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CLASSIFICATION  
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE <b>Agricultural Marketing Development</b>			2. PROJECT NUMBER <b>532-0060</b>	3. MISSION/AID/W OFFICE <b>USAID/JAMAICA</b>
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <b>94-2</b>	
A. First PRO-AG or Equivalent FY <b>80</b>	B. Final Obligation Expected FY <b>87</b>	C. Final Input Delivery FY <b>87</b>	6. ESTIMATED PROJECT FUNDING (000)	
			7. PERIOD COVERED BY EVALUATION	
			From (month/yr.) <b>1/81</b>	
			To (month/yr.) <b>11/83</b>	
			Date of Evaluation Review <b>Nov. 2-22, 1983</b>	
			<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Existing AMC facility will be renovated to serve as one of the subterminal markets and lease commitment lowered to 20% to satisfy C.P.	MOA-SAHNEY	12/84
2. A Livestock Auction Market will be included as an Assembly and Grading Station.	MOA-KNIGHT	9/84
3. An abattoir will be constructed to serve as one of the SWDMs, a joint venture between a private firm and the Jamaica Livestock Association is being pursued to lease and/or purchase the facility.	MOA-KNIGHT	6/85
4. The MOA will concentrate its efforts on establishing 6-9 AGSs and take up the remaining 16-19 if warranted.	MOA-SAHNEY	12/84
5. C.P.s for AGSs will not be waived as requested by MOA.	MANGRICH	1/84
6. PACD will be extended only if satisfactory progress is made with the implementation of Phase II.	MANGRICH	6/85
7. Operating subsidies to new Producer Marketing Organizations will be increased to 4 years to cover shortfalls in operating expenses on a sliding scale.	MOA-SAHNEY	3/84

C. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____
<input checked="" type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A.	<input type="checkbox"/> Continue Project Without Change
B.	<input checked="" type="checkbox"/> Change Project Design and/or
	<input checked="" type="checkbox"/> Change Implementation Plan
C.	<input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Richard Mangrich, Project Officer, USAID/J  
Ashok Sahney, Actg. Director, Marketing Div. MOA  
Herbert Knight, Project Coordinator, Marketing Division, MOA

12. Mission/AID/W Office Director Approval

Signature: *Lewis P. Reade*  
Typed Name: Lewis P. Reade  
Date: \_\_\_\_\_

<p>8. Vehicles will be added to the list of eligible equipment for the AGSs.</p>	<p>MOA-SAHNEY MANGRICH</p>	<p>5/84</p>
<p>9. Savings (US &amp; J\$) from the reduced scope of the SWDM component will be reprogramed as follows:</p>		
<p>a) US\$2,500,000 credit guarantee for PMOs (GOJ Budget).  b) US\$1,000,000 technical assistance (AID budget)  c) US\$ 200,000 for demonstration farms (GOJ, AID)  d) US\$ 100,000 Marketing Extension support (GOJ &amp; AID Budget)  e) US\$ 50,000 Postharvest handling and quality assurance equipment (AID)  f) US\$ 50,000 Postharvest handling and storage demonstration (GOJ, AID)  g) US\$ 150,000 Market research and development (GOJ, AID)</p>	<p>MOA-SAHNEY MANGRICH</p>	<p>5/84</p>
<p>10. AID not agreed to MOA assigning managers to new PMOs. New Agricultural Cooperative Development Project with National Union of Cooperative Societies (NUCS) will train management candidates who will then be hired by PMOs directly.</p>		
<p>11. Amendment reflