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DOMINICA COUNTRY PAPER

Submission by the Ministry of Agriculture,
Dominica

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UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA Office for the Caribbean

DOMINICA COUNTRY PAPER

SUBMISSION BY THE MINISTRY OF AGRICULTURE, DOMINICA

AGRICULTURE AND THE ECONOMY (DOMINICA)

With no proven deposits of commercially valuable minerals and the under-developed nature of tourism, manufacturing and industry, agriculture traditionally has been, and currently is the predominant sector of the Dominican economy.

The sector contributes over 90% to export earnings, 40% of G.D.P. and 35% of employment. Further, 70% of Dominica's population live in the rural areas, where agriculture is for all practical purposes the one important economic activity.

The above situation has been reflected in Government's policy of economic development in which agriculture occupies a central position.

The following capital allocations for the financial years 1978/79 - 1982/83 illustrate that fact:-

	(<u>EC\$000,000</u>)				
	1978/79	1979/80	1980/81	1981/82	1982/83
Agriculture	15.5	42.79	37.6	24.4	34.5
Education and Health Communications	11.70	20.97	13.1	15.3	20
Works + Tourism	39.42	9.46	19.1	41.0	22
Home Affairs + Housing	10.25	5.39	19.1	15.5	-

Agricultural Research Policy

The Government of Dominica contributes annually to the financing of CARDI, the Regional Research Organization. The Government of Dominica also supports a local CARDI office and its research activities in Dominica.

Up until very recently, besides the work done by CARDI and WINBAN Research very little other research was done.

In 1982, a Research Unit was set up within the Ministry of Agriculture because the need for research into problems, peculiar and urgent to the farmers in Dominica, was realised as CARDI's research perspective, though relevant to Dominica's needs is more regionally oriented.

The Ministry of Agriculture, CARDI and the French Technical Co-operation group (FTC) sat together and drew up an Agricultural Research Programme, aimed at ensuring maximum co-ordination in activities between the three groups.

Government's policy on agriculture includes areas such as:

- (1) Import substitution;
- (2) Self-sufficiency in food production where possible;
- (3) Export to the region and extra-regionally;
- (4) Diversification of the agricultural base;
- (5) Development of agro-industry;
- (6) Improvement in the standard of farming and living of the farmers.

In the formulation of research policy therefore, three criteria are followed:

- Keep within Government's policy on agriculture, as far as possible;
- (2) Problem -oriented projects directly from the farmers' needs;
- (3) Complement work done by other regional research organisations.

As far as the determination of research priorities is concerned, three factors are taken into consideration: one, the seriousness of the problem, two, the importance of the crop to farmers and the economy and thirdly, the availability of resources.

STRUCTURAL ORGANISATION

MINISTRY OF AGRICULTURE, FISHERIES, FORESTRY + CO-OPERATIVES

Minister

Permanent Secretary

Chief Agricultural Officer

Other Research
Organisations

Division of Agriculture

CARDI

Research Unit Livestock Crop Protection Produce Chemist

FTC

WINBAN

Co-ordinated Research Programme

The Research Unit, headed by the Crop Research Officer (CRO), is a department of the Division of Agriculture, headed by the Chief Agricultural Officer, (CAO), which in turn forms part of the Ministry of Agriculture, Fisheries, Forestry and Co-operatives, headed by the Minister and his Permanent Secretary.

There is close co-operation between the Research Unit and the other departments of the Division of Agriculture such as Livestock, Crop Protection, Produce Chemist, Land Use, Extension Services.

Direct contact, through the CAO and CRO is maintained with the other research organisations such as CARDI, FTC and WINBAN.

The Ministry of Agriculture maintains six agricultural stations on which some research work is done by the Ministry as well as by CARDI and FTC.

MANAGEMENT OF AGRICULTURAL RESEARCH PROGRAMMES AND PROJECTS.

Bi-annual meetings, chaired by the CAO are held, attended by the Ministry of Agriculture, CARDI, FTC and WINBAN at which the progress of various research activities is discussed.

Some of the agricultural research projects underway include:

	<u>Title</u>	Researcher	Objectives	Time Frame
(1)	Small Farm Systems Project	CARDI	Monitor and analyse small farm systems and make interventions for improving overall efficiency of farms	1982 - 87
(2)	Livestock Manage- ment for higher productivity	CARDI Min. Agr.	Develop models of low cost livestock housing; improved fodder pro- duction; composting of waste and reduce labour requirements	1982 - 85
(3)	Virus tested Yam Multiplication	CARDI/FTC Min. Agr.	Produce virus tested Yam; Planting material of Alata and Trifida cultivars to plant 20 acres per year	1982 - 85
(4)	Tannia and Dasheen Improvement	CARDĮ	Identification of highest yielding cultivar locally, regionally and extraregionally, and selection for tolerance to TCB disease	1983 - 85
(5)	Tannia Leaf Burning Disease studies	CARDI Min. Agr.	Development of a crop Management method to control TCB disease	1982 - 85
(6)	Ripening Indices of Avocadoes and Mangoes	Min. Agr.	Determination of optimum harvesting schedules for the different varieties of Avocado and Mango	1983 - 85
(7)	Integrated Pest Management of Coffee Leaf Miner Citrus Weevil	Min. Agr.	Determine life cycles and management pro- cedures for these pests	1983 - 85
(8)	Evaluation of cultivars Cashew/Aloes	Min. Agr.	Develop a technological package for production	1977 - 86
(9)	New Teaching Method co-operative for Farmers	FTC	Establishment of training centre for farmers and extension agents and an effective co-operative to service farmers with inputs and information	1982 - 88

	<u>Title</u>	Researcher	<u>Objectives</u>	Time Frame
(10)	Testing methods of Drying and freezing various crops	Min. Agr.	Develop methods of drying and freezing root crops to shelf life and for candied fruits	1982 - 84

Major constraints to agricultural research include:-

Insufficient funds for staff and equipment

Research	Budget	Ministry	of	Agriculture
YEAR				•
1981/82		159,000		
1983/83		162,620		
1983/84		84,850		

HUMAN RESOURCE DEVELOPMENT

The institutions formally involved in agricultural research are the Ministry of Agriculture, CARDI and the French Technical Co-operation (FTC).

The resources available to agricultural research are as follows:

	Full Time Researcher	Equipment		Infrastructure		
		Vehicles	Tractors	Station	Labs.	Office
Min. Agr.	1 MSc (Crop Protec- tion)	0	7	6	1	1
CARDI	1 MSc	3	0	0	1	1
	2 BSc					
	1 Assistant				-	
FTC	2 BSc	2	0	0	0	1

The agricultural stations, office space, laboratory, labour and equipment of the Ministry of Agriculture, are available and actively utilized by all three research organizations. The FTC is embarked on the building of a centre in La Plaine and the housing of CARDI on a Government site is being considered.

Other technical staff within the Ministry of Agriculture include:

- 1 MSc Agriculture Engineering (Land Use)
- 1 MSc Plant Pathology (on 1 year's study leave)
- 1 MSc Rural Development Planning
- 2 Veterinarians
- 2 BSc Food Technology
- 2 BSc Agricultural Economics
- 3 BSc Livestock
- 1 BSc Agronomy
- 1 BSc Agricultural Engineering
- 6 JSA Diploma graduates

Ministry of Agriculture staff presently on training:

- 1 MSc Livestock
- 3 BSc Agriculture
- 2 Diploma (ECIAF)

Our main limitations now are in the disciplines of Entomology, Agronomy and Animal Nutrition.

EXTERNAL RELATIONSHIPS

Organisations such as CIMMYT, CIAT, TDRI, CARDI, INRA and UWI have provided both technical assistance and in-service training.

Other organisations such as CDB, IICA, USAID, FAO and EDF, have provided assistance through funding of specific projects and technical assistance.

The Ministry of Agriculture remains in close touch with all these organisations.

Transmission of Information and Technology

Because of the close working relationship between the Crop Research Unit and the Extension Department, research results are immediately transferred to the farmer through direct contact.

The research work done on the agricultural stations serve as demonstrations to the farmers in the area and field days are held with farmers to discuss the results.

Direct on-farm trials also serve to bring the result home to the farmers.

The Ministry of Agriculture has an Information Unit which produces regular radio programmes in English and Patois, on which research results are communicated to the farming community (evaluated and discussed). Quarterly Information Bulletin, Agricultural News are produced by this Unit.

CARDI's research results are disseminated through their own information network, but also through the extension department, of the Ministry of Agriculture, directly to the farmers. They also have several on-farm trials and field days which help to bring the results to the farmers.

Results relevant to specific crops are transmitted directly to their commodity associations for dissemination among their membership.

The main constraints to acceptance of results by farmers are:

- Lack of funds and equipment;
- (2) Poor marketing;
- (3) Reluctance to change old ways.

Information as to the value of research reaches the Research Unit through direct contact with farmers, through the extension officers or from the commodity association.

EVALUATION

Formerly, little evaluation of research work was done due to the unorganized way in which research was carried out.

However, farmers do not hesitate to make their thoughts known, and many of them give their comments, criticisms and advice directly to the extension officers.

Now, an annual evaluation session with the researchers, farmers and other involved persons is planned at which research results applied, and to be applied, will be discussed and evaluated.

In the final analysis, evaluation of research results is based on two criteria:

- (1) Adoption by farmers;
- (2) Increase in production or efficiency of the farmer.

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