricultural Policy Strategies

The GOJ through MINAG is fostering policies and programs for the development of a modern and efficient Agricultural Sector. MINAG's role is being re-defined to provide policy determination, guidance, leadership and a number of management functions, essentially to provide an open market climate within which the Private Sector is expected to perform, with appropriate GOJ supports when justified and possible.

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The Ministry of Agriculture's direct involvement in agricultural production is intended to be selective and restrictive to special cases, e.g. demonstrating a new technology or introducing a new product. This leaves the Private Sector involvement in agricultural investment and production to be the determinant and crucial player to spearhead Jamaica's agricultural modernization drive.

MINAG's strategy is to pursue measures for achieving strong and efficiently managed Public Sector institutions; to provide relevant services in the generation and transfer of appropriate technology, control of crop and animal pests and diseases, irrigation, and services specifically designed for the enhancement of small-farmer agriculture.

The major public policy objectives are to:

- Enhance production for export markets to increase export earnings.
- Enhance production for domestic consumption (mainly by small farmers), reducing reliance on imports and saving scarce foreign exchange earnings.
- Provide the potential for increasing employment opportunities, preserving the environment and improving the quality of life of rural people.

Various strategies proposed and/or pursued include:

- Increasing efficiency and competitiveness based on comparative advantage and adoption of appropriate technology.
- Achievement of increasing levels of food self-sufficiency and crop diversification, the emphasis being on the production of:
 - (a) domestic food crops and non-traditional export crops - root crops, cucumbers, pumpkins, sweet peppers and horticultural crops; and

- (b) **selected traditional export crops; e.g. banana, citrus, cocoa and coffee.**

Policy strategies under the Structural Adjustment Program (SAP) involved deregulation and liberalisation, particularly in relation to the organisation, production and marketing of traditional export crops under the aegis of their respective Commodity-Specific Statutory Bodies.

These strategies are expected to accommodate market determined interest rates, removal of price controls, elimination of subsidies and an increasing pace of privatization. Currently GOJ through MINAG is in the process of finalizing the privatization of its four (4) sugar estates (factories and land) namely Frome, Monymusk, Bernard Lodge and Long Pond.

In order to meet its macroeconomic targets MINAG is pursuing measures which impact, inter alia, on the structure and performance of the Agricultural Sector, specifically with respect to:

- Enhancement of agricultural production of selected domestic food crops and export crops (traditional and non-traditional).**
- Generating increased levels of food self-sufficiency.**
- Improvement in land use particularly on hillsides, including the use of alternative cropping patterns and zoning strategies.**
- Environmental up-grading through Environmental Policy; Conversion of the Natural Resource Conservation Department (NRCD) into the Natural Resource Conservation Authority (NRCA) for protecting and preserving degraded areas including Watersheds.**

- **Improving land reform with respect to:**
 - **land availability and operational sizes of farms;**
 - **appropriate freehold and leasehold types of tenure;**
 - **accelerating the tempo of land titling;**
 - **expanding and promoting the use of agricultural credit;**
 - **up-grading systems, structures and facilities for export and domestic marketing.**

- **Institutional strengthening in the areas of extension, training and research for the generation and transfer of affordable adaptive technology.**

The Five-Year Development Plan for Agriculture, 1990-1995 is pursuing a number of the foregoing strategies in formulating a number of development programs. But its strategy rests on the modernization of agriculture, with emphasis on export crops (traditional and non-traditional), fishing and livestock through private sector activities supported by public sector technical services and infrastructure, in joint-ventures between local and foreign entrepreneurs.

IICA'S STRATEGY OVERVIEW FOR 1992-1993

Given that MINAG is the largest and most important agricultural organization within the sector, and is responsible for agricultural policy and implementation of agricultural sector plans, IICA's main contact as an international technical cooperating agency on Agriculture in Jamaica is with the Ministry of Agriculture.

IICA's proposals, based on definitive actions pursued by MINAG under the SAP and on the successes achieved, were used as a guide for providing support to MINAG in pursuing objectives designed to enhance the agricultural sector development in specific areas.

Since 1990 IICA/Jamaica's technical cooperation program has been adjusting its actions to accommodate the effects of the stabilization and adjustment structural macroeconomic reforms, and the socio-political environment. Among the most relevant efforts that this office has considered are:

- Re-definition of MINAG's role and operational capability, and
- Improvement in agricultural competitiveness.

The principal strategic guidelines to concentrate IICA's program were rationalized to respond to areas:

- (i) which are of critical importance to the GOJ;
- (ii) in which IICA possesses institutional expertise;
- (iii) identified as providing conceptually promising topics for making a significant technical contribution; and
- (iv) which have the greatest potential "Institutional Yield".

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Due to IICA's limited financing resources, the technical cooperation program envisioned was conceptually set up in critical and promising areas to: "generate knowledge", and develop a "comparative advantage". Thus, IICA's technical cooperation program was reduced to three areas, through which its technical activities were concentrated and channeled.

Those programs are:

- (i) Generation and Transfer of Technology*
- (ii) Organization and Management of Rural Development*
- (iii) Short-Term Technical Cooperation and Pre-Investment*

IICA has been pursuing efforts in assisting with the institutional strengthening of specialized areas of the Agricultural Sector, by maintaining institutional working relations with:

The Rural Agricultural Development Authority (RADA), Jamaica Promotions Ltd. (JAMPRO), The Scientific Research Council (SRC), The Jamaica Agricultural Development Foundation (JADF), The Jamaica Agricultural Research Program (JARP), The Caribbean Agricultural Research and Development Institute (CARDI), University of the West Indies (UWI), Mona Campus, Department of Botany and Faculty of Agriculture. Export Marketing Organisations (EMO's), and the Commodity Specific Statutory Bodies (CSSB's), Farmer Organisations, notably the Jamaica Agricultural Society (JAS), The Jamaica Exporters Association (JEA), Private firms and producers, The Planning Institute of Jamaica (PIOJ), and the international community and bilateral missions.

Following is a synthesis of the technical instruments executed for this period in detail.

FORMAL PROGRAMS AND ACTIONS

IICA/Jamaica's broad formalized programs include:

A. PROGRAM II - GENERATION AND TRANSFER OF TECHNOLOGY

- *Technical Assistance for the Rural Agricultural Development Authority (RADA) and the Agricultural Research and Development Division ARDD).*
- *Management and technical support for Hillside Agricultural Sub-Project (HASP)*
- *Training in tropical fruits and analytical guidelines to determine Jamaica's agricultural competitive advantage.*

B. PROGRAM III - ORGANIZATION AND MANAGEMENT OF RURAL DEVELOPMENT

- *Analytical study with regard to rural poverty at the Country level, especially in relation to the high percentage of the rural population which falls below the poverty line.*
- *Project profile preparation training courses for RADA's institutional development.*
- *Farm Management training and Generation of Information.*
- *Continuing action in support of institutionalization of RADA's activities.*

C. SHORT-TERM TECHNICAL COOPERATION AND PRE-INVESTMENT

- *Technical co-operation and administrative support services for strengthening institutional agricultural project management capabilities within the public sector.*
- *Continuing financial support for MINAG's Professional and Technical Staff to facilitate participation in various activities-seminars, workshops, training etc.*
- *Collecting Jamaican data for the development of a Caribbean-wide agricultural statistics Data Base.*
- *Technical Cooperation through Multinational Projects, in the:*
 - *Design of strategies for policy analysis, planning and management in support of agricultural development.*
 - *Co-operative program for developing agricultural research technology and transfer, as well as exchange between LAC member countries.*
 - *CARAPHIN activities for animal and plant pests and diseases.*

ACTIVITIES/ACHIEVEMENTS 1992-1993

Activities for the 1992-1993 biennium were selected on the basis of a re-definition of MINAG's roles and operational capability, and also on an assessment of IICA's comparative advantage for providing technical co-operation in the priority areas identified for Jamaica's agricultural development. Some of the activities begun in 1992 were pursued during 1993. IICA's activities were largely confined to three (3) broad areas already mentioned:

- **Generation and Transfer of Technology; Organisation and Management for Rural Development; and Short term technical cooperation and pre-investment activities.**

Broad objectives related to:

- **Re-enforcing the Public Sector's efforts to rationalize its services, with particular emphasis on agricultural research, extension and rural development; and**
- **Optimizing IICA's technical know-how capacity for establishing an institutional comparative advantage, particularly with respect to achieving "Sustainable Hillside Agricultural Development".**

The 1992 - 1993 technical action program emphasized support for:

- **Institutional strengthening of RADA, especially in relation to its extension operations methodologies.**
- **Institutional strengthening of MINAG's Research and Development Division (RD&D), specifically re on-farm research for tree-crops in hillside agriculture.**

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- **Specific-oriented technical activities for:**
- **providing critical information regarding project management;**
 - **preparing project profiles for external funding; and**
 - **facilitating interchange of technical information.**

IICA's technical co-operation projects were therefore mainly designed to support the:

- (i) development of institutional technical expertise in Sustainable Hillside Agriculture geared to establish a methodological process, which might be applicable to other member countries of IICA's Caribbean sub-region; and**
- (ii) improvement in the organization and management of the national technology generation and transfer capability in On-Farm Adaptive Research (OFAR) and Extension with small farmers.**

The projects arising from this strategy are:

I: GENERATION AND TRANSFER OF TECHNOLOGY

Project Name: Support for the Generation and Transfer of Agricultural Technology in Jamaica.

Nature: To improve the organizational and management of the national technology generation and transfer of technology in "Small On Farm Adaptive Research System" with emphasis on Hillside Agriculture.

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The activities in this project were designed to re-inforce the public sector's efforts to operationalize its services, with emphasis in agricultural research, extension and rural development, specifically to improve the organization and management of the national technology generation and transfer of technology in "On Farm Adaptive Research System".

Through this project, IICA/Jamaica has been able to develop an expertise in institution building in Extension and Research linkages through On Farm Research and Extension Methodologies for small farmers.

Project Name: The Hillside Agricultural Sub-Project (HASP).

Nature: IICA/Jamaica's technical expertise and knowledge regarding Hillside Agriculture enabled it to support the Research and Development Division of MINAG in implementing a project for continued research and extension efforts with small farmers in critical watershed environments.

IICA/Jamaica for more than a decade has continued to devote resources in research and technical monitoring of on-farm adaptive research and extension activities on hillside agriculture. These institutional efforts have resulted in various publications, seminars, round-tables, workshops, training events, etc.

It is expected that the findings of this sub-project will be further developed and its research and extension methodological findings adapted for application in other geographic watersheds in the country.

This project is one of many developed in the past in this subject area. While the project came to an end in December 1993, based on a positive external evaluation of the project, a second phase is being contemplated for 1994.

Project Name: National Yam Export Development Project Phase I (RADA/IICA).

Nature: A technological package --"Mini-sett" has been developed to produce improved yam cultures and has been transferred to extension agents and farmers. The word "Mini-sett" has become a household name for about 70% of the yam producing farmers in Jamaica. The "Mini-sett" yam technique has contributed to increased yam exports and has made yams more competitive in the international markets.

An intensive program of technology transfer was undertaken through field days, seminars, workshops, etc. with farmers and extension officers. The project finished in November 1993, and a proposal has been submitted for funding a second phase, incorporating extension agents, producers and exporters.

II: ORGANIZATION AND MANAGEMENT OF RURAL DEVELOPMENT

The initiatives undertaken in this area were geared to strengthen the operational capabilities in the national institutions for managing rural development, especially RADA.

Project Name: Agricultural Policy and Management for Rural Development.

Nature: This project was designed to elaborate institutional management instruments for RADA geared to enhance its operational capabilities. Also, training was provided on those instruments to consolidate its operations for managing rural development.

A number of seminars, workshops, and courses were held to strengthen RADA in project preparation and extension methodologies.

Project Name: Environmental Impact Analysis in a specific Watershed in Jamaica: A Case Study (GTZ/IICA).

Nature: This was a study of the Rio Cobre Watershed designed to evaluate the environmental impact of "Hillside Farming". On this topic, technical expertise is being initiated in environmental impact analysis and its methodology might be adapted and applied to other watersheds in the country.

One is to expect that this is a critical area. IICA/Jamaica has already an institutional comparative advantage in Hillside Agriculture, thus it seems that in the short-run the IICA office might be able to pursue further assistance.

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Project Name: Rural Women Project

Nature: *This is a regional study financed by the Inter-American Development Bank (IDB), with the participation of Barbados, Guyana, and Suriname. Once completed in 1994 it is expected that a regional and/or country specific strategy for rural women in the Caribbean will emerge.*

This is an area that is critical and important for the respective countries. Due to the importance of rural women, multilateral agencies will tend to favour project design and implementation.

Project Name: Strategy Proposal for Rural Poverty (IFAD/CEPPI/IICA).

Nature: *This study was completed and submitted to IFAD for approval and publication. Nearly 30% of Jamaica's population is below the poverty line. IICA/Jamaica has an excellent information base with regard to the state of rural poverty in the country that could be used for designing a rural poverty reduction program. It is expected that due to the degree of the rural poverty problem, multilateral agencies will tend to favour project preparation and implementation.*

III: SHORT-TERM TECHNICAL COOPERATION AND PRE-INVESTMENT

Project Name: Short Term Technical Cooperation Activities.

Nature: This is an activity designed to provide short-term critical technical assistance.

It is an area in which IICA/Jamaica tries to seize opportunities for involvement in technical requests that are important and critical in the agricultural sector.

It is worth mentioning that a number of technical cooperation activities were carried out through national and multinational projects in this period. Principally they included:

- Preparation of Project Profiles.
- Technical support to RADA in project preparation and re-introduction of a School Garden Program.
- Training in Project Identification and Formulation.
- Regional Seminar on Project Preparation and Evaluation.
- Seminar on Papayas and Mangoes (JEA/JARP).
- International Seminar on Coconut Research and Development.
- Workshop on Agricultural Joint-ventures. (JAMPRO/IDB/IICA)
- Small Dairy Farmer Development Workshop.
- Designing strategies for policy analysis, planning and management in support of agricultural development in the Caribbean.

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- *Facilitating Caribbean and Latin American linkages for agricultural development.*
- *Surveying and monitoring animal and plant diseases and pests to facilitate production efficiency (CARAPHIN).*

FUNDING

IICA is financed through funds made available annually from member states' quotas, overhead charges for administering external resources, and from miscellaneous other incomes. Also, IICA administered external funds provided by national and international organizations and agencies which are designated for specific activities.

IICA/Jamaica continues to enjoy a close working relationship with donor countries such as Canada, USA, France and Israel, and with multilateral and bilateral agencies and international organizations such as IDB, PAHO, EEC, CIDA, USAID, UNDP, FAO, CARDI, UWI, IFAD, IDRC, French Institute of Scientific Research for Development in Co-operation (ORSTOM), German Agency for Technical Co-operation (GTZ), Peace Corps, and the Central International Co-operation in Agricultural Research for Development (CIRAD).

The distribution of IICA/Jamaica expenditures derived from quotas is: Direct Technical Co-operation Services 83%; Management 15.2% and General Costs 1.8%.

OVERVIEW FOR THE FUTURE

This overview of IICA's technical cooperation in 1992 - 1993 hardly predicts what might be envisioned for the medium term in a Jamaica. However, it basically incorporates a viable scenario for the office to be operational, given a continued change of present realities, which merit further application.

Donors (World Bank, IDB IMF, USAID and bilateral agencies) have subjected Jamaica to a progressive structural adjustment program since 1982 that is expected to continue. This has led to a re-definition of the Public Sector's role and in some respects has impaired its operational capability. Also, since 1990, the funding by donor agencies, except for USAID, has been static. Recently, EEC and IFAD have decided to re-commence activities and/or have manifested some interest in participating. There are no new loans to the agricultural sector, and if this scenario endures, in the near future there will be only limited external resources geared to support agricultural development.

In light of the above, it is suggested that the government's efforts should continue to focus on enhancing the country's agricultural competitiveness, presumably for non-traditional products or what is increasingly being regarded as "Boutique Agriculture". Thus, the overall purpose of this Office's technical program in the medium-term can be summarized as that of:

- (i) Optimizing the technical know-how available in the office.*
- (ii) Consolidating an institutional comparative advantage in few topics.*
- (iii) Re-inforcing the public sector's efforts to operationalize its services, with emphasis on agricultural research, extension and rural development.*
- (iv) Collaborating with and complementing other technical cooperation and donor agency action programs.*

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- (v) **Facilitating strategic alliances among the Public and Private sectors in agriculture.**

The specific objectives presented herewith as relating to the overall goals of this office's technical cooperation are to:

