

PROJECT ASSISTANCE COMPLETION REPORT

Project Title: Farming Systems Research and
Development (FSRD)

Project Number: 538-0099

Funding Period: 07/15/83 to 03/31/89

LOP Funding: \$7,550,000 Grant

Implementing Agency: Caribbean Agricultural Research &
Development Institute (CARDI)

PACD: 03/31/89

I. Background and Purpose

The evolution of the Caribbean Agricultural Research and Development Institute (CARDI) over its relatively short life can be divided into three phases. During the establishment phase (1975-78), the Institute concentrated on carrying out high quality adaptive research at CARDI headquarters in Trinidad with small units in Jamaica and Barbados.

The decentralization phase (1979-86) involved steady growth to meet a wider range of problems from member countries and an increased emphasis on small farmers and domestic crops. During this phase, CARDI established an active research program with scientists working in all member states, and with the help of external funding (primarily from USAID), embarked on a major program using the farming systems methodology.

The current phase is one of consolidation of existing programs and diversification into non-traditional export crops to more effectively address the needs of OECS member states. This stage involves identifying and overcoming weaknesses in the Institution, better focusing the research efforts to achieve greater impact, and establishing linkages with other institutions to strengthen the region's capacity to carry out quality research.

USAID provided previous support to CARDI in the Small Farm Multiple Cropping Systems Project (1978-83). The FSRD Project was designed to develop an effective and sustainable Farming Systems Research and Development (FSRD) program in CARDI that is responsive to agricultural needs in Eastern Caribbean countries.

The Project consisted of three interrelated outputs:

- (1) Technology Generation to produce economically viable farm level technological improvements in selected crops, livestock and crop/livestock combinations.
- (2) Technology Transfer to develop methods to systematically transfer technological improvements to extension agents, private enterprises and farmers.
- (3) Institution Building to develop and strengthen the administrative systems required to support and sustain FSRD and other technical programs.

II. Description of Project Inputs

AID contributions to the Project included:

- (1) Personnel costs (\$1,890,000) to cover, on a decreasing basis over the life of the Project, ten technical specialists, country team members not funded by individual countries and selected management support costs.
- (2) Equipment and Supplies (\$1,110,000) for regional offices and experiment stations.
- (3) Operating expenses (\$950,000) of maintaining two regional offices and to cover on-farm research and on-island travel.
- (4) Regional travel (\$400,000) for all Project personnel having technical and/or administrative responsibilities.
- (5) Technical assistance (\$1,960,000) in the areas of research management, farming systems and various technical areas.
- (6) Short-term training (\$390,000) for essential staff development.
- (7) Two external evaluations (\$300,000).

CARDI, through the grant provided by AID, was responsible for all major Project inputs except technical assistance and offshore procurement. AID entered into a \$2.85 million contract with the South-East Consortium for International Development (SECID) to provide T.A. and offshore procurement.

Early on in the Project, it was concluded that CARDI could not assume Project personnel costs on an increasing basis over the life of the Project. Therefore, Amendment No. 4 to the PROAG dated June 12, 1985 reduced the CARDI contribution by half and put off CARDI assumption of personnel costs until the end of the Project. Because of a delay in initiation of the SECID Contract, RDO/C was able to reduce the level of effort and estimated funding of the Contract by \$800,000 and use these funds to cover the additional personnel costs.

III. Project Accomplishments

In addition to adapting a methodology suitable to Eastern Caribbean conditions, the Project helped build a cadre of trained staff and developed several improved technologies which were adopted at the farm level. These technologies include: propagation of yams using "mini-sets"; the identification of a yam variety which is much more tolerant to anthracnose; evaluation and release of white and sweet potato varieties; initiation of LPM controls for cabbage insect problems; adaptation and demonstration of top-working of mangoes for export markets; the identification of the causal organism of the tannia "burning" disease along with simple controls which will allow cultivation of tannia over a much wider area; and distribution to farmers of improved planting materials for grains and rootcrops. The project also established a very important linkage between CARDI and the SECID through the technical assistance which SECID provided to improve research methodology, personnel management and computerization.

On the institutional development side the Project resulted in the development and implementation of: a structured annual planning, budgeting and reporting process; a micro-computer-based management system; a strategic plan; a performance appraisal system and planning and evaluation unit.

The Project also developed CARDI staff skills in planning and implementation and helped CARDI to develop the capability to assist OECS countries. In addition, the Project, with the assistance of AID staff, helped CARDI to develop important contacts and relationships with a wide variety of regional and international entities such as the University of the West Indies (UWI), the International Institute for Cooperation in Agriculture (IICA) and the Consultative Group for International Agricultural Research (CGIAR).

During the last year of the Project, CARDI assumed payment of 13 of the 20 professional personnel previously paid with Project funds.

IV. Project Impact

The Project has been at least partially responsible for transforming CARDI into a viable, financially sound institution capable of responding to the challenge of changing agricultural opportunities in the region.

Evidence of this transformation is the 5-year CARDI Strategic Plan, the annual planning process which CARDI now routinely goes through, the successful shift from academic research to adaptive research at the farm level, the stability and quality of leadership over the past three years, the support which CARDI now enjoys from core contributors and donors alike, the recognition which CARDI has received from the CGIAR and the relationship which CARDI is establishing with UWI. CARDI recently demonstrated its dynamism through its quick response to a recent invasion of the Eastern Caribbean by African locusts.

V. Continued AID Monitoring Requirements

RDO /C has just signed an agreement with CARDI for implementation of the Agricultural Research and Extension Project (AREP). This Project will build on the accomplishments of the FSRD Project to help CARDI develop new technologies for the diversification of agriculture in the Eastern Caribbean. The central theme of the project is a closer working relationship between research and extension. Considerable emphasis will be placed on coordination of activities between

CARDI, UWI and national extension services. Monitoring of the continued institutional growth of CARDI will occur through implementation of AREP.

VI. Lessons Learned

1. Organizational change is slow in an institution such as CARDI and therefore support is required until these changes become a permanent part of the institutional culture.
2. It is not merely sufficient to develop good internal technical and administrative/management systems. An institution such as CARDI also needs to develop the external linkages with a wide variety of regional and international organizations, Ministries of Agriculture and private sector groups if it is to make the most of its scarce resources and garner the necessary financial and political support.
3. There is a mutual benefit to long-term technical assistance relationships such as that enjoyed by CARDI with SECID under this Project. West Indian scientists have access to a very broad range of technical expertise and training opportunities and U.S. scientists are able to test their assumptions under different geographic and cultural conditions.

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