

# A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

*PDKAL988*

IDENTIFICATION DATA

<b>A. REPORTING A.I.D. UNIT</b> <u>RDO/C</u> (Mission or AID/W Office)  (ES#538-87-06 )	<b>B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?</b>  yes <input type="checkbox"/> slipped <input type="checkbox"/> ad hoc <input type="checkbox"/>  Eval Plan Submission Date FY <u>87</u> Q <u>1st</u>	<b>C. EVALUATION TIMING</b>  Interim <input type="checkbox"/> final <input checked="" type="checkbox"/> ex post <input type="checkbox"/> other <input type="checkbox"/>			
<b>D. ACTIVITY OR ACTIVITIES EVALUATED</b> (List the following information for project(s) or program(s) evaluated, if not applicable, list title and date of the evaluation report)					
Project #	Project/Program Title (or title & date of evaluation report)	First PROAG or equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost ('000)	Amount Obligated to Date ('000)
538-0101	St. Vincent Agricultural Development Project	84	11/87	\$2,000	\$2,000

ACTIONS

<b>E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR</b>  <p style="text-align: center;">Action(s) Required</p>  No action decisions were made by the Mission as a result of this evaluation.  The sole recommendation made by the evaluation was that technical assistance be extended to assist with counterpart development. The Mission had decided to extend the PACD prior to the evaluation.	<b>Name of officer responsible for Action</b>	<b>Date Action to be Completed</b>
(Attach extra sheet if necessary)		

APPROVALS

**F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION** mo 11 day 19 yr 86

**G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS**

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer
Signature Typed Name	<i>[Signature]</i> David Muechler	<i>[Signature]</i> Darwin Clarke	<i>[Signature]</i> James S. Holtaway
Date	<u>09/30/87</u>	<u>N/A</u>	<u>01/31/87</u>

Mission or AID/W Office Director: *[Signature]*  
 Date: 01/20/87

FILE /X

## H. EVALUATION ABSTRACT (do not exceed the space provided)

The Project was designed assist the Government of St. Vincent and the Grenadines (GOSVG) to increase net incomes of small farmers and to increase foreign exchange earnings from agricultural exports. The Project is being implemented by the GOSVG Ministry of Trade, Industry and Agriculture (MTIA) and a local PVO, the Organization for Rural Development (ORD), with RONCO Consulting Corporation as the prime contractor. This evaluation (08/86) was conducted by a three-person MUCIA team on the basis of a review of project documents, structured interviews with project personnel, government officials, farmers, traders and local agriculturalists and observation visits. The purpose of the evaluation was to review the impact, accomplishments, and strategic significance of the Project as well as the appropriateness of its design. The major findings and conclusions are:

In general terms the original design of the project was appropriate at the time it was created. However, a number of political and economic factors during the early stages of implementation led to major shifts in activities, abandonment of some and addition of new activities.

The project achieved some measure of success in the production and data gathering activities. The most notable success was the production input supply credit activity which was implemented by ORD. However, the marketing and research components were less than successful and there was a lack of institutionalization of activities.

The primary conclusion is that the Project should have been implemented with balanced emphasis to lessen production/marketing constraints for crops aimed at both extraregional and regional markets. A disproportionate share of resources were channeled towards crops for the extra regional markets and in the end failed mainly because of transportation constraints.

The evaluation team recommended that technical assistance in the areas of statistics and marketing be extended to provide selected training with a view to institutionalizing these activities.

## I. EVALUATION COSTS

1 Evaluation Team Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
Donald Johnson	MUCIA	Contract No.	\$35,918	PD&S
Lynn Forster	(Midwest Universities Consortium for Int'l Activities, Inc.)	TSM· LAC-0000-I-00-2023-00, WO#10		
Corrine Glesne		PIO/T· 538-0000-3-60230		

2 Mission/Office Professional Staff Person-Days (estimate) 8

3 Borrower/Grantee Professional Staff Person Days (estimate) \_\_\_\_\_

# EVALUATION SUMMARY PART II

## J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)

Address the following items.

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office RDO/C

Date this summary prepared July 31, 1987

Title and Date of Full Evaluation Report. Evaluation of the St. Vincent Agricultural Development Project (No. 538-0101), 09/30/86

This Project was designed to address fundamental production and marketing constraints to increasing the net incomes of small farmers and foreign exchange earnings from agricultural exports in St. Vincent and the Grenadines. The Project strategy was to provide resources to lessen these constraints through (a) identification of commodities with a strong market potential (b) support to increase small-farmer productivity and marketing efficiency for these potentially profitable commodities and (c) development of a public sector agricultural planning capability. To this end the design focussed on four areas (a) technology generation and application, (b) production inputs, (c) marketing services and (d) agricultural data gathering and analysis. A commodity specific approach was used in order to provide a practical model for the GOSVG in expanding opportunities for small farmer production and marketing of export crops. This initiative was designed to support the Mission's overall and sector strategy of export-led growth in St. Vincent and the Grenadines.

The purpose of the evaluation was to determine how effective the Project has been in addressing the abovementioned constraints and the extent of its impact on the production and exports of specific commodities and the development of agricultural planning data collection and analysis in the MTIA. The methodology used in conducting the evaluation consisted mainly of a review of project documentation, interviews, and field observation. Interviews were conducted with RDO/C staff, Contractor project staff, host country policy makers, members of the ORD, farmers, and traders. The approach was to consider each activity in terms of relevance of the original estimate, actual outputs and measurable impact.

The major findings and conclusions are as follows:

### Findings

#### Production Research

In order to increase small farmer productivity, improvements were to be made in agricultural research. Progress with this activity was marginal in two aspects. Firstly, a minimum of six farming seasons were to be used with at least twelve varieties of four crops tested in each season. In the event, only limited trials were conducted for three crops. Also the adoption rate was such that it did not result in a doubling of output as anticipated by the project designers. Secondly, little progress was made with upgrading the MTIA research facilities and equipment. In particular, the sorely needed soil testing and analysis equipment was deleted from the list of priorities.

SUMMARY

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Crop Production: The revolving credit fund of \$100,000 for small farmers' inputs appears to be the most successful activity of the Project. It was well implemented by ORD with low default rates (approximately 20%) and provided access to credit for 625 farmers. Unfortunately poor fertilizer quality prevented farmers from realizing total benefits. Specific benefits for farmers have been the following improved distribution system for inputs; reduced transaction costs; use of more appropriate fertilizers; and farmers' increased confidence in ORD.

Marketing: Few of the several discrete interventions to improve marketing efficiency were accomplished. For example, the short-term storage facility for traders was designed but not yet constructed. A pilot storage facility for a selected crop was not built and research to identify varieties and methods to improve storage life was no longer considered priority. Packaging materials were not yet made available to traders and very little training or technical assistance was provided for them. No attempt had been made to establish forward contracts between farmers and traders (except at ORD's initiative) or to establish a price information system. On a more positive note grades and standards were being established for most crops.

The Agricultural Sector Data Collection and Analysis: This component was the most costly part of the Project (\$925,000) with numerous sub-components. The agricultural census sub-component was well conceived, designed and implemented. The reliability rate of the data is estimated as high as 85%. Potential long-term benefits can accrue to GOSVG policy makers and international donors who use the data. The statistical unit staff did not receive training nor were their skills upgraded in other relevant forms of statistical analysis. No special studies were undertaken as originally planned. The planned addition to the MTIA office building was under construction and when completed will increase the space considerably; but it is not the size expected by the GOSVG nor will it totally eliminate inadequate working conditions.

A specific plan for appropriate pesticide management was elaborated in the project design. At the time of the evaluation no project related activities were initiated in the area of pesticide safety and the amount allocated (\$15,000) seemed totally inadequate for the task.

The Winter Vegetable Pilot Activity was added to the list of components several months into the implementation process. The genesis of this activity appears to have been a combination of external factors, significant among which was the demise of the regional marketing protocol which limited the markets for the four crops initially identified. Essentially the production aspect of the pilot was successful as it resulted in high quality produce and acceptable yields. However, problems with faulty business plan assumptions and transportation to markets resulted in financial losses. The 'core farm and small holder approach' envisioned under this pilot failed to take into account the differences in technology available to the large core farm versus the small holder, which would not seem to make the venture favorable for the small farmer, who is supposed to be the target beneficiary. Ultimately the pilot activity adversely affected implementation of the other components both financially and in terms of staff time.

## Conclusions

The overall design of the Project seems to have been generally appropriate to the setting at that time, in that it realistically identified and attempted to address a majority of the bottlenecks facing Vincentian agriculture. With certain exceptions, the targets were achievable and the assumptions realistic. Exceptions include overly optimistic research goals, and assumptions concerning the GSOVG absorptive capacity for technical assistance, the omission of a market identification component and the absence of adequate funding for research equipment. External factors intervened and significantly impacted on the priorities and the direction of the Project. The relatively high proportion of technical assistance costs (50%) compared to other expenditures tended to reduce the visual impact of the overall Project. Never-the-less, several sub-components and activities were being accomplished which hold the promise of developmental impact for the future. The research component should lead to the selection of higher yielding varieties of two crops. The ORD revolving credit fund supply component is benefiting small farmers. Under the marketing component, the short-term storage facility can still be completed, grades and standards will have been established for export crops and traders are more conscious of the quality of produce. The agricultural census will be useful to GOSVG planners and donors. One major disappointment, however, has been the lack of institutionalization of project activities. To this end the evaluation team recommended an extension of the contract for the Survey Statistician and the Marketing Advisor.

## Lessons Learned

The report did not include a section on lessons learned but the following have emerged:

- o Care must be taken not to impose overly ambitious targets for crop research activities, particularly where the capacity of the grantee is limited and production of the crops selected are subject to vagaries of external forces over which there is no control.
- o Market identification is important before venturing into the production of crops for any market, whether it be local, regional or international.
- o Where a significant new component is added to a project, designers should ensure that original planned activities can still be carried out or make necessary changes to allow for short falls.
- o If the conditions obtaining at the outset of the project change the underlying assumptions and possibilities for project achievements should be reassessed and piecemeal implementation should be avoided.
- o Institutionalization requires the early identification of counterparts to work closely with expatriate advisors.

ATTACHMENTS

Evaluation Report including Scope of Work

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

The Mission has mixed views about the evaluations' report. While the team presented a fairly comprehensive report it includes from the Mission's standpoint some biases based on limits in the methodological approach. For example in the Mission's view too little time was spent in the field to fully utilize interviewing opportunities. Thus while the team held an extensive interview with the former Minister of Agriculture, their discussion with the current Minister was brief and conducted by telephone. In addition, the Permanent Secretary with whom they met was new to the Ministry and was not familiar with the project background.

The Mission disagrees with the evaluator's observation that the winter vegetable pilot activity was a radical shift away from the project's goal to increase the net incomes of small farmers. Although not mentioned by the evaluators, the strategy for this activity included assisting small farmers to produce labor intensive niche crops. Further, part of the project goal was to increase foreign exchange earnings through extra regional exports. Thus the Winter Vegetable pilot activity accords with Mission strategy which contends that sustained expansion of Agriculture in the Eastern Caribbean depends on the ability of the region to produce commodities for niche markets in North America and Europe.

MISSION COMMENTS ON FULL REPORT

**INSTRUCTIONS FOR COMPLETING AND SUBMITTING  
"A.I.D. EVALUATION SUMMARY"**

This form has two parts. Part I contains information to support future A.I.D. management action, and to process the evaluation into A.I.D.'s automated "memory". Part II is a self-contained summary of key elements of the full evaluation report, it can be distributed separately to interested A.I.D. staff.

**WHAT WILL THIS FORM BE USED FOR?**

- Record of the decisions reached by responsible officials, so that the principals involved in the activity or activities evaluated are clear about their subsequent responsibilities, and so that headquarters are aware of anticipated actions by the reporting unit.
- Notification that an evaluation has been completed, either as planned in the current Annual Evaluation Plan or for *ad hoc* reasons.
- Summary of findings at the time of the evaluation, for use in answering queries and for directing interested readers to the full evaluation report.
- Suggestions about lessons learned for use in planning and reviewing other activities of a similar nature. This form as well as the full evaluation report are processed by PPC/CDIE into A.I.D.'s automated "memory" for later access by planners and managers.

**WHEN SHOULD THE FORM BE COMPLETED AND SUBMITTED?** After the Mission or AID/W office review of the evaluation, and after the full report has been put into a final draft (i.e., all pertinent comments included). The A.I.D. officer responsible for the evaluation should complete this form. Part of this task may be assigned to others (e.g., the evaluation team can be required to complete the Abstract and the Summary of Findings, Conclusions, and Recommendations). The individual designated as the Mission or AID/W evaluation officer is responsible for ensuring that the form is completed and submitted in a timely fashion.

**WHERE SHOULD THE FORM BE SENT?** A copy of the form *and attachment(s)* should be sent to each of the following three places in AID/Washington:

- The respective Bureau Evaluation Office
- PPC/CDIE/DI/Acquisitions, Room 209 SA-18
- SER/MO/CPM/P, Room B930 NS (please attach A.I.D. Form 5-18 or a 2-way memo and request duplication and standard distribution of 10 copies)

**HOW TO ORDER ADDITIONAL COPIES OF THIS FORM:** Copies of this form can be obtained by sending a "Supplies/Equipment/Services Requisition" (A.I.D. 5-7) to SER/MO/RM, Room 1264 SA-14 in AID/Washington. Indicate the title and number of this form ("A.I.D. Evaluation Summary, A.I.D. \_\_\_\_\_") and the quantity needed.

**PART I (Facesheet and Page 2)**

- A. REPORTING A.I.D. UNIT:** Identify the Mission or AID/W office that initiated the evaluation (e.g., USAID/Senegal, S&T/H). Missions and offices which maintain a serial numbering system for their evaluation reports can use the next line for that purpose (e.g., ES# 87/5).
- B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?** If this form is being submitted close to the date indicated in the current FY Annual Evaluation Plan (or if the final draft of the full evaluation report was submitted close to that date), check "yes". If it is being submitted late or as carried over from a previous year's plan, check "slipped". In either case, indicate on the next line the FY and Quarter in which the evaluation was initially planned. If it is not included in this year's or last year's plan, check "ad hoc".

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- C. EVALUATION TIMING:** If this is an evaluation of a single project or program, check the box most applicable to the timing of the evaluation relative to the anticipated life of the project or program. If this is the last evaluation expected to inform a decision about a subsequently phased or follow-on project, check "final", even though the project may have a year or more to run before its PACD. If this is an evaluation of more than a single project or program, check "other"
- D. ACTIVITY OR ACTIVITIES EVALUATED:** For an evaluation covering more than four projects or programs, only list the title and date of the full evaluation report.
- E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR:** What is the Mission or office going to do based on the findings, conclusions, and recommendations of the evaluation, when are they going to do it, and who will be responsible for the actions required? List *in order of priority or importance* the key actions or decisions to be taken, unresolved issues and any items requiring further study. Identify as appropriate A.I.D. actions, borrower/grantee actions, and actions requiring joint efforts.
- F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION:** Date when the internal Mission or office review was held or completed
- G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:** As appropriate, the ranking representative of the borrower/grantee can sign beside the A.I.D. Project or Program Officer
- H. EVALUATION ABSTRACT:** This one-paragraph abstract will be used by PPC/CDIE to enter information about the evaluation into A.I.D.'s automated "memory". It should invite potentially interested readers to the longer summary in Part II and perhaps ultimately to the full evaluation report. It should inform the reader about the following
- \* If the evaluated activity or activities have characteristics related to the reader's interests
  - \* The key findings, conclusions, and lessons
  - \* An idea of the research methods used and the nature/quality of the data supporting the findings
- Previous abstracts have often been deficient in one of two ways
- \* Too much information on project design, implementation problems, and current project status discourages readers before they can determine if there are important findings of interest to them
  - \* A "remote" tone or style prevents readers from getting a real flavor of the activity or activities evaluated, progress or lack of progress, and major reasons as analyzed by the evaluation
- In sequential sentences, the abstract should convey
- \* The programming reason behind the evaluation, and its timing (e.g., mid-term, final),
  - \* The purpose and basic characteristics of the activities evaluated,
  - \* A summary statement of the overall achievements or lack thereof to date;
  - \* A picture of the status of the activities as disclosed in the full evaluation report,
  - \* An idea of the research method and types of data sources used by the evaluators;
  - \* The most important findings and conclusions, and key lessons learned.

Avoid the passive tense and vague adjectives. Where appropriate, use hard numbers. (An example of an abstract follows, "bullets" may be used to highlight key points)

- 3. Findings and conclusions. Discuss major findings and interpretations related to the questions in the Scope of Work. Note any major assumptions about the activity that proved invalid, including policy related factors. Cite progress since any previous evaluation.
- 4. Principal recommendations for this activity and its offspring (in the mission country or in the office program). Specify the pertinent conclusions for A.I.D. in design and management of the activity, and for approval/disapproval and fundamental changes in any follow-on activities. Note any recommendations from a previous evaluation that are still valid but were not acted upon.
- 5. Lessons learned (for other activities and for A.I.D. generally). This is an opportunity to give A.I.D. colleagues advice about planning and implementation strategies, i.e., how to tackle a similar development problem, key design factors, factors pertinent to management and to evaluation itself. There may be no clear lessons. Don't stretch the findings by presenting vague generalizations in an effort to suggest broadly applicable lessons. If items 3-4 above are succinctly covered, the reader can derive pertinent lessons. On the other hand, don't hold back clear lessons even when these may seem trite or naive. Address
  - Project Design Implications. Findings/conclusions about this activity that bear on the design or management of other similar activities and their assumptions.
  - Broad action implications. Elements which suggest action beyond the activity evaluated, and which need to be considered in designing similar activities in other contexts (e.g., policy requirements, factors in the country that were particularly constraining or supportive).

NOTE: The above outline is identical to the outline recommended for the Executive Summary of the full evaluation report. At the discretion of the Mission or Office, the latter can be copied directly onto this form.

K. **ATTACHMENTS:** Always attach a copy of the full evaluation report. A.I.D. assumes that the bibliography of the full report will include all items considered relevant to the evaluation by the Mission or Office. NOTE: If the Mission or Office has prepared documents that (1) comment in detail on the full report or (2) go into greater detail on matters requiring future A.I.D. action, these can be attached to the A.I.D. Evaluation Summary form or submitted separately via memoranda or cables.

L. **COMMENTS BY MISSION, AID/W AND BORROWER/GRANTEE:** This section summarizes the comments of the Mission, AID/W Office, and the borrower/grantee on the full evaluation report. It should enable the reader to understand their respective views about the usefulness and quality of the evaluation, and why any recommendations may have been rejected. It can cover the following:

- To what extent does the evaluation meet the demands of the scope of work? Does the evaluation provide answers to the questions posed? Does it surface unforeseen issues of potential interest or concern to the Mission or Office?
- Did the evaluators spend sufficient time in the field to fully understand the activity, its impacts, and the problems encountered in managing the activity?
- Did any of the evaluators show particular biases which staff believe affected the findings? Avoid *ad hominem* discussions but cite objective evidence such as data overlooked, gaps in interviews, statements suggesting a lack of objectivity, weaknesses in data underlying principal conclusions and recommendations.
- Did the evaluation employ innovative methods which would be applicable and useful in evaluating other projects known to the Mission or Office? Note the development of proxy measures of impact or benefit, efforts to construct baseline data; techniques that were particularly effective in isolating the effects of the activity from other concurrent factors.
- Do the findings and lessons learned that are cited in the report generally concur with the conclusions reached by A.I.D. staff and well-informed host country officials? Do lower priority findings in the evaluation warrant greater emphasis?

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### EXAMPLE OF AN ABSTRACT

The project aims to help the Government of Zaire (GOZ) establish a self-sustaining primary health care (PHC) system in 50 rural health zones (RHZ). The project is being implemented by the Church of Christ in Zaire and the GOZ's PHC Office. This mid-term evaluation (8/81-4/84) was conducted by a GOZ USAID/Z team on the basis of a review of project documents (including a 4/84 project activity report), visits to nine RHZ's, and interviews with project personnel. The purpose was to clarify some uncertainties about the initial design and set future priorities for activities. The major findings and conclusions are:

- This well-managed and coordinated project should attain most objectives by its 1986 end.
- Progress has been good in establishing RHZ's, converting dispensaries into health centers, installing latrines (over double the target), and training medical zone chiefs, nurses, and auxiliary health workers. Long-term training has lagged however, and family planning and well construction targets have proven unviable.
- The initial assumption that doctors and nurses can organize and train village health committees seems invalid.
- User fees at health centers are insufficient to cover service costs. A.I.D.'s PRICOR project is currently studying self-financing procedures.
- Because of the project's strategic importance in Zaire's health development, it is strongly recommended to extend it 4-5 years and increase RHZ and health center targets, stressing pharmaceutical/medical supplies development and regional Training for Trainers Centers for nurses, supervisors, and village health workers.

The evaluators noted the following "lessons":

- The training of local leaders should begin as soon as the Project Identification Document is agreed upon.
- An annual national health conference spurs policy dialogue and development of donor subprojects.
- The project's institution-building nature rather than directly service nature has helped prepare thousands of Zairis to work with others in large health systems.

- I **EVALUATION COSTS:** Costs of the evaluation are presented in two ways. The first are the costs of the work of the evaluation team per se. If Mission or office staff served as members of the team, indicate the number of person-days in the third column. The second are the indirect estimated costs incurred by involvement of other Mission/Office and borrower/grantee staff in the broader evaluation process, including time for preparations, logistical support, and reviews.

### PART II (Pages 3-6)

- J **SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS:** The following reflects a consensus among A.I.D.'s Bureaus on common elements to be included in a summary of any evaluation. The summary should not exceed the three pages provided. It should be self-contained and avoid "in-house" jargon. Spell out acronyms when first used. Avoid unnecessarily complicated explanations of the activity or activities evaluated, or of the evaluation methodology; the interested reader can find this information in the full evaluation report. Get all the critical facts and findings into the summary since a large proportion of readers will go no further. Cover the following elements, preferably in the order given:

1. Purpose of the activity or activities evaluated. What constraints or opportunities does the loan and/or grant activity address, what is it trying to do about the constraints? Specify the problem, then specify the solution and its relationship, if any, to overall Mission or office strategy. State logframe purpose and goal, if applicable.
2. Purpose of the evaluation and methodology used. Why was the evaluation undertaken? Briefly describe the types and sources of evidence used to assess effectiveness and impact.



**MIDWEST UNIVERSITIES CONSORTIUM  
FOR INTERNATIONAL ACTIVITIES, INC.**

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EXECUTIVE SUMMARY  
FOR THE  
EVALUATION OF THE ST. VINCENT  
AGRICULTURAL DEVELOPMENT PROJECT  
(No. 538-0101)

Performed by:

Donald R. Jackson

Lynn Forster

Corrine Glesne

September 30, 1986

For

The Midwest Universities Consortium for International Activities, Inc. and the United States Agency for International Development, under the "Technical Services to Mission" Contract, No. LAC 0000-I-00-2023, Work Order No. 10.

## EXECUTIVE SUMMARY

### Introduction

The following document is an Executive Summary for the evaluation of the St. Vincent Agricultural Development Project (538-0101) funded by the Regional Development Office/Caribbean (RDO/C) of the United States Agency for International Development. The amount authorized for disbursement under the Project was US \$2.0 million and the authorization date was June 25, 1984. Project implementation began in January, 1985 and is due to terminate on November 30, 1986. RONCO Consulting Corporation, Washington, D.C. was the prime contractor for the Project providing three long term technicians and over 24 person months of short term assistance.

The evaluation was conducted by a team provided through the Midwestern Universities Consortium for International Activities, Inc. (MUCIA) under Technical Services to Missions Contract No. LAC-0000-1-00-2023-00, Work Order No. 10. Field data collection and draft report write-up were performed during the last two weeks of August, 1986 with final report preparation being completed during the month of September. The team was composed of a rural development expert, and agricultural economist and a social anthropologist.

The original Project design included three discernible components: Production, Marketing, and Data Gathering and Analysis. A fourth component, the Winter Vegetable Pilot Project, was added during implementation. Each component is then divided into various sub-components and activities. In discussions between the evaluation team and the RDO/C, it was decided that the format to be used should reflect these divisions, and that each discrete activity would be considered in light of three measures: 1) the relevance of the activity's original rationale to the overall agricultural development needs of St. Vincent; 2) the actual outputs of the activities achieved by the Project; and, 3) the measureable impact of the Project on small-holder productivity, or on the marketing efficiency of those crops produced by small holders.

Before entering the analysis, the team would like to underscore several factors which strongly affected the implementation and outcome of the original Project as planned. These are presented in this section of the report due to their ability to influence, either singly or together, the various elements of the Project in ways which were not perceived in the original design. These factors are:

\*A change in the government of St. Vincent and the Grenadines just weeks prior to the signing of the Grant Project Agreement;

\*A scrapping of the CARICOM Agricultural Marketing Protocol which guaranteed St. Vincent concessionary markets for three of the four crops identified in the original project design (peanuts, carrots and sweet potatoes);

\*The demise of the sugar industry which necessitated changes in GOSVG agricultural policy concerning employment and land use; and,

\*The unexpected policy shift on the part of the RDO/C away from bilateral project development and towards regional ones.

## Methodology

The methodology used in conducting the evaluation depended on interviews and field observation. Interviews were conducted with RDO/C staff, Contractor Project staff, Vincentian policy makers and government officials, staff and members of the Organization for Rural Development (ORD), farmers, traffickers, and others knowledgeable about Vincentian agriculture.

Selection of those interviewed depended upon first identifying key personnel associated with the project. These individuals were asked to recommend others to be contacted who were, in turn, interviewed. A set of core questions guided each interview. As the team's understanding of the Project increased, new questions were asked. In some cases, individuals were contacted a second time as a broader range of questions were developed. In most cases, all three team members participated in each interview, lending individual expertise and viewpoint to both the interviewing and analysis procedures.

## Findings

The original design of the St. Vincent Agricultural Development Project is quite clear in the specification of its goal and purpose. The goal is to increase net incomes of small farmers and to increase foreign exchange earnings from agriculture. The purpose is to increase productivity of small farmer agriculture and assure that producers participate in its economic benefits; to improve the efficiency in marketing and to expand the markets for commodities produced by small farmers; and to strengthen the capability of the agricultural sector to perform more effective program planning, implementation and monitoring.

In order to increase small farmer productivity, agricultural research was to be improved and improvements were to be made in supplying agricultural credit. The research component was to be implemented by the Caribbean Agricultural Research and Development Institute (CARDI) under the direction of the Ministry of Trade, Industry, and Agriculture (MTIA). Variety trials were to be conducted for four crops: carrots, peanuts, sweet potatoes, and onions. For each crop, a minimum of six growing seasons were to be used with at least 12 varieties tested in each season, and on-farm trials were to begin in the third season. These plans were not carried out by the Project as anticipated. Limited variety trials were done for sweet potatoes, carrots, and peanuts. Preliminary results were promising for sweet potatoes and carrots where some varieties produced significant yield increases over commonly used varieties.

In order to support the research effort, upgrading of research facilities and equipment was to take place. Little progress was made by the Project in accomplishing this objective. Furthermore, the evaluation team believes that the Project design should have devoted more funds for soil testing and analysis equipment.

In retrospect, the original project design was overly optimistic in specifying the variety trials. Six growing seasons and 12 varieties per crop seems overly ambitious, especially in light of the meager direct financial support from the Project. In addition, the assumptions regarding transfer of yield increasing varieties was unrealistic. The assumed adoption rate was to produce a near doubling of output from these four crops within two years, and again this assumption seems unrealistic. Also, it must be recognized that enthusiasm for completing work in these crops was dampened by the suspension of the Agricultural Marketing Protocol (AMP), which sharply curtailed exports to neighboring countries.

Credit for small farmers was to be increased through a revolving loan fund financed by the Project and managed by the Organization for Rural Development (ORD). A fund totaling US\$100,000 was established by ORD to be used as a source of revolving credit. Farmers purchasing inputs, such as fertilizer, seed, and other supplies, could pay 25 percent down, receive inputs at planting, and repay the remaining balance after harvest. This appears to have been the most successful activity of the Project. It was implemented well, allowing over 625 farmers access to credit with reasonably low default rates. It was implemented in the spirit of the primary goal of the Project, to help small farmers. Unfortunately, poor fertilizer quality prevented farmers from realizing the full benefits of this activity.

Specific benefits of the revolving loan fund have been the following: the distribution system for fertilizer, agro-chemicals and seeds needed by small farmers has been improved; transactions costs of using purchased inputs has been reduced; and the chemical formulation of fertilizer has been improved. Furthermore, Project support of ORD has led to two other impacts, which are consistent with Project objectives: forward contracts were established for one crop (ginger) and member pride in a small farmer organization was increased.

Marketing efficiency was to be improved by several discrete interventions, including: a short-term storage facility was to be built for traffickers; a medium-term pilot storage facility for sweet potatoes was to be built; a revolving fund was to be established to supply packaging materials to traffickers; training and technical services were to be supplied to traffickers; grades and standards were to be instituted; forward contracting between traffickers and farmers was to be encouraged; and a price information system was to be established.

At the time of the site visit by the evaluation team, few of these objectives had been accomplished. The traffickers' storage facility had been designed and the arrival of construction materials was imminent. The decision had been made to not build sweet potato storage. Packaging materials were not available to traffickers but were soon to be. Very limited trafficker training had been conducted. No attempts have apparently been made to establish forward contracts between farmers and traffickers and no attempt has been made to establish a price information system. On a more positive note, grades and standards were in the process of being established for most crops.

The Agricultural Sector Data Collection and Analysis was the largest component of the Project, representing US \$925,000 of total Project funds. It has three functional sub-components: the execution of the recent Agricultural Census; the training and upgrading of the staff of the MTIA's Statistical Unit to enable them to conduct periodic special studies; and the actual use of the training and upgrading to conduct the special studies. Additionally, a modest addition to the MTIA building, plus furniture and equipment (US \$165,000) was included in this component, as well as the establishment of a Pesticide Safety Program (US \$15,000).

The Agricultural Census sub-component appears to have been well conceived, designed and implemented despite unforeseen delays. The reliability rate of the data is estimated to be as high as 85 percent by Project Staff. The immediate short term benefits of the Census stem from the employment which was created by the hiring of over 100 unemployed workers to serve as enumerators and supervisors. Long-term benefits from the Census exercise may be best realized through use by Vincentian policy makers in monitoring structural change and by international donors in better planning their assistance projects.

The original Project design considered the training of Statistical Unit staff to be of at least equal utility to the Agricultural Census. Staff were to have been trained and their skills upgraded in crop forecasting and other forms of statistical analysis. This was not done, although one person has eventually been selected to receive some U.S. training.

The Crop Forecasting and Special Studies sub-component was to enable the Statistical Unit to undertake small-scale special purpose surveys utilizing the sample frame developed in the Census activity and the training provided by that activity. Since the implementation of the Census was delayed by nine months and the training of the Statistical Unit staff was not accomplished, no special studies have been undertaken by the Unit and none are currently planned.

As part of the original Project design, the RDO/C approved the construction of an addition to the MTIA building. Work did not begin until late June, 1986 and will not be completed before the scheduled termination date of the Project. The addition is not as large as originally requested by the GOSVG. Although it will undoubtedly increase the MTIA's efficiency and working conditions, overcrowding and inadequate working conditions will still persist.

The original design team for the Project elaborated a specific plan for appropriate pesticide management. To date, no Project related activities have been initiated in the area of pesticide safety, although plans were discussed with the team for sending a local technician for a short-course in pesticide management through another RDO/C project. The US \$15,000 allotted for this component appears to have been totally inadequate for the task.

The Winter Vegetable Pilot Project was added to the list of Project components several months into the implementation process. The genesis of the Pilot appears to have been caused by a combination of factors including the demise of the AMP, limiting the markets for the original four crops; the decision by the GOSVG to abandon the production of sugar, with the need to find alternative crops to sugar cane; and, the GOSVG's acquiring of Orange Hill Estate which also presented the question of which crops to plant on this extensive piece of land. As a result of these factors, Project staff provided two short term consultants to assist in the selection of crops which would have market acceptance in the region and extra-regionally. This then led to the hiring of another short term consultant to design a Business/Operational plan for the development of a large scale winter vegetable production enterprise. This enterprise would have required US \$2.8 million in investment capital and the establishment of two private sector companies to be owned by joint Vincentian and U.S. interests. The land was to be provided on a long term lease from the government. The company would then establish a 'core' farm for the production and sale of commodities to U.S. markets. Once the core farm had solidified the production technology and could guarantee quality standards and the volumes necessary to attract shippers and brokers in the U.S., small farmers surrounding the core farm were to have been invited to produce for the enterprise. Investors could not be found for the proposed large scale operation due to a lack of appropriate incentives.

A great deal of public interest had been stimulated by the concept and a decision was made between the Project staff, the GOSVG and the RDO/C to proceed with a much scaled down Pilot project. Provisional authorization to spend up to U.S. \$300,000 on such an activity was granted. The progress of the Pilot effort is well documented in Project staff reports.

On a purely financial basis, the Pilot was a great disappointment to most observers with total receipts from the sale of produce reaching only 11 percent of total costs. Essentially, the production component of the Pilot did prove to be a success. High quality produce and acceptable yields were realized with four of the five crops planted. The problems which arose appear to have been in transportation to market and reliance on a U.S. produce broker who proved to be somewhat inexperienced in his knowledge of importing to Puerto Rican and U.S. markets.

In hindsight, several premises of the Winter Vegetable Pilot Project proved incorrect. First, the Minister of Agriculture's assurances that land in sufficient amounts would be made available by the GOSVG (1,200 acres by year three of the enterprise) is doubtful. Cabinet was not in agreement, and to many the scheme was viewed as a return to the plantation/estate economy of the past. Other assumptions which appear to have been in error include the existence of markets in Puerto Rico and Miami, the reliability of shipping to those markets, and the wage rate/work day which could be expected for the enterprise.

Another implicit assumption was that the Pilot would not unduly jeopardize the planned original activities of the Project. This was no doubt influenced

by the potential of a Phase II follow-on Project. Ultimately, the Pilot did affect the implementation of the other components both financially and in terms of staff time allotted.

Finally, it was assumed that the Pilot would be consistent with the Project's goal of assisting the small farmers. This assumption stems from the 'core' farm concept which embodies the idea that once the core farm is established and operating, individual small farmers in the surrounding area would be invited to produce similar crops for sale to the enterprise. It is the team's judgement that even if the core farm concept had been successful, it would have provided little, or no benefit to small farmers. The capital intensive technology of the core farm would be unsuitable for small farmers. In other countries where the core farm concept has been attempted, small farmers have ended up being only the residual supplier to export markets. Additionally, the winter vegetable concept holds the potential for adversely affecting prices received by small farmers not tied to a core farm. Core farm 'rejects' would most likely find their way to the local market where they would depress the prices of the same, or similar, local crops.

## Conclusions

In general terms, the original design of the Project seems to have been appropriate to the Project setting at that time. The Project design realistically identified and attempted to address a majority of the bottlenecks facing Vincentian agriculture. With certain exceptions (i.e., overly optimistic research goals, overly optimistic assumptions concerning government absorptive capacity of technical assistance, the avoidance of a market identification component, the absence of adequate funding for the soil testing facilities), the targets and assumptions were also within the range of what was appropriate and achievable at the time. The fact that many of the sub-components were altered or cancelled during implementation should not necessarily lead to the conclusion that the design was inadequate, but rather that external factors intervened and impacted on the priorities and direction of the Project.

One important design issue which needs to be mentioned in our concluding remarks is that of the relatively high proportion of technical assistance which the Project provided compared to the other types of expenditures. This was underscored by the Minister of Agriculture when he summed up the net benefits of the Project by saying that, "There weren't enough bricks and mortar in the Project." In light of the expectation of a second phase to the Project the proportion seems reasonable, however, as the situation turned out it tended to greatly reduce the visual impact of the overall Project, as well as its long term effectiveness.

The actual implementation of the Project as designed was greatly affected by the four factors mentioned in the introduction: a change in the GOSV's administration; the abandonment of the AMP; the abandonment of sugar by the GOSV; and RDO/C's shift from bilateral to regional projects. For better,

for worse, the combined effect of these factors tended to erode what had been an integrated Project with interdependent components, into a series of somewhat unrelated activities. Furthermore, the advent of the Winter Vegetable Pilot Project did substantially impact on several of the other components causing action on some of them to be postponed while others were dropped. Additionally, it is the feeling of the team that the decision to mount the Winter Vegetable component signified a radical shift in the Project's goal and purpose by not linking it directly to the development of small farmers.

Nevertheless, several sub-components and activities were accomplished which hold the promise of developmental impact for the future. The Research component is now underway which will no doubt lead to the selection of higher yielding varieties of carrots and sweet potatoes. The ORD input supply component is presently benefitting small farmers and all indications are that it will continue to do so in the future. In terms of the Marketing component, the short-term storage facility for traffickers will be built, grades and standards will have been established for St. Vincent's principal export crops, and the consciousness of traffickers in terms of produce quality has undoubtedly been increased. The agricultural census was also completed which will provide invaluable information to GOSVG planners and donors alike. Additionally, the Ministry of Trade, Industry and Agriculture will receive larger, more appropriate office facilities. Even in the case of the Winter Vegetable Pilot Project experiences were gained, and "a better understanding of the problems involved in producing for U.S. markets was achieved" as was stated by the Project Coordinator.

The most disheartening aspect of the implementation, however, deals with what we refer to as a lack of an institutionalization of the Project's activities. A cardinal rule of development assistance projects stresses the need for counterparts to expatriot technical advisors, as well as a close working relationship with the local implementing agencies and beneficiaries. From the Survey Statistician whose counterpart turned out to be inappropriate, to the Marketing Advisor who was never housed in the Marketing Corporation (where he was to be the counterpart to the General Manager), and to the Winter Vegetable Pilot whose designers never considered a role for a counterpart, the Project violates the rule. Below the level of Minister of Agriculture and Project Manager, few Vincentians interviewed considered themselves to be part of the Project or to have had any influence over it. Additionally, in many cases, the planned training activities have not taken place and most likely will not before the current termination date of the Project. In order to partially address this issue, the team recommends an extension of the Survey Statistician and the Marketing Advisor for periods of three to six months to carry out selected training in the use of the sample frame in conducting the special studies in the case of the former, and to train traffickers and SVMC personnel in the use of the short term storage facility and the new packaging materials in the case of the latter.

Since many of the sub-components have not as yet been completed, or have not had sufficient time for their benefits to materialize, the measurement of

actual Project impact is somewhat difficult. As far as direct, perceivable benefits are concerned the only successful sub-component has been the ORD input supply scheme. Other activities such as the agronomic research, the census, the Ministry addition, and the short term storage facility for traffickers will have to be reevaluated at a future time to determine their benefits to the agricultural development process.



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EVALUATION OF THE ST. VINCENT AGRICULTURAL  
DEVELOPMENT PROJECT (No. 538-0101)

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For

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## Introduction

The following document is an evaluation of the St. Vincent Agricultural Development Project (538-0101) funded by the United States Agency for International Development (USAID). The amount authorized for disbursement under the Project was US \$ 2 million, and the authorization date was 6/25/84. Project implementation began in January, 1985 and is due to terminate on November 30, 1986. RONCO Consulting Corporation, Washington, D.C. was the prime contractor for the Project providing three long-term technicians and over 24 person months of short-term assistance.

This evaluation was conducted by a team provided through the Midwestern Universities Consortium for International Activities (MUCIA), under Technical Services to Missions Contract No. LAC-0000-I-00-2023, Work Order No. 10. Field data collection and draft report write-up were performed during the last two weeks of August, 1986. The team was composed of Dr. Donald R. Jackson, Rural Development Expert/Team Leader, Dr. Lynn Forster, Agricultural Economist, and Dr. Corrine Glesne, Social Anthropologist. A discussion describing the methodology used in the evaluation follows this introduction. A List of Persons Contacted and a copy of the evaluation team's Scope of Work are attached as annexes.

The original Project design included three discernible components: Production, Marketing, and Data Gathering and Analysis. (A fourth component, the Winter Vegetable Pilot Project was added during implementation.) Each of these components were then further broken down into sub-components. In discussions with RDO/C Mission personnel it was decided that the format for this final report would reflect this ordering. Furthermore, and in compliance with the Statement of Work, it was also decided that all components/sub-components would be considered in light of three measures: the relevance of the sub-component's original rationale to the overall agricultural development needs of St. Vincent; the actual outputs of the sub-components which were achieved by the Project; and, the measurable impact of the Project on small-holder productivity or on the marketing efficiency of those crops produced by small holders. This presentation follows in the section entitled Findings. General lessons learned and the team's summary conclusions are subsequently presented in the last section: Conclusions.

Before beginning this analysis, however, the team would like to underscore several factors which strongly affected the implementation and outcome of the original Project as planned. These are presented here in the Introduction due to their tendency, either singly or together, to influence the various components and sub-components in ways which were not perceived in the original design. These factors were:

\*A change in the government of St. Vincent and the Grenadines just weeks prior to the signing of the Grant Project Agreement;

\*A scrapping of the CARICOM Agricultural Marketing Protocol which guaranteed St. Vincent concessionary markets for three of the four crops identified in the original Project design (peanuts, carrots and sweet potatoes);

\*The demise of the sugar industry which necessitated changes in GOSVG agricultural policy concerning employment and land use; and,

\*The unexpected policy shift on the part of the RDO/C away from bilateral projects and towards regional ones.

In June, 1984 (the same month as the signing of the current Project Agreement) St. Vincent and the Grenadines elected its second government since independence. While not radically different from the previous government in either policy or goals it did represent a change in personalities, as well as differing degrees of emphasis on specific points. Most notable of these shifts in emphasis is demonstrated in the person of the current Minister of Trade, Industry and Agriculture (MTIA) who was elected with the Prime Minister, named Minister of State (for Agriculture, a Deputy position), and later made a full Minister. His background as an exporter of agricultural commodities has made him more prone towards private sector solutions to the country's agricultural problems. This was most obvious in his support of the Winter Vegetable Pilot Project (not in the original Project design) and in his lack of support for the Project's proposed marketing activities, many of which were to have been implemented through, or in conjunction with, the St. Vincent Marketing Corporation, a parastatal body.

An additional change which took place concerned three of the four initial crops which were to have been supported. Dating back at least two decades, the CARICOM countries established an Agricultural Marketing Protocol (AMP) guaranteeing markets for specific commodities at fixed prices. In most cases the AMP promoted a form of barter trade between the more developed members of CARICOM (Trinidad, Guyana and Jamaica) and the smaller, less developed island members. Specific to this Project, and up until the signing of the Project Agreement, St. Vincent had been granted permission under the AMP to export carrots, peanuts and sweet potatoes to Trinidad. The prices received for these commodities were far superior to those of the world market while the quality permitted was inferior. With this situation existing with many other commodities throughout the CARICOM nations the AMP was eventually 'suspended' in early 1985. The net result of this for St. Vincent and the Grenadines was a drastic reduction in the only market for three principal smallholder crops. For the Project staff this meant a reorientation for several of the Project's sub-components while offering the opportunity to attempt a new concept, the Winter Vegetable Pilot Project.

Cabinet's decision for the government to cease the cultivation of cane and the refining of sugar was another factor which changed the environment in which the Project was to be implemented. After having abandoned the State production of sugar cane in the seventies the GOSVG reinitiated its cultivation and refining in the early eighties in an attempt to create employment and substitute for sugar imports. By the end of 1984, however, it was evident that a sugar industry was too much of a luxury for St. Vincent to afford and the refinery was again closed. This was a difficult political decision for the Cabinet to make since many of the workers in the Georgetown area depended on the sugar industry for their livelihoods. The fact that the

land was idle and government owned encouraged its invasion by squatters and threatened to create a politically stressful situation. The GOSVG was therefore seeking a solution to the unemployment problem as well as a positive activity to point to in countering opposition criticism. On the Vincentian side of the equation these factors helped to set the stage for the government's agreement to embrace the Winter Vegetable Pilot Project with the enthusiasm that it did.

A final factor guided Project implementers and policy makers until relatively recently. Implicit in the original design of the Project was the premise that this was to be phase one of an at least two-phased, development assistance program. Witness to this is the notably high proportion of technical assistance which was supplied by the Project (48 percent of the entire US \$2 million was authorized for technical assistance based on the rationale that it was necessary in order to pave the way for a second, less labor intensive phase), as well as several verbal commitments made by a previous RDO/C Mission Director to GOSVG representatives. Nevertheless, continued bilateral assistance to St. Vincent does not coincide with current RDO/C policy which places emphasis on regional institutions and mechanisms.

As it appears, neither the Project staff, nor the GOSVG were officially informed of the impossibility of a Phase Two until April, 1986, and until then had been working under the assumption that the Project would, in all likelihood, be continued. Therefore, when the opportunity to attempt the Winter Vegetable Pilot Project presented itself, decision makers had been led to believe that the implementation of certain Project sub-components could be postponed to a later date. Additionally, it was reasoned, should the Winter Vegetable Pilot Project be successful, changes in the design of several sub-components would be necessary. The decision was therefore made to place all uncommitted Project resources behind the Pilot and to postpone several of the sub-components.

In the pages which follow the appropriateness, execution and impact of each of the components and sub-components are discussed and analyzed. While we have attempted to evaluate the Project from a technical standpoint, the above four factors have shaped the Project's implementation and must be kept in mind in any evaluation.

### Methodology

The methodology used in conducting the following evaluation depended mainly on qualitative measures such as interviewing and field observation. In-depth interviews were conducted with RDO/C staff, Contractor Project staff, Vincentian policy makers and government officials, staff of regional organizations, staff and members of the Organization for Rural Development (ORD), and members of the private sector. Shorter interviews were also held with 12 farmers, 3 traffickers, and several others knowledgeable about St. Vincent and its agriculture. (See attached Annex for a listing of persons interviewed.) These interviews, plus a thorough review of the appropriate Project documentation, produced the understanding that we have portrayed here.

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In general, sample selection of those interviewed depended upon first identifying the key personnel associated with the Project and then arranging interviews with those who were available. Three key people were not interviewed, however. The Prime Minister, the Minister of Agriculture, and the Director of Central Planning were off-island and unavailable to the evaluation team. (Subsequent to the team's departure the Minister of Agriculture was contacted for a telephone interview.) Several of the first interviewees mentioned other individuals whom we then also contacted. The team's sample of farmers was basically one of opportunity, dependent upon whom was available the day we spent on the leeward side of the island with ORD Field Staff. Data gathering through field observation included visiting three ORD district stores, the land of three farmers, the Winter Vegetable Pilot site on the north windward side of the island, the Marketing Corporation selection, packaging and grading area, the Central Market, and the traffickers on Monday when they gather near the port to ship their produce.

The team judged interviews with key people to be potentially more useful than a more statistically-oriented survey design for the following reasons: Impact of the Project on farmers and traffickers at this point in time (other than on ORD farmers--a number of whom we did interview) seemed negligible from all reports, rendering questionable the meaning of a farmer/trafficker survey; We were not sure that before the fact, we knew the right questions to include in a survey. Our experience proved this hunch correct. As we interviewed, we learned of influencing factors other than those gleaned through our reading of the documents; and, A survey format did not seem appropriate to meetings with the various types of professionals with whom we dealt.

A set of core questions guided the interviews, enhanced by other questions tailored to fit each specific interviewee and his or her role in the Project. As our understanding of the Project process developed, we were motivated to ask questions that we had not considered during the first few days. We therefore recontacted several whom had been interviewed earlier to comment on our initial impressions. Follow-up debriefing meetings were also separately held with Project and RDO/C staffs.

In most cases, all three members of the evaluation team participated in each interview, lending individual expertise and viewpoint to both the interviewing and analysis procedures. Each took comprehensive notes of the interviews which were then compared, contributing to reliability of data interpretation. The notes were organized according to Project component categories (i.e. revolving credit scheme, traffickers' storage shed, Winter Vegetable Pilot, etc.) and others which emerged from the interview process (i.e., working relationships between various parties involved, the role of the Minister of Agriculture). These were then further organized according to the three tasks specified in the Terms of Reference for the evaluation. From these categories, the report was developed. We have presented the varied perspectives portrayed by the different parties involved and, where possible, provided our own analysis depending on the situation.

## Findings

The original design of the St. Vincent Agricultural Development Project is quite clear in the specification of its Goal and Purposes. The Goal is to increase net incomes of small farmers and to increase foreign exchange earnings from agriculture. The Purpose is divided into three sub-purposes which correspond to the original functional components of the Project:

### -Technology Generation and Application

The increased productivity of small farm agriculture and the assurance that producers participate in the economic benefits therefrom.

### -Marketing Services

The improved efficiency in marketing and an expanded market for commodities produced in small-holder systems.

### -Agricultural Data Gathering and Analysis

A strengthening of the capability of the agricultural sector to perform more effective program planning, implementation and monitoring.

The following section presents the team's findings regarding the fulfillment of these parameters. They are organized on a component by component basis and are addressed in terms of: the appropriateness of the component/sub-component in light of the original Project design to the Project setting; the actual activities and accomplishments which took place; and, the development impact and strategic significance of the Project. The order of the presentation reflects the original Logical Framework Matrix and is not meant as a priority ranking.

## Technology Generation and Application

The Production Component of the Project consists of two sub-components: agricultural research in the four smallholder crops of carrots, sweet potatoes, peanuts and onions through CARDI and the MTIA; and, agricultural input supply on credit to smallholders through the Organization for Rural Development.

### Research

The research sub-component was to have been implemented by the Caribbean Agricultural Research and Development Institute (CARDI) under the direction of the MTIA Research Unit. It was to have involved three steps: a) planning and preliminary selection of technology; b) testing and adaptation of the technology; and, c) dissemination of the identified technologies. While CARDI

was given the primary responsibility for conducting the research, it was not provided with direct budgetary support from the Project. Rather, CARDI was to have performed this task using funding provided by USAID through other regional projects aimed at strengthening that institution.

Three of the four selected crops i.e., carrots, peanuts and sweet potatoes were selected on the grounds of their familiarity among smallholders on St. Vincent, as well as relatively secure markets under the Agricultural Marketing Protocol. Onions were added to the list due to a belief that increased local production could substitute for imports. As a result of the Project's activities it was hoped that land under these crops would increase by an average of 30 percent, while yields would increase by an average of 75 percent. a minimum of six experimental cycles per crop were to have been completed over the life of the Project, with on-farm trials beginning with the third cycle. A minimum of 12 varieties per crop were to have been identified and tested.

In order to support the research effort some upgrading of research facilities and equipment was to have taken place. This was to have included the renovation of research station facilities, fencing, research-related tools, and small scale irrigation equipment.

In spite of good faith efforts on the part of those involved, these targets have not been met. To date two experimental cycles have been attempted with sweet potatoes, the first on an experimental plot, followed by on-farm trials on the land of five small farmers. (These were the only on-farm trials conducted as of the date of the evaluation.) So far these trials have identified one variety of sweet potato which has the capability to increase average yields by 25 percent.

Seventeen varieties of carrots were tested in a research plot experiment. Three of these show promise with yield increases also approximating 25 percent. Several varieties of peanuts were tasted but none showed promise. The onion trials were washed out by heavy rains and further testing was postponed until October, 1986.

Project activities in the upgrading of research facilities were also kept to a minimum due to several factors which are described below. In reality one experimental facility was fenced using Project funds and an amount of fertilizer left over from the Winter Vegetable Pilot Project was donated to CARDI for its use in further experiments.

Four factors acted to severely limit the Project's purpose in the achievement of its targeted measures for this sub-component. First, it appears that the original design was overly optimistic in the establishment of research targets. Even if all other elements had been in place, it is difficult to imagine that six complete research cycles could have been accomplished during the relatively short 24 month life of the Project. This is especially true given the start-up time required in the identification of varieties and their sources, as well as the time which would have been

required to disseminate the research results to farmers. Not only was the overly optimistic time frame of the original design unachievable in terms of the research results, but it is now proving to also be unachievable in terms of meaningful technology transfer. The rationale behind the inclusion of this sub-component in the Project was that the knowledge learned would be extended to farmers through interaction between them, the CARDI researchers and the Extension Staff of the MTIA. While some trials are being performed on farmers' plots and a number of farmers have been able to observe the demonstration plots, the evaluation team questions whether these activities will continue as originally perceived once the Project terminates.

Secondly, as has been stated above, the AMP which provided markets for carrots, sweet potatoes and peanuts was suspended in the early months of the Project. While a domestic market for these crops still exists, the potential for expanded markets and increased income was severely limited by the suspension. This greatly diminished enthusiasm in their cultivation on the part of farmers and researchers alike. The research which was to have hopefully led to the expanded cultivation of onions was also put in doubt when it was learned that local costs of production would be approximately EC \$2.00/pound which compared to the landed cost of onions from Europe (Holland) at only EC \$.40/pound.

Structural problems in the implementation of the research facility upgrading activities were yet another cause for the lack of progress in this sub-component. The principal research station of the MTIA is located in an area known as Camden Park which over the past years has become an industrial complex as part of the GOSVG's plans for attracting manufacturing interests to the island. As land became more and more scarce in the area, the MTIA made plans to transfer the station elsewhere to a more appropriate location. Since these plans had already been initiated by the time Project implementation had begun, a decision was taken not to upgrade the facilities at Camden Park but rather to wait for a new site to be designated. This has yet to come about and it is doubtful if this sub-component will be completed by Project termination.

Of particular concern with this turn of events is the fact that the sorely needed capacity for soil testing and analysis will not be supported by the Project. The original design acknowledged the lack of this capability and provided US \$3,000 for soil testing and analysis equipment. Given the lack of a building to house this equipment, plus the Project staff's opinion that the small amount of resources provided would not be sufficient to do the job correctly, it was decided to drop the soils laboratory equipment from the Project, and to transfer the assigned amount to another component.

In the team's view this activity should have received more careful attention during Project design and should have been followed up during implementation. Presently, soil testing and analysis in St. Vincent represent a major impediment to agricultural development. At the present time the availability of these services in the region is extremely limited, consisting of facilities at the University of the West Indies in Trinidad, or in the

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United States. Both alternatives are bureaucratically inefficient and expensive, being a practical solution to only the larger farmers or through special favors. (Trinidad for example, does not always accept soil from St. Vincent due to its high nematode content. This means that soil samples, even processed through CARDI, sometimes have to be smuggled into that country.)