- (i) **develop an institutional technical expertise in "Sustainable Hillside Agriculture";**
- (ii) **improve the organization and management of the national technology generation and transfer of technology in "On Farm System Research";**
- (iii) **strengthen the operational capabilities in the national institutions for managing rural development; and**
- (iv) **strengthen the country's efforts in improving its agricultural competitiveness.**

The strategic technical cooperation activities to be enhanced and applied can be summarized as:

- (i) **Continuing the research and technical monitoring associated with "Hillside Agriculture". This will be derived from appropriate publications and seminars, designed for possible use in other Caribbean countries. Similarly, it is expected that the Ministry of Agriculture will develop an expertise to deal with the reduction of poverty associated with the low incomes earned from hillside farming.**
- (ii) **Complementing the initiatives undertaken by MINAG and other international and regional agencies in the re-organization and management of research and extension by way of workshops, direct technical assistance, methodologies, etc.**

- (iii) Supporting RADA's institutional management instruments geared to enhance its operational capabilities. Training on those instruments are to take place on a permanent basis, as the institution consolidates its operations.**
- (iv) Continuing support for the public and private sector agricultural development initiatives geared to enhance agricultural competitiveness. Enhanced production from tropical tree crops such as papaya, mango, ackee, provides examples of IICA's potential involvement, as well as the promoting of crop-specific technology for small farmers. Yam production is an example of how to involve small farmers in non-traditional export agriculture, while at the same time developing environmentally friendly techniques.**

IICA's regular financial resources are insufficient to adequately meet the objectives already outlined. In order to increase its actual technical cooperation levels, IICA's resources are to be allocated to those activities that will generate the greater "Institutional Yield". Emphasis will be placed on those activities that are technological sound and complement the efforts of other external funding agencies and donors.

Given the above strategy all efforts and resources are being concentrated on the topics of "Sustainable Hillside Agriculture", "Farming Systems of Small Farmers" and "Agricultural Competitiveness"

PROPOSALS FOR THE 1994, 1995 BIENNium

I. Continuing Programs/Projects

- **Supporting Generation and Transfer of Agricultural Technology within the On-Farm Adaptive Research and Extension (OFAR/E) program.**
- **Supporting the development of Small-Farmer's Hillside Agriculture by activities designed to improve environmental conservation practices.**
- **Supporting national Institutional Building projects, inclusive of in-service training programs.**

II. Other Programs/Projects

- **The Rural Women's Caribbean Assessment Project.**
- **Analyzing the impact of Structural Adjustment Processes on the Agricultural Sector in Jamaica.**
- **Supporting the establishment of the Mini-Sett Yam Project - Phase II.**
- **Assessing Jamaica's agricultural competitiveness.**
- **Institutional support for:**
 - **Establishment of a Tropical Fruit Crops Association;**
 - **Yam Grower's Association.**

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- *Strengthening and formalizing the institutional relations with:*
 - *Jamaica Agricultural Development Foundation (JADF);*
 - *Jamaica Exporters Association (JEA);*
 - *Food and Agricultural Organization (FAO);*
and
 - *Caribbean Agricultural Research and Development Institute (CARDI)*

