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BARBADOS COUNTRY PAPER

Submission by the Ministry of Agriculture, Food and Consumer Affairs, Barbados

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UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA Office for the Caribbean

BARBADOS COUNTRY PAPER

SUBMISSION BY THE MINISTRY OF AGRICULTURE, FOOD AND CONSUMER AFFAIRS BARBADOS

Prepared by

J.P.W. Jeffers
Deputy Chief Agricultural Officer
(Research)

1. Agricultural Research Policy of the Country

- a) The procedures for formulation of Research Policy and priorities have been determined in the past by the Planning Unit of the Ministry of Agriculture in consultation with the Technical Officers of the Ministry and the farming community. These perceived needs are examined against the country's Development Plan;
- b) Priority research objectives are mainly problem-oriented and to some extent commodity-oriented. For example, when an outbreak of root borers in sugar cane occured some time ago, a thrust made to deal with that situation, and personnel and funds made available; and
- c) The staff of the Ministry and the funds are limited. As a result, resources are not allocated on a priority basis. An annual plan of work is prepared according to a combination of desciplines and perceived need. Work is then carried out depending on the financial resources allocated to the area.

2. Structural Organization of the National Agricultural Research System

a) The National Research System is the responsibility of the Deputy Chief Agricultural Officers, who in turn reports to the Chief Agricultural Officer. The Chief Agricultural Officer and Permanent Secretary are the joint heads of the Ministry (Technical and Administration) and they together

with the Minister are the Policy-makers. Recently, a National Agricultural Advisory Committee has been established. Its function is to advise the Minister on all or any aspect of agriculture;

- b) The organizations' participation in the system are:
 - i. In the public sector, the Ministry of Agriculture, Food and Consumer Affairs.

The staff and budget of the Ministry's research section is as follows:

Research Budget (\$Bds)	1978-79	1979-80	1980-81	1981-82	1982-83
Agronomy (includes staff and labour)	1,285,180	1,322,490	1,403,380	1,365,149	2,018,016
Livestock	1,273,495	1,137,962	1,223,561	1,494,601	1,876,251

Staff allocated to research is as follows:

- 1 Deputy Chief Agricultural Officer)
 8 Agronomists)
 2 Entomologists)
 1 Agricultural Engineer)
 1 Veterinarian) Professionally qualified
 1 Animal Nutrition Officer)
 6 Animal Husbandry Officers)
 30 Supporting Technical Staff)
- ii. The Agronomy Research Unit of the Barbados Sugar Producers Association; and
- iii. Caribbean Agricultural Research and Development Institute (CARDI) 2 Agronomists; 2 Entomologists.
 - The Ministry of Agriculture has a meeting at the start of each year and all organizations are represented. In this way work is programmed and can be carried out without duplication of effort and with the possibility of complementary and supplementary efforts; and
- c) The National System is set up by discipline. The main ones being Agronomy, Entomology (Chemical and Biological Control), Plant Pathology, Animal Nutrition, Animal Husbandry, Veterinary Medicine and Agricultural Engineering.

The Agronomy is done at the Central Agricultural Research Station, and the Livestock work at the Central Livestock and Animal Nutrition Station.

3. The Management of Agricultural Research Programmes and Projects

a) Individual areas e.g. Agronomy, prepare programmes and projects in August. These are budget proposals and are submitted to the Ministry of Finance for inclusion in the annual budget. This budget is for the financial year April to March.

In January, the research staff meets to plan their work for the calender year. At this meeting, the Ministry staff as well as representatives of other organizations and of farmers meet to plan the annual programme;

b) Major projects are:

Plant Protection

- i. Control of Sugar cane Pests; and
- ii. Control of Food Crop Pests.

These are on-going projects and have two Entomologists and 15 others in this programme. Transport, and field equipment as well as two equipped laboratories are allocated to this section. Main achievements are the effective control of cane borer and many other crop pests. Main weakness is shortage of funds and staff.

Agronomy

Sugar Cane Agronomy Vegetable Production Root Crops Pulses

These are all on-going projects and have 5 agronomists,
7 technicians and station labour. Objectives are to help
the diversification project to reduce the dependence on foreign

food and conserve foreign currency. Main achievements have been in the area of Sugar Cane Agronomy and the dramatic increase in vegetable production in the last 10 years. Main weakness is the lack of funds and staff.

Livestock

Development of Local Feeds
Sheep Development

In the last 5 years, considerable efforts have been made in developing sugar cane based feeds, and more recently on the use of River Tamarind. The staff, laboratory facilities and funds are limiting.

Much work has also been done on the development of the local Black Belly Sheep. Funds are also limiting in this area; and

c) Total Research Budget 1982-83 \$Bds. 4,178,424.

 Capital
 \$ 284,167

 Staff
 \$1,090,830

 Operating expenses
 \$2,793,427

4. Human Resource Development

a) Research staff:

8 Agronomists
2 MSc. 6 BSc.
2 Entomologists
1 Agricultural Engineer (Soil and Water)
1 Veterinarian
1 Animal Nutrition
6 Animal Husbandry Officers
1 MSc. 5 BSc.
30 Technical Staff
2 MSc. 6 BSc.
1 PhD. 1 MSc.
MSc.
1 MSc. 5 BSc.
Diplomas in Agriculture

There is need for a Plant Pathologist, Power and Machinery Engineer and an Agronomist (Fruiticulture);

- b) Due to the world wide recession, overseas training has been suspended. There are areas of need but the training now available is local in-service training; and
- c) There has been staff loss recently. Some has been due to age, others have been due to better salary offers outside the public service.

5. External Relationship

So far the main links with international or regional organizations have been with IICA, CIAT, CARDI and UWI. With IICA and CIAT the relations have been mainly in the areas of technical assistance and technology transfers. With respect to CARDI and UWI, the exchange has been more limited. CARDI has done some collaborative work on onions and sheep and contact with UWI is sparse.

6. Transmission of Information and Technology

- a) The main approaches to transferring research findings has been through the Extension staff. In addition, there is the direct connection between researchers and farmers. There are some on-farm trials as well, but these have not been as successful as radio and bulletins. One bulletin in particular "Crop Recommendations" is very widely sought;
- b) Apart from Sugar Cane trials, perhaps only 1% of the research resources are devoted to on-farm trials. The main constraint to adoption is gaining the confidence of the farmer. It is difficult to persuade farmers to adopt new practices if they are not able to dispose of produce from old practices and unimproved varieties; and
- c) Information on the value or need for research is most commonly transmitted directly to researchers by farmers and also through extension workers. Of late, in a few areas, notably poultry and dairy farmers, pressure groups have been making their presence felt.

7. Evaluation

In the past, we have been fortunate in that we have been able to see positive results from most of our work without any conscious evaluation. It is now becoming increasingly difficult to determine, not to mention evaluate progress as increments of improvement get smaller and smaller. It is essential therefore that some method of evaluation be built into future programmes in order to get an objective and accurate assessment of our work.

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