Lastly, the fact that CARDI's financial support to conduct the research required by the Project came from other regional RDO/C projects undoubtedly led to an overall lack of dynamism in pursuing the research goals of the Project. Notwithstanding the fact that CARDI did have monies available to conduct the type of research required under the Project, and did in fact sign a Memorandum of Understanding agreeing to undertake the research, it was not administratively feasible to assume that they would do so with the required alacrity. Every project has its own internal momentum and priority-establishing criteria, as well as its own day to day accountability system. In this case it appears that it would have been more efficient to have specifically earmarked Project funds to CARDI for the implementation of the research activities.

#### Input supply

In the original Project design this necessary sub-component was included with the intention of addressing an additional set of constraints in St. Vincent's smallholder production system; access to quality, appropriate inputs on credit. As such, US \$100,000 was provided to the Organization for Rural Development (ORD) for the bulk importation of agricultural inputs (mainly fertilizer, but soon to include other agro-chemicals and hand tools), and their distribution to small farmers. Technical assistance in the establishment of a credit program and in the organization of ORD's record keeping system was provided through another USAID-funded project.

At first the inputs were to have been sold to those farmers who wanted to grow the four selected crops (carrots, sweet potatoes, peanuts and onions), ostensibly using the new technologies being defined by the research sub-component described above. Nevertheless, based on the failure of the AMP and the consequent poor market position of the three crops, ORD petitioned and received permission from RDO/C to expand the crop list to include the production of any agricultural commodity for which there was a market.

Additional terms for the sale of inputs on credit include the borrowers being required to put up 25 percent of the value of the loan, an interest rate of one percent per month on the remaining balance, and a repayment date of two months beyond the harvest dates of the crops planted. Originally, the loans were to have become due at harvest time but this provided problems for farmers whose crops were ready for harvest but for which there was no ready market. The repayment period was therefore extended to reflect the proposed harvest date plus two months. Furthermore, and in the case of either credit or cash sales, ORD is allowed to charge a mark-up on its inputs sufficient to cover administrative and delivery costs. All payments are to be made into a Revolving Fund for on-lending during each successive crop cycle.

This sub-component appears to have been the most successful activity of the Project; both in terms of its implementation and in its development impact among small farmers. As of August, 1986 the entire US \$100,000 had been drawn down and expended on the purchase of inputs. Of this amount, approximately one-third had been sold to farmers for cash, while two-thirds had been extended through in-kind credit. The Memorandum of Understanding signed between the MTIA and ORD stipulates that the inputs and credit be made available to all small farmers and not just to ORD members. As such, as of May, 1986 1,100 farmers were being monitored by ORD Field Staff. This meant for the most part that they had purchased fertilizer either with cash (43 percent of farmers), or on credit (57 percent) and were receiving some form of additional technical assistance from ORD.

Repayment of the loans by farmers is most likely to become an issue in the near future. ORD currently calculates the proportion of its portfolio 'at risk' to be 26 percent which is based on a RDO/C formula of all loans unpaid two months after harvest as a percentage of all loans due. According to ORD's Memorandum of Understanding with the MTIA, a bad debts ratio of more than 15 percent is to trigger a study into the causes of the delinquent loans and to take measures to correct the problem. Plans for this action were being made during the time that the team was in St. Vincent.

In the team's view, however, a gross indicator of bad debts such as the one being used in the Project dramatizes the issue out of proportion for several reasons. The first of these is the fact that the 'harvest date' (plus two months) is established at the time the loan is taken out. Nevertheless, several of the crops planted have a variable harvest period (ground provisions, ginger, etc.) which allow farmers to leave their crop in the ground in hopes of a market upturn. In many cases the two month grace period after harvest might not have been long enough for many farmers. Secondly, bad debts ratios are normally expressed as a function of time, i.e., 30 days past due, 60-90 days past due, and so on with no real importance being given to delinquency until four to six months have passed. Lastly, the fact that ORD has a specific policy of never pardoning debts implies that the gross indicator required in the Memorandum of Understanding will necessarily increase over time.

Several benefits of the ORD input supply program were identified during field investigation. Summarized these are:

- It has improved the distribution system for fertilizer, agro-chemicals and seed needed by the small farmer. These inputs are distributed to ORD 'stores' in eight locations throughout the island. Farmers report that they can now easily get access to these inputs when they need them without losing the time previously required for a trip to Kingstown. ORD workers report that the stores are now open every day rather than the two days a week as was normal before the input supply activity. (This may be partly through farmer demand, but also perhaps due to the fact that ORD currently has a

supply of hygroscopic fertilizer that it is trying to move as quickly as possible.)

-It has lowered the transaction costs of using, or purchasing agricultural inputs for the small farmer. Transportation costs have now been reduced as a result of ORD's distribution system. (This system has been made greatly more efficient through the use of a USAID-provided truck. The operating costs of the truck, as well as all other costs incurred in delivering the inputs are charged to buyers through the sale price.)

-Before the input supply activity, most of the fertilizer used by the small farmers of St. Vincent was supplied through the Banana Growers' Association. As would be expected, it was of a chemical formulation designed for the growing of bananas. Based partially on soil testing results, ORD now provides different formulations that better meet the needs of crops other than bananas making this input more cost effective.

-The credit portion of the input supply activity has increased rural savings by requiring the farmers to put up 25 percent of the total loan before they can receive any inputs. ORD considers this an intentional form of forced savings. It is seen by the evaluation team as an essential portion of this sub-component's success.

-Linkages between ORD and the Caribbean Agricultural Trade Organization (CATCO) have been strengthened through forward contracting with small farmers for ginger. ORD has a vested interest in assisting its credit recipients find markets for their produce. In this case ORD establishes forward contracts with its ginger producing borrowers for sale through CATCO to European buyers.

-The input supply program has increased the popularity of ORD among small farmers, as well as respect for ORD by other groups and organizations. To the extent that ORD is small farmer oriented, the strengthening of the organization contributes to developing pride in those who work the land and in small farmer organizations.

One detracting element of the input supply program concerns the quality of the fertilizer currently being supplied. ORD, or any other fertilizer importer on St. Vincent, has three options in its sources of supply: the U.S., Martinique or the Dominican Republic. Quotes received from the U.S. revealed that the prices were up to 50 percent higher than those available in the region and this option was discarded. Goods from Martinique cannot be purchased with USAID funds due to a restrictive covenant. This forced this option to be discarded although prices and transportation costs were

considerably lower. ORD therefore purchased its fertilizer from the Dominican Republic. What was received, however, was a product of very poor quality. In essence, the fertilizer had not been treated to prevent it from taking on water from the atmosphere and the bags in which it was transported were not waterproof. This combination produces a sticky, oozing mass with reduced nutrient content which is very difficult to apply, as well as store. This experience has led to farmer dissatisfaction and has forced ORD to reduce its prices. As a result the organization has been forced to take legal action against the supplier in the Dominican Republic. In order to avoid this problem in the future ORD plans to purchase fertilizer from sources in Martinique. By then they will be using the credit program's reflows which do not come under the restrictive covenant.

### Marketing Services

The original Marketing Services component consisted of several discrete interventions aimed at improving marketing constraints faced by small farmers, traffickers and other exporters of agricultural produce. As specified in the original design these are: a short-term storage facility for traffickers; a medium-term pilot facility for the storage of sweet potatoes; the establishment of a revolving fund to provide packaging materials to traffickers, training and technical services for traffickers in the areas of sorting and quality standards, packaging materials and techniques, and the encouragement of forward contracting for produce between suppliers and traffickers; and, the establishment of a market price information system by the SVMC for use by small farmers.

#### Short-term Storage for Traffickers

The Agricultural Sector Survey for St. Vincent, as well as the Project Paper for this Project both describe the inefficient and uneconomic process used by traffickers in organizing their produce for export. One of the measures proposed in the Project Paper for a resolution of this problem was the construction of a short-term storage facility to be used by traffickers on a rental basis for the sorting, packaging and immediate storage prior to shipping of their produce. The Project Paper established the approximate size of this facility at 10,000 square feet which would benefit 65 traffickers using an average of 100 square feet each. (The difference would consist of aisle space and an administrative office.)

As of September, 1986, 20 months after the initiation of Project implementation, construction had not yet begun, although Project Staff gave assurances that it would begin shortly. Two reasons were given for the lack of movement on this sub-component: the changes in government and the Winter Vegetable Pilot Project. The first begins with the change of government which was mentioned in the introduction to this report, and the plans that the new government had concerning the port area. Initially the new government proposed a total reorganization of the port facility to be conducted over a period of several years. Since the short-term storage facility was to be built on land within the area designated for the port renovation, the Project

staff were told by the Minister of Agriculture to place the storage facility sub-component on hold.

In early 1986, the GOSVG decided that the renovation of the port was not possible at that time and the decision was then made to reinstate activity on the facility. Nevertheless, this decision came at the height of the activity concerning the Winter Vegetable Pilot Project when staff resources were stretched to their limit. Activity on this sub-component was therefore given minimal attention until fairly recently when specifications were drawn up, and tenders were requested and received. It is estimated that materials for the construction of the shed will arrive during September and that construction will begin shortly afterward. The facility, however, will not be completed by the time the Project staff departs in late November.

Three potential problems were identified by the team concerning the adequacy of this sub-component. Originally the facility was to have enclosed 10,000 square feet of space providing room for approximately 65 traffickers. The present plans call for a 4,800 square foot structure to be built. Since the Traffickers' Association is made up of 270 members, with non-member traffickers totaling approximately 50 more, it is difficult to see how they will all be accommodated. (Staggering the facility's usage throughout the week is not presently an option since all three ships which carry St. Vincent's trafficker-produce depart on Monday night. This necessarily requires all traffickers sending produce in a given week to be present on Monday mornings.)

Secondly, the terms of reference for the Marketing Advisor require him to provide technical assistance in the day to day management of the facility, as well as training to the traffickers and facility administrators. Since the facility will not be built before the departure of the Marketing Advisor there is a potential for at least a portion of the estimated impact of the facility to be lost. The team therefore recommends that the Marketing advisor be retained for a period of two to three months after the facility's completion in order to carry out this task.

Thirdly, and closely linked to the second point, is a doubt which exists in the minds of several of those interviewed as to the willingness of the traffickers to use the facility once it is built. The SMC currently operates a small short-term facility for traffickers next to its offices. In exchange for payment of EC \$5 per day, traffickers can currently get out of the sun and pack their produce in a relatively more secure environment. (The current alternative is to camp in the streets of the port area.) Nevertheless, on the Monday that the team visited the current trafficker area only three were using the present facility. When asked why more do not do so the answers ranged from, "its not worth the EC \$5", to "standing out in the sun is not that much of a problem". If the facility is to be used, even by the numbers of traffickers that it will be able to hold, a great deal of training, cajoling and increased regulation might have to take place.

## Pilot Sweet Potato Storage

The Agricultural Sector Survey identified improvements in the storability of sweet potatoes as a high priority of the GOSVG. The original Project design therefore included a sub-component valued at US \$50,000 for the establishment of a pilot sweet potato storage facility to be managed by the SVMC on a fee basis for traffickers. Research into varieties and methods of storage were also to be conducted. The principal target of the sub-component was a lengthening of the shelf-life of locally grown sweet potatoes to enable traffickers to take advantage of price upswings after the harvest period.

Nevertheless, this sub-component was not implemented. The reasons for this appear to be two, depending on the source. The current Minister of Agriculture stated that he did not see the sweet potato problem as one of storability, but rather one of developing a technology which would allow farmers to grow the crop year round. On these grounds he requested that the sub-component be dropped from the Project. The Project's Marketing Advisor, on the other hand, stated that a Project-provided post harvest expert concluded that nothing could be done to increase the shelf-life of sweet potatoes and that the activity would be a wasted effort. On these grounds he concurred that the sub-component be dropped.

Whichever the case, it appears that greater concern should have been taken over the scrapping of this sub-component. In supporting the activity the President of the Traffickers' Association stated that the storability issue was one of varieties since Barbados has several varieties which can last three to four weeks compared to the one week which is common to the Vincentian varieties. This theoretically could have been looked at by the Project.

## Packaging Materials

The Sector Survey and the Project Paper both also describe the chaos and uneconomic nature of the situation surrounding the use of packaging materials in the transportation and export of St. Vincent's agricultural produce. Up until now the bottleneck in individual traffickers buying proper packaging materials has been the relatively small scale of each person's operations. As a solution the Project proposes to provide US \$25,000 to the SVMC to establish a fund for the bulk purchase of packaging materials. These materials would then be sold to traffickers from a warehouse located in the port area.

As of the time of the field investigation this activity had not yet begun although the team received assurance that it would begin shortly. A large quantity of wire-wound, wooden slatted, collapsible crates have been ordered, and types of sacking are being evaluated. Three problems appear to have caused the delays in implementing this sub-component. Trafficker agreement on the types and sizes of the materials took longer than estimated, U.S. suppliers of packaging materials took longer than expected in responding to requests for samples and bids; and, the implementation of the Winter Vegetable Pilot Project detracted from the Project staff's ability to supervise progress on a day-to-day basis.

A last issue of concern to the team is the fact that while the packaging materials fund will most likely be functioning by the end of the Project, the necessary training in their use (especially convincing traffickers of their utility) will not have been completed. This is another justification for the team's recommendation that the Marketing Advisor be extended.

#### Training and Technical services for traffickers

Three activities compose this sub-component: the identification of sorting and grading standards; the identification of improved packaging materials; and, the promotion of forward supply contracts between farmers and buyers.