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ANNEX I

Table 1: Gross Domestic Product, Jamaica (Constant Prices, 1986) 1986 1992

ITEMS	1986	1987	1988	1989	1990	1991	1992
I. FOODS							
1. Agriculture, Forestry & Fishing	849.5	888.7	1,065.4	968.5	1,080.2	1078.3	1,217.0
Annual Change (%)	-	4.6	19.9	(9.1)	11.5	(0.2)	12.9
2. Mining & Quarrying	901.8	955.6	913.0	1,238.1	1,520.5	1,606.7	1,566.9
Annual Change (%)	-	6.0	(4.5)	35.6	22.8	5.7	(2.5)
3. Manufacturing	2,946.7	3,085.2	3,308.3	3,559.4	3,706.4	3,422.6	3,455.4
Annual Change (%)	-	4.7	7.2	7.6	4.1	(7.7)	1.0
4. Construction & Installation	1,086.1	1,240.6	1,424.6	1,680.5	1,707.2	1,718.2	1,725.5
Annual Change (%)	-	14.2	14.8	18.0	1.6	0.6	0.4
TOTAL GOODS	5,784.1	6,170.1	6,711.3	7,446.5	8,014.3	7,825.8	7,963.9
Annual Change (%)	-	6.7	8.8	11.0	7.6	(2.4)	1.8
II SERVICES							
1. Basic Services	1,802.3	1,986.1	2,149.3	2,277.9	2,379.8	2,464.2	2,581.1
Annual Change (%)	-	10.2	8.2	6.0	4.5	3.5	4.7
2. Other Services	6,804.8	7,290.4	7,538.6	7,949.0	8,380.6	8,743.1	9,293.6
Annual Change (%)	-	7.1	3.4	5.4	5.4	4.3	6.3
TOTAL SERVICES	8,607.1	9,275.6	9,687.9	10,266.9	10,760.4	11,207.3	11,874.7
Annual Change (%)	-	7.8	4.4	5.6	5.2	4.2	6.0
III LESS IMPUTED SERVICES CHARGES	678.1	716.6	989.5	1,195.3	1,365.2	1,575.0	2,171.2
IV. TOTAL DOMESTIC PRODUCT	13,713	14,730	15,409.7	16,478.1	17,409.5	17,458.1	17,667.3
Annual Change (%)	-	7.4	4.6	6.9	5.7	0.3	1.2
V. PER CAPITA INCOME (%)							
Annual Change (%)			6,529.5	6,894.6	7,223.9	7,154.9	7,181.8
				5.6	4.8	(1.0)	0.4

Source: Planning Institute of Jamaica - Economic and Social Survey 1992, 1993

ANNEX II

Table 2: Agriculture Sector GDP (Constant Prices, 1986) 1986-1992

ITEMS	1986	1987	1988	1989	1990	1991	1992
National GDP (J\$M)	13,713	14,730	15,409.7	16,478	17,409.5	17,458	17,677.3
Annual Change (%)	-	7.4	4.6	0.3	5.7	0.3	1.2
Agr. Sector GDP (J\$M)							
1. Export Agriculture (J\$M)							
Sugar Cane GDP "	89.0	80.1	103.5	92.7	103.9	110.3	103.3
Others " "	64.1	71.3	59.4	56.8	55.5	48.2	55.5
Sub-Total " "	153.1	151.4	162.9	149.5	159.4	158.5	158.8
Annual Change (%)	-	(1.1)	7.6	(8.2)	6.6	(0.6)	0.2
% SGDP	18.0	17.0	15.3	15.4	14.8	14.7	13.1
2. Domestic Agriculture (J\$M)							
Root Crops "	150.1	159.2	290.9	255.5	303.7	310.0	359.9
Others	278.5	287.9	359.8	317.4	343.7	341.9	436.4
Sub-Total	428.6	447.1	650.7	572.9	647.4	651.9	796.3
Annual Change (%)	-	4.3	45.5	(12.0)	13.0	0.7	22.2
% SGDP	50.4	50.3	61.1	59	59.9	60.5	65.4
3. Livestock & Hunting (J\$M)	185.7	204.4	167.6	170.3	205.5	200.8	195.0
Annual Change (%)	-	10.1	(18.0)	1.6	20.7	(2.3)	(2.9)
% SGDP	21.9	23.0	15.7	17.6	19.0	18.6	16.0
4. Fishing (J\$M)	55.0	54.3	48.9	50.0	53.9	51.9	51.7
Annual Change (%)	-	(1.3)	(9.9)	2.2	7.8	(3.7)	(0.4)
% SGDP	6.5	6.1	4.6	5.2	5.0	4.8	4.3
5. Forestry & Logging (J\$M)	27.1	31.5	35.3	25.7	14.0	15.2	15.2
Annual Change (%)	-	16.2	12.1	(27.2)	(45.5)	8.6	0.0
% SGDP	3.2	3.6	3.3	2.6	1.3	1.4	1.2
6. Total SGDP (J\$M)	849.5	888.7	1,065.4	968.4	1,080.2	1,078.3	1,217.0
Annual Change (%)	-	4.6	19.9	(9.1)	11.5	(0.2)	12.9
% SGDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% National GDP	6.2	6.0	6.9	5.9	6.2	6.2	6.9

Source: Basic data from Planning Institute of Jamaica, Economic and Social Survey of Jamaica, 1991, 1992



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