The first activity has, for the most part, been accomplished. Standards have been drawn up and approved by a Grades and Standards Committee for most of the main crops. A proposed list of remaining crops has been drawn up and standards will be completed for them. One drag on the rapid completion of this activity has been the time it has taken for the Committee to decide on the appropriateness of each standard.

The identification of appropriate packaging materials by Project staff was accomplished as part of the work performed on the packaging materials sub-component. Requests for samples were sent to various U.S. and regional producers of packaging materials. After a review involving Ministry personnel, traffickers, and Project staff, the crate described above was selected and an order was placed.

The implementation activity relating to the promotion of forward contracts between farmers and traders was one of the most disappointing elements reviewed by the team. Apparently a misreading of the Project Paper by the Project staff led to the conclusion that what was referred to as forward contracting meant contracts between traders and food brokers in the importing countries. Since in the Marketing Advisor's experience this was not customary in the business, this activity was quickly discarded.

In reality the current Minister of Agriculture's example had served as the Project Design Team's model for this activity. At the time of the Project design the Minister was involved in the export of agricultural exotica to Canadian and U.K. markets. In order to assure a continuous supply of produce, he established a system of forward contracting with selected growers. The contracts specified the commodity, the variety and quality, approximate amounts, the pick-up date, and the price. Since this system appeared to benefit both the exporter and the farmer, it was recommended for inclusion in the Project.

#### Market Price Information System

This sub-component was to have established a market price information system to initially monitor the prices of the original four selected commodities. Once it was working, other small-farmer commodities were to have

been added. The activity, to have been implemented by the SWMC, was to have collected pricing information which was to be made available to small farmers through the mass media on a weekly basis. Presumably farmers would have used this information to make decisions on which crops to plant.

This sub-component, however, was also scrapped in an early stage of Project implementation. According to the Minister of Agriculture, "This type of information would only cause greater gluts and shortages," as many small farmers get in and out of production too late to take advantage of the price movements. The Project's Marketing Advisor, on the other hand, suggested that this type of historical data would be of little use since what happened in the past most often has nothing to do with the future.

In the team's view, the charges that price information exacerbates price instability and that price information is useless in developing future price expectations are not well founded. Economic theory suggests the opposite conclusions: that historic price information helps market participants observe seasonal or cyclic price patterns, helps them develop buying or selling strategies to take advantage of these patterns, and eventually improves price stability. Furthermore, recent developments in theory suggest that well functioning competitive market prices accurately reflect supply and demand conditions and contain important information allowing participants to develop future price expectations.

Meanwhile, the General Manager of the SWMC informed the team that a Peace Corps Volunteer, assigned to the Corporation, had begun to collect information of this type, but that when he terminated there was no one to continue the effort. No doubt the failure of the markets for carrots, sweet potatoes and peanuts also had something to do with the dropping of this sub-component.

The evaluation team in this case feels that both the original design and the current implementation efforts were remiss in not identifying the real need for agricultural information in St. Vincent. What farmers, exporters and planners need desperately to know, on an almost daily basis, are the location of 'market windows' for the crops which can be grown to some comparative advantage, the standards and volumes required, and the potential prices which can be expected. This would have been a totally appropriate public sector activity for the SWMC to have implemented.

#### Agricultural Sector Data Collection and Analysis

This is the largest component of the Project representing US \$925,000 of total Project funds, (although US \$270,000 of this represents the overall Project Coordinator's position). It has three functional sub-components, plus two additional tangential activities. The most obvious sub-component has been the accomplishment of the recent Agricultural Census which is due to be published shortly. Project-provided inputs included the payment of salaries for enumerators, supervisors and other staff, the provision of both long and short-term technical assistance, the provision of computers and other equipment, and the printing of the Census itself.

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A second sub-component included the training and upgrading of the staff of the MTIA's Statistical Unit to enable them to conduct periodic special studies using the sample frame which was produced through the implementation of the Census.

The third sub-component was to have included the actual use of the training and upgrading provided above to conduct the special studies. These proposed studies (4) were to have forecasted yield data for the original four crops on a bi-annual basis using the sample frame. Additionally, a modest addition to the MTIA building, plus furniture and equipment (US \$165,000) was included in this component, as well as the establishment of a Pesticide Safety Program (US \$15,000).

### Agricultural Census

This sub-component appears to have been well conceived, designed and implemented although delays in obtaining the necessary legal authorization from the Attorney General to conduct the Census threatened to severely limit the implementation for a period of over nine months. Nevertheless, the use of more sophisticated computers and related software than had been envisioned in the original Project design made up for a substantial part of this lost time.

Although the results have not yet been made available, most policy makers interviewed seemed quite pleased with the manner in which the Census was carried out. The reliability rate of the data is estimated to be as high as 85 percent by Project staff. This is considered to be quite good for countries similar to St. Vincent. Because supervisors were generally from the areas they supervised, they could often detect obvious misrepresentations of the responses.

Most feel that the figures for farm size, and the volumes of crops produced will be low, with uneducated estimates running between 25 and 50 percent. Several farmers interviewed for the Census boasted to the evaluation team that they had intentionally left out portions of their land and its production in their responses to the enumerators. One woman interviewed by the team related that she answered, "a son and a daughter", when asked by the Census enumerators which crops she had produced. It appears that farmers are reluctant to give information about land size and production because they feel such information could be linked to increased taxation. Unfortunately, the Minister of Agriculture made a public statement about the possibility of taxing idle land around the same time that the Census was being conducted. This is thought to have influenced farmer responses in the data collection process.

In reading through the Census questions and related training documents, the team was concerned with two apparent assumptions reflected in the presentation: the word 'farmers' always referred to males; and, the use of the term 'head of household' being a valid concept in the Eastern Caribbean. One supervisor reported some confusion over the head of household questions, while others questioned did not think that the lack of the use of he/she had distorted the counting of female farmers.

Benefits stemming from the implementation of the Census appear to be either very short-term, or long-term. The immediate short term benefits stem from the employment which was created by the hiring of over 100 unemployed workers to serve as enumerators and supervisors. This practice of hiring the unemployed was ordered by the GOSVG Cabinet and initially was met with skepticism. Nevertheless, due to careful screening and selection the practice seems to have worked well with few exceptions.

The long term benefits to this component have yet to appear, but it is reasonable to posit that they have the potential to be significant. Somewhat to the team's surprise, the vast majority of people who were asked about the eventual use of the Census results, responded that they would be used by the international donors to better plan their assistance projects. Use by the GOSVG Planning Unit is an additional expected benefit.

#### Training of Statistical Unit Staff

The original Project design considered this sub-component to be of at least equal utility to the implementation of the Agricultural Census. Staff of the Statistical Unit were to have been trained and their skills upgraded to the point where they would be able to use the sampling frame developed by the Census to forecast the areas planted and the expected market volumes of the original four selected commodities (presumably these skills are generic and could therefore apply to any crops).

Nevertheless, the purposes of this sub-component have not as yet been accomplished. The unexpected delays in initiating the Census were no doubt, in part responsible. Additionally, the problem of who to train in the Statistical Unit also confronted the Project. The Unit is staffed by a Chief and two assistants. The Chief of the Unit is an expatriot whose long term tenure on St. Vincent is doubtful. Furthermore, this person's two assistants were thought to be of too low a professional caliber to have benefited from training of this type and no candidates were therefore selected. Nevertheless, one of these two assistants was eventually chosen to receive training in the U.S. concerning issues related to census data, but his departure has been held up due to missing paperwork requirements. It is presently planned that he will be sent before the Project terminates.

#### Crop Forecasting and Special Studies

The purpose of this sub-component was to enable the Statistical Unit of the MTIA to undertake small-scale special purpose surveys (four were suggested in the Project Paper), utilizing the sample frame developed in the Census activity and the training provided by that activity. Among the first types of special studies to be undertaken in this sub-component was to forecast production yields for the original four selected crops.

Since the implementation of the Census was delayed by nine months, and the training of Statistical Unit staff was not accomplished for the reasons cited above, no special studies have been undertaken by the Unit and none are

currently planned. Additionally, on technical grounds it appears that the original design calling for studies which would forecast yields was in error. Early on in the design of the Census collection instruments it was decided that yield data would be impossible to collect, or that if it were collected it would be unreliable. Questions concerning crop yields were therefore not included in the Census.

Nevertheless, in the team's opinion it would be an unfortunate waste for the Project to terminate without the sample frame being put to use, or some Vincentians being trained in its implementation. Likewise, the computers and related equipment which were purchased to assist in analyzing the Census data are currently scheduled to be turned over to the MTIA and the Central Planning Unit upon Project termination. However, no training in their use is currently planned due to time constraints. For these reasons, the evaluation team recommends the extension of the Survey Statistician for a period of three to six months to accomplish these tasks.

#### Addition to the MTIA Building

As part of the original Project design, the RDO/C somewhat reluctantly approved the inclusion of US \$150,000 for the construction of an addition to the MTIA building, and US \$15,000 to provide for necessary furnishings. The need for this type of activity was recognized by everyone at the time, although RDO/C balked at this type of development assistance project providing for the construction of government-owned infrastructure.

Although movement on this activity was begun by the MTIA before Project implementation even began, its development was slowed by administrative procedures on the part of the GOSVG and USAID, as well as the potential contractors. As a result, work did not begin until late June, 1986 and will not be completed before the scheduled termination date of the Project.

An additional point needs to be made concerning the Ministry addition. Since this activity's inclusion in the Project was a 'negotiated' one, it apparently will not fully meet the needs of anyone! The GOSVG originally requested a building quite a bit larger than the current addition will cover. Due to RDO/C's resistance in accepting the idea, a US \$150,000 addition was settled upon. While this added square footage will undoubtedly increase the MTIA's efficiency and working conditions, overcrowding and inadequate working conditions will still persist.

#### Pesticide Safety Program

The original design team for the Project elaborated a plan for appropriate pesticide management in the Project areas, and in the country as a whole. This plan was quite specific and included:

The identification and provision of specific pesticide products, application procedures, and safety precautions for incorporation in the Project;

The appointment of a Pesticide Coordinator to monitor pesticide use in the Project and to coordinate training, extension, and other Project activities required to ensure correct and safe use of pesticides,

The development of a series of new in-country short courses in pesticide management for agricultural extension workers, health officers, nurses, crop protection workers, and others; and,

The recruitment of two inspectors/trainers to assist in the development and implementation of pesticide regulations and enforcement procedures provided for in St. Vincent's Pesticide Control act of 1973.

To accomplish this ambitious set of activities the Project provided US \$15,000 which appears to have been totally inadequate for the task. To date no Project related activities have been initiated in the area of pesticide safety, although plans were discussed with the team for sending a local technician for a short-course in pesticide management through another RDO/C project.

#### The Winter Vegetable Pilot Project

The team's comments on this component are divided into two parts for purposes of clarity: a description of the events as they occurred; and, the team's analysis of the component's implementation.

##### Description

The Winter Vegetable Pilot Project was added to the list of Project components several months into the implementation process. The genesis of the Pilot appears to have been caused by a combination of factors including:

-the demise of the AMP limiting the markets for the original four crops and prompting Project staff to search for new activities to support;

-the decision in April, 1985 by the GOSVG to abandon the production of sugar, with the need to find alternative crops to sugar cane; and,

-the GOSVG's acquiring of Orange Hill Estate which also presented the question of which crops to plant on this rather extensive piece of land.

As a result of these factors, Project staff agreed to provide two short term consultants in May, 1985 to assist in the selection of crops which would have market acceptance in the region and extra-regionally. This exercise resulted in the decision that the production of selected winter vegetables

(peppers, eggplant, zucchini squash, watermelon and cucumbers) for the U.S. market were the best choices.

This then led to the hiring of another short term consultant to design a Business/Operational Plan for the development of a large scale winter vegetable production enterprise. This enterprise, which would have required US \$2.8 million in investment capital, would have required the establishment of two private sector companies (one for production and one for marketing) to be owned by joint Vincentian and U.S. interests. The land would be provided to the enterprise on a long term lease from the government (500 acres the first year, 1,000 the second, and 1,200 the third) for a nominal fee. The company would then establish a 'core' farm for the production and sale of the five commodities to U.S. markets during the months of January through March. Due to the capital intensive nature of the technologies to be applied, the land had to be of less than six percent slope which was potentially available in the Orange Hill area.

The concept further held that production would be initiated on the core farm to solidify the technology and to guarantee quality standards and the volumes necessary to attract shippers and brokers in the U.S. Once this had been established, small farmers surrounding the core farm were to have been invited to produce for the enterprise. The extension of technology, credit, inputs and mechanization pools to small farmers was also to have come about in a later stage. This concept appears to have been aggressively embraced by the current Minister of Agriculture, and the Project and RDO/C staffs as an innovative way of diversifying St. Vincent's crops and markets, creating employment and foreign investment, and assisting the small farmer.

The Business/Operational Plan was completed in mid-August, 1985, but in order to produce for the U.S. winter market the crops were to be planted by the beginning of October. Additionally, the U.S. investors were to have been found by that time, and the investments in the production and marketing facilities were to have been in place. A decision was made to proceed with a search for the U.S. investors in spite of what turned out to be an impossible timetable. Of additional interest is the fact that the consultant cautioned that a foreign investor would require a risk-reducing incentive in order to make the enterprise attractive. The idea of a bonus payment of US \$1.00 per box of produce sold was suggested, but was later rejected by USAID/Washington as looking too much like a subsidy.

It appears that without this bonus payment no U.S. investors were willing to become involved. Nevertheless, a great deal of public interest had been stimulated by the concept, including that of the Prime Minister, and a decision was made between the Project staff, the GOSVG and the RDO/C to proceed with a much scaled down Pilot project. Provisional authorization to spend up to U.S. \$300,000 on such an activity was granted. In a demonstration of its commitment to the activity, the Ministry of Agriculture agreed to hire a U.S. firm, Caribbean Management Services (CMS), to oversee the production operations, while work went forward in the attempt to organize the marketing company. The Project staff agreed to coordinate the day-to-day operations of

the Pilot. Although larger tracts of land were originally considered, the Pilot was finally allocated a total of 97 acres on three sites for the cultivation of the five winter vegetables identified by the two earlier consultants.

The progress of the Pilot effort is well documented in the Quarterly Reports from the Project staff, and in a report entitled, "Winter Vegetable Pilot Project, Final Report, May 10, 1986," and will not be described in detail here. In summary, however, and on a purely financial basis, the Pilot was a great disappointment to most observers with total receipts from the sale of produce reaching only 11 percent of total costs (approximately US \$450,000 was eventually charged to the Pilot with net receipts totaling approximately US \$50,000). However, leaving the analysis at this point would prove a great disservice to the experiment and to those who conducted it. Several ameliorating factors help to explain at least a portion of these losses.

- The pilot was seen as an experiment utilizing grant funding. "If it had been a commercial venture it would have been run much tighter," was one explanation given by the Project Coordinator.

- The management contract with CMS could easily have handled much larger acreages when in reality it only dealt with ninety-seven.

- The machinery acquired by the Pilot (one new four-wheel drive tractor with a complete set of implements, plus two reconditioned tractors left over from the GOSVG's sugar operations) was also capable of covering a far greater acreage than was eventually farmed.

- A large amount of produce was either left in the fields due to a lack of markets, or was carried off (predial larceny). Approximately 40 percent of the total marketable production was lost in this way.

- A relatively large amount of input supplies and packaging materials (US \$36,000) was left over. (Some of this has since been donated to CARDI for its research efforts.)

Nevertheless, several detractors of the Pilot suggested the reasoning that the Project had in fact devoted a far higher share of resources to the Pilot. As the argument goes, if the Project Coordinator's and the Marketing Advisor's salaries, plus office and logistical support were also added to the direct expenses charged to the Pilot, the losses would have been far higher. The fact that these staff members were heavily involved in the day to day management of the Pilot for over a year gives credence to the argument.

Essentially, the production component of the Pilot, using flat land farming techniques from North Carolina adjusted to St. Vincent, plus the

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relative ease of access to capital resources from the Project, did prove to be a success. High quality produce and acceptable yields were realized with four of the five crops planted. Zucchini squash proved to be a disappointment and will not be recommended in the future, while eggplant production surpassed the original production estimates. While cucumber, pepper and watermelon production were far below original estimates, the Project staff feels that increases could easily be achieved through adjustments in the production technology of these crops.

The problems which arose appear to have been in two areas: transportation to market; and, reliance on a U.S. produce broker who proved to be somewhat inexperienced in his knowledge of importing to the Puerto Rican and U.S. markets. Project staff maintain that the marketing of the produce was not a problem, but rather that it was one of transportation to the markets. This is based on an expression of interest from a U.S. medium-sized produce broker who offered to sell any, and all, produce that could be shipped from St. Vincent. This premise was not fully tested, however, since only two shipments of produce (both watermelon) ever reached the market. Additionally, the broker's assurances of market access in Puerto Rico and through Miami proved to be false for a series of reasons. Nevertheless, a somewhat dismaying chain of transport-related disasters (refer to, "Final Report, Winter Vegetable Pilot Project") did point to the fact that transportation is, and will continue to be, the most critical bottleneck to future activities of this type.

#### Analysis

This analysis begins in making the distinction between the proposed private sector enterprise which did not come about, and the Pilot Project which did. In light of the very unfavorable earnings to expenditure ratio, several people related to this evaluation suggested that we consider the Winter Vegetable experience in terms of lessons learned, rather than in terms of what was actually accomplished. We have attempted to do this.

The Business/Operational Plan prepared by the consultant is a well written, technical document which describes the proposed enterprise, lays out the risks involved, and presents varying levels of profit and loss depending on the sensitivity of several variables. It must be acknowledged that the consultant cautions the reader throughout the document concerning the reliability of the assumptions made, as well as pointing out several necessary events which needed to take place for the enterprise to have been a success. It is, however, overly optimistic in making certain assumptions which were not specified, and in selecting a baseline case (the most probable scenario) in the sensitivity analysis which was much more positive than hindsight tells us it should have been.

Possibly the principal assumption which was made, and which was not borne out in fact, was that land in sufficient amounts would be made available by the GOSVG (1,200 acres by year three of the enterprise). While the Minister of Agriculture maintained to Project staff that the necessary acreage

would be available, primarily at Orange Hill, it appears that Cabinet in the final analysis was not in agreement. Discussions with many observers indicated that Cabinet's position was linked to the negative political repercussions which might have come about as a result of a program which would have given a relatively large amount of the country's best land to a foreign national. To many the scheme was viewed as a return to the plantation/estate economy of the past.

Additionally, at the request of the Prime Minister's Office the Organization of American States (OAS) is coordinating the development of a land distribution/integrated rural development program for the Orange Hill estate. This program to date has donor commitments totaling EC \$17.0 million including contributions from the European Economic Community, the Caribbean Development Bank, the St. Vincent Housing Authority, the Canadian International Development Agency and the Organization of American States. Commitments from the World Bank and the British Development Division are also expected. Apparently, this program was being planned through the Ministry of Finance and the Central Planning Unit of the Prime Minister's Office without any coordination with Agriculture. Based on this information it can be presumed that the Orange Hill land was never a real option for the winter vegetable enterprise.

Other assumptions which appear to have been in error include the existence of markets in Puerto Rico and Miami, the reliability of shipping to those markets, and the wage rate/work day which could be expected for the enterprise. In the case of the first two, the sensitivity analysis only deals with upward and downward changes in price, and does not consider the impact of their actual availability to the enterprise. As turned out, neither assumption was valid. Additionally, the wage rate/work day figures used in preparing the crop budgets and pro forma income statements underestimated the various wage rates which would be necessary, as well as overestimating the number of hours which constitute a 'days' labor. (Most people interviewed thought that it would be difficult to find agricultural laborers willing to work more than four to five hours per day, whereas the Business/Operational Plan assumes an eight hour day.)

In summary, the Business/Operational Plan relied on certain assurances from the Minister of Agriculture which did not materialize, while making other assumptions which were later proven to be in error. In this regard it is quite fortunate that the establishment of the enterprise did not continue beyond where it did.

Turning now to the implementation of the Pilot project, rather than dwelling on the specific issues of production, transportation and marketing which have been dealt with in other Project documents, the team has attempted to concentrate on some of the overall assumptions which resulted in the decision to implement the Pilot; especially in terms of the Pilot's influence on other components.

While not an exhaustive listing, the following assumptions appear to the evaluation team to have been crucial to the decision to implement the Pilot, and perhaps form the nexus of the lessons learned from the experiment. In general, and taken together, they helped set the stage for an extremely optimistic environment which greatly influenced GOSVG, RDO/C and Project staff in the decision making process. These assumptions were:

- That the Winter Vegetable Pilot Project would not unduly jeopardize the planned original activities of the Project;
- That the Pilot would be consistent with the Project's Goal of assisting the small farmers of St. Vincent;
- That the Pilot was essentially an experiment in production and that, "if markets could be found so much the better; and,
- That the Pilot would be an overall learning experience for all involved.

The first assumption which deals with the relationship between the Pilot and the Project was no doubt influenced by the potential of a Phase II follow-on Project. Given this line of thinking, any potential conflicts between the Pilot and the Project could have been dealt with at a later date. As was discussed above in the analysis of the other components, several activities and sub-components were in fact delayed due to the Pilot activities, while others might not be accomplished by the time the Project ends in November, 1986. Ultimately, it is the conclusion of the Project staff that the Pilot did affect the implementation of the other components both financially, and in terms of staff time allotted for their completion.

The second assumption stems from the 'core' farm concept which embodies the idea that once the core farm is established and operating, individual small farmers in the surrounding area would be invited to produce similar crops for sale to the enterprise. The concept also includes the provision of required inputs and training to assure that produce of the same quality would be grown by the small farmers. Nevertheless, several potential factors run counter to the harmonious interaction between a core farm and small farmers. The first of these concerns the type of technology, both available and appropriate, in each case. A listing of the differences on St. Vincent is perhaps appropriate:

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### Core Farm

- Primarily flat land (less than 6% slope)
- Extensive land area under unified management (1,200 acres in the third year)
- Total dependence on imported inputs (even bee hives in the case of cucurbits)
- Need for irrigation for most crops
- Need to use large, expensive machinery

### Typical Small Farmer

- Primarily hillside land
- Average plot size less than 5 acres
- Minimal to partial dependence on imported inputs
- No familiarity with irrigation, nor access to it
- No familiarity with machinery, nor access to it

While measures have been suggested to overcome some of these differences (machinery pools, irrigation committees, credit for input purchase, etc.), they all have the tendency to raise the level of complexity and the costs of production for the small farmer. This necessarily leads to greater risks and potential for a loss situation. Additionally, in other countries where this concept has been applied, there has been a demonstrated tendency for the small farmers to be treated as suppliers of last resort by the core farm. The managers of the core farm, in looking to their own interests first, necessarily give priority to the farm's produce in filling market orders and in receiving the highest price. In these cases the produce of small farmers is only accepted when the market volumes cannot be met by the core farm (winter vegetables in Guatemala, milk in Ecuador, copra in Indonesia).

Additionally, the winter vegetable concept holds the potential for adversely affecting small farmers not tied to a core farm. This was partially demonstrated by the Pilot project. Although the principal target of production is the export market a certain percentage of each crop will necessarily be held back due to quality restrictions. These 'rejects' will most likely find their way to the local market where they will depress the prices of the same, or similar, local crops. (This happened in St. Vincent with the Pilot project in the case of cucumbers when the local market was flooded with unsold Pilot project fruit.) The Project's Marketing Advisor felt that this should be expected with any export-oriented commodity, and that "small farmers should be told not to grow the same crops as are being grown on the core farm."

Based on these factors, it is the team's judgement that even if the core farm concept had been successful, it would have provided little, or no benefit to small farmers. This appears to also be the opinion of the Project's

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Marketing Advisor who stated to the team that, "Winter vegetables are not for the small farmer", when asked about the small farmer's ability to meet the quality standards demanded by the marketplace.

A third salient assumption which was made in the Pilot project was that production should be the emphasis of the exercise, and that marketing would be sorted out at a later date. To the team, as well as to many of the people interviewed during field investigation, production is not the bottleneck; especially given the availability of capital and technology as was the case with the Pilot project. Rather, the principal constraint to the expansion of St. Vincent's agriculture lies in market identification and access. While we recognize the efforts which went into producing the crops, we wish that at least as much emphasis had been placed on the marketing side of the equation as was placed on production.

The last significant assumption which was made was that the Pilot was an experiment from which much would be learned and appreciated. While only siding slightly with the respondents who answered, "nothing new", to the team's question of what had been learned in the Pilot project, we did note a certain redundancy in many of the 'lessons learned' cited in the final report. Aside from this, however, the team's principal concern about the lessons learned issue concerns the question of, 'lessons learned by whom?' The Project staff and those working on the CMS management contract obviously learned the most from both the production and marketing standpoints. Several GOSVG and RDO/C officials undoubtedly also benefited from the experience. Nevertheless, and aside from the quarterly and final reports which have been written and which are receiving limited distribution, the team sees no institutionalization of the learning process; i.e., training programs, counterpart relationships, etc. While we recognize that the Project staff strongly encouraged small farmers and farmers' groups to visit the production plots (which was a very successful effort), there is a great difference between observing watermelons growing in rows and in knowing how to grow them and the intricacies of their markets.

## Conclusions: Opportunities Lost

The following conclusions reflect the team's analysis of our field interviews and discussions with RDO/C and Project staff, GOSVG officials and policy makers, and Project beneficiaries. They are presented in the format originally requested: original design, actual implementation; and, benefits.

In general terms, the original design of the Project seems to have been appropriate to the Project setting at the time. The Project design realistically identified and attempted to address a majority of the bottlenecks facing Vincentian agriculture. With certain exceptions (i.e., overly optimistic research goals, overly optimistic assumptions concerning government absorptive capacity of technical assistance, the avoidance of a market identification component, the absence of adequate funding for the soil testing facilities), the targets and assumptions were also within the range of what was appropriate and achievable at the time. The fact that many of the sub-components were altered or cancelled during implementation should not necessarily lead to the conclusion that the design was inadequate, but rather that external factors intervened and impacted on the priorities and direction of the Project.

One important design issue which needs to be mentioned in our concluding remarks is that of the relatively high proportion of technical assistance which the Project provided compared to the other types of expenditures. This was underscored by the Minister of Agriculture when he summed up the net benefits of the Project by saying that, "There weren't enough bricks and mortar in the Project." In light of the expectation of a second phase to the Project the proportion seems reasonable, however, as the situation turned out it tended to greatly reduce the visual impact of the overall Project, as well as its long term effectiveness.

The actual implementation of the Project as designed was greatly affected by the four factors mentioned in the introduction: a change in the GOSVG administration; the abandonment of the AMP; the abandonment of sugar by the GOSVG; and RDO/C's shift from bilateral to regional projects. For better, or for worse, the combined effect of these factors tended to erode what had been an integrated Project with interdependent components, into a series of somewhat unrelated activities. Furthermore, the advent of the Winter Vegetable Pilot Project did substantially impact on several of the other components causing action on some of them to be postponed while others were dropped. Additionally, it is the feeling of the team that the decision to mount the Winter Vegetable component signified a radical shift in the Project's goal and purpose by not linking it directly to the development of small farmers.

Nevertheless, several sub-components and activities were accomplished which hold the promise of developmental impact for the future. The Research component is now underway which will no doubt lead to the selection of higher yielding varieties of carrots and sweet potatoes. The ORD input supply component is presently benefitting small farmers and all indications are that

it will continue to do so in the future. In terms of the Marketing component, the short-term storage facility for traffickers will be built, grades and standards will have been established for St. Vincent's principal export crops, and the consciousness of traffickers in terms of produce quality has undoubtedly been increased. The agricultural census was also completed which will provide invaluable information to GOSVG planners and donors alike. Additionally, the Ministry of Trade, Industry and Agriculture will receive larger, more appropriate office facilities. Even in the case of the Winter Vegetable Pilot Project experiences were gained, and "a better understanding of the problems involved in producing for U.S. markets was achieved" as was stated by the Project Coordinator.

The most disheartening aspect of the implementation, however, deals with what we refer to as a lack of an institutionalization of the Project's activities. A cardinal rule of development assistance projects stresses the need for counterparts to expatriot technical advisors, as well as a close working relationship with the local implementing agencies and beneficiaries. From the Survey Statistician whose counterpart turned out to be inappropriate, to the Marketing Advisor who was never housed in the Marketing Corporation (where he was to be the counterpart to the General Manager), and to the Winter Vegetable Pilot whose designers never considered a role for a counterpart, the Project violates the rule. Below the level of Minister of Agriculture and Project Manager few Vincentians interviewed considered themselves to be part of the Project or to have had any influence over it. Additionally, in many cases, the planned training activities have not taken place and most likely will not before the current termination of the Project. In order to partially address this issue, the team recommends an extension of the Survey Statistician and the Marketing Advisor for periods of three to six months to carry out selected training in the use of the sample frame in conducting the special studies in the case of the former, and to train traffickers and SMC personnel in the use of the short term storage facility and the new packaging materials in the case of the latter.

Since many of the sub-components have not as yet been completed, or have not had sufficient time for their benefits to materialize, the measurement of actual Project impact is somewhat difficult. As far as direct, perceivable benefits are concerned the only successful sub-component has been the ORD input supply scheme. Other activities such as the agronomic research, the census, the Ministry addition, and the short term storage facility for traffickers will have to be reevaluated at a future time to determine their benefits to the agricultural development process.

LIST OF INDIVIDUALS CONTACTED

USAID

William Baucom, Agricultural Development Officer  
Larry Laird, Deputy Agricultural Development Officer  
Mike Maxey, Assistant Agricultural Development Officer  
Ted Bratrude, Program Officer

RONCO

Leon Hesser, Project Coordinator  
Robert Maloney, Marketing Advisor  
Robert Ngong, Census Statistician

Ministry of Trade, Industry, and Agriculture

Marcus DeFreitas, Minister of Agriculture (by telephone)  
Hugh Phillips, Project Manager  
Kingsley Layne, Permanent Secretary  
Grafton Van Loo, Chief Agricultural Officer  
Charles Gunsam, Research Officer

Organization for Rural Development

Jethro Greene, Chief Coordinator  
Norville Abrahams, Marketing and Production Coordinator  
Hector Lawrence, Financial Analyst  
David Collins, Financial/Administrative Advisor  
Harold Jones, Agronomist  
Ruthlyn Cruchan, Field Officer  
Vernon Cuningan, Field Officer  
Alstan Mandeville, Marketing Agent

Caribbean Agricultural Research and Development Institute

Harold Patterson, Country Team Leader

St. Vincent Marketing Corporation

Gilbert Telemaque, General Manager

Farmers - 6 men, 6 women

Traffickers

Conrad Forbes, President Traffickers' Association  
1 man, 1 woman

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American States

ion, Representative

, Ex-Minister of Agriculture  
ie, Ex-Head of Extension Service  
h, local entrepreneur  
Ex-CARDI Field Staff  
Farm Manager  
-Peace Corps Volunteer, now farming  
cape gardening in St. Vincent

STATEMENT OF WORK

I. PURPOSE

The purpose of this contract is to assess the effectiveness of the St. Vincent Agriculture Development Project No. 538-0101 in satisfying the goal, purpose and end-of-project objectives as specified in the Project Paper.

II. BACKGROUND

The Agriculture Development Project was authorized on June 27, 1984, to provide US\$2.0 million to support agriculture development in St. Vincent. The objectives of the project are to: a) increase the productivity of small farm agriculture; b) improve efficiency in marketing and expand markets for commodities produced in small holder systems, and c) strengthen the capability of the agricultural sector to perform more effective program planning and monitoring. The Project consists of five components that, while essentially separate activities, are linked by their relationship to the four commodities (sweet potatoes, carrots, onions and peanuts) targeted for increased production and sale. Assistance is being provided in the following areas:

- a) Marketing -- training of producers and traders, establishment of proper packaging materials, provision of rental space for short-term storage of produce, and establishment of a marketing information service.
- b) Research and Technology Transfer -- varietal testing and renovation of research facilities.
- c) Production Inputs -- establishment of a revolving credit in-kind production input program for small farmers.
- d) Census -- execution of a national agricultural census.
- e) Special Studies -- support for special studies by Ministry of Agriculture.

The goal of the Project is to increase net incomes of small farmers and increase foreign earnings from agricultural exports. The purpose of the Project is to increase productivity of small holder agriculture, and improve marketing efficiency for commodities produced in these systems. To achieve this purpose, the design strategy of the Project called for resources -- technical assistance, commodities and equipment -- to be marshaled by public and private sector entities, to remove production/marketing constraints on four targeted crops - carrots, sweet potatoes, peanuts and onions.

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The project design calls for three primary actions to be taken regarding each targeted commodity: a) research to alleviate production constraints; b) credit assistance to small farmers for production input purchases to allow full utilization of existing and project supported research; and c) assistance to find new markets, to improve current agricultural marketing services and to establish a local agriculture information base for improved marketing. The utilization of a commodity specific approach was intended to provide a practical model for the GOSVG's use in expanding opportunities for small farmer production and marketing.

To a significant extent this model has already been replicated under the Project using four vegetable crops with potential for sale in external markets in the United States and United Kingdom during a "winter window" of January, February and March of each year. In May 1985, an assessment was made of the production and marketing potential of certain vegetable crops for the U.S. winter market. It was concluded that there was potential for development of a private sector operated "winter vegetable" production and marketing company. A preliminary proposal for this activity indicated there was sufficient arable land (800 acres) available for development of a base farm to be operated by the private company. The proposal followed closely the general concept of the AID supported Agro-21 Project in Jamaica -- private production and marketing of five vegetable crops (sweet pepper, cucumber, squash, watermelon, and eggplant) with AID financing for fixed assets such as packing and cooling equipment. The Mission reviewed the proposal and at the request of the Government of St. Vincent and the Grenadines (GOSVG), agreed to fund technical assistance under the Project to develop a business/operational plan for a winter vegetable production enterprise in St. Vincent.

The final business plan indicated the enterprise could be financially sound if support was provided to off-set marketing risks (i.e. inadequate shipping and post-harvest handling infrastructure). The Mission considered providing some type of incentive program for the formation of a private company (a bonus payment plan was considered whereby a specified amount -- determined by the added costs of operating in St. Vincent as opposed to South Florida -- would be paid the company by AID for every box of produce delivered to the U.S. market). The incentive program was informally discussed in AID/W and determined to be inappropriate. Without an incentive program, no investor could be found for formation of the private company.

Meanwhile, a groundswell of interest (led by the Minister of Agriculture) occurred in St. Vincent regarding the production of winter vegetables. This type of an agricultural production program was seen by the GOSVG as a partial solution to the unemployment problem caused by the closure of the sugar industry. Prime Minister Mitchell requested AID assistance to test the feasibility of producing and marketing vegetables. The Mission agreed to fund US\$300,000 for a Winter Vegetable Pilot under the Research and Marketing component of the Project. The Winter Vegetable Pilot was executed as a major component of the Project.

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Therefore, the Project consisted of the five components identified in paragraph one above. However, the "Winter Vegetable" pilot activity was an expansion of the activities originally identified under the Research and Marketing components.

### III. SCOPE OF WORK

A. The contractor shall perform the following tasks.

Task 1 -- Review of Project Design for Appropriateness to the Project Setting

The contractor shall review each of the major elements of the original Project design (to include the goal, purpose, outputs, problems to be addressed, assumptions made, activities to be undertaken, implementation plan, and financial resources provided) for the purpose of determining how well the design elements fit the operational setting in which the Project was actually implemented. In particular, the contractor shall examine the government policy environment and other exogenous factors extant when the Project was designed and examine the affect on the Project of any changes in government policy and other factors that may have occurred after the Project was designed. Likewise, the contractor shall examine the proposed roles of each institution described in the original Project design to compare and contrast these proposed roles with the actual roles played by these institutions during Project implementation. The review conducted under this work task shall seek to determine the degree to which the original Project design elements were appropriate in light of the actual experience of the Project. As a result of this work, the contractor shall prepare a memorandum setting forth its professional judgement regarding the appropriateness of the conceptual, operational, financial, and other design elements of the Project in light of the experience since the Project design was originally completed.

Task 2 -- Review of Implementation Activities and Accomplishments

The contractor shall identify and review each major activity undertaken to implement the Project, and shall describe the outputs which have been accomplished in each major activity. Objectively verifiable measures shall be used wherever possible to describe the magnitude of the outputs achieved. Care shall be used to describe the activities and achievements which were planned in the original Project design, as well as those that were not planned in the original design. In those instances, if any, where actual achievements of outputs of any activity are significantly less than originally planned, the contractor shall analyze the cause of such shortfalls and delays. The contractor shall comment on the effectiveness and the efficiency of the work accomplished by the principal organizations, firms, and individuals holding responsibility for implementing the Project. The contractor shall also comment on the responsiveness and effectiveness with which RDO/C met its responsibilities to monitor the Project and to disburse

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funds on a timely basis. The contractor shall prepare a memorandum which describes its findings, sets forth its comments, and summarizes its conclusions regarding the activities and accomplishments achieved under the Project.

Task 3 -- Review of Project Impact and Strategic Significance

The contractor shall examine the extent to which the Project contributed to increases in productivity of small-holder agriculture in St. Vincent or improved the marketing efficiency for commodities produced in these systems. This examination should include instances where new technology, improved implements, access to inputs, changes in policy, post-harvest handling, or any other aspect of agricultural husbandry may have been influenced by the Project. The contractor shall estimate the proportion of the farm families that appear to have been affected by the Project and shall comment on the degree to which any changes in production or marketing methods introduced by the Project are likely to be sustained beyond the life of the Project. Further, the contractor shall examine the extent to which the Project may have contributed to the strategic goal of diversifying and re-orienting St. Vincent agricultural sector to export a broader range of high-value commodities. Specifically, the contractor shall assess and comment on the strength and weakness of the Project with regard to its strategic significance to the development of St. Vincent agriculture. As a result of this review, the contractor shall prepare a memorandum setting forth its professional opinion regarding this development impact and strategic significance of the Project.

Task 4 -- Prepare Final Report

Based on the work and reviews accomplished in Tasks 1 through 3, the contractor shall document the findings and conclusions in a report entitled "An Evaluation of the St. Vincent Agricultural Development Project. AID Project No. 538-0101". This report shall include the following sections.

a. An Executive Summary including the purpose of the evaluation, methodology used, findings, conclusion and recommendations, the development impact of the Project and lessons learned.

b. An explicit description of the methodology and a copy of the Scope of Work.

c. A listing of the evaluation team, including host country personnel, their field of expertise and the role they played on the team.

d. A clear presentation of the evaluation findings in a separate section of the report.

e. A separate section on the development impact of the Project.

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f. A separate section on lessons learned and recommendations for future activities. This should describe to the extent possible, the contractor's perception of the causal relationship among factors that appeared critical to Project accomplishments or shortcomings.

The contractor may include additional sections in the report as deemed useful. The contractor shall present RDO/C with a substantially complete written draft of this report prior to the departure of the field evaluation team.

B. The evaluation team shall perform the services required in three phases as follows:

1. Phase I

The duration of Phase I will be approximately four work days. The evaluation team will be expected to become familiar with the Project, determine the evaluation criteria, develop survey instruments and identify specific data and benchmarks for measuring Project impact within an appropriate framework. At the conclusion of Phase I, the evaluation team will discuss planned methodology and planned field work activity with RDO/C.

2. Phase II

During Phase II the evaluation team will be expected to conduct field work and interviews over a six work day period. The team will visit St. Vincent to collect data and to conduct interviews with technical assistance staff, Ministry of Agriculture officials, farmers, and personnel of cooperating organizations (ORD, CARDI and CARDATS).

3. Phase III

Phase III involves the analysis of findings and the preparation of the draft report to be accomplished in five work days.

IV. REPORTS

The report described in Task 4 in the above section shall constitute the "final report" of the contractor's work accomplished under this work order. This report shall be submitted to RDO/C in twenty (20) copies no later than September 30, 1986.

V. RELATIONSHIPS AND RESPONSIBILITIES

Contractor personnel will be responsible to the Mission Director of RDO/C or his designee and will coordinate their activities with GUSVG officials and other appropriate individuals in St. Vincent (CARDI, ORD, RONCO, Huckster's Association, etc.).

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VI. PERSONNEL

A. It is expected that work under this contract will begin in Barbados (4 days), with travel to St. Vincent (6 days), and conclude with a final week of report preparation and debriefing in Barbados.

B. It is anticipated that performance of this evaluation will require the following expertise:

1. Agronomist/Agricultural Economist  
and Team Leader: 18 person days
2. Agricultural Economist: 18 person days
3. Agricultural Marketing Specialist: 9 person days

VII. TERM OF PERFORMANCE

The contractor shall initiate work on or about August 18, 1986 and the Estimated Completion Date is September 30, 1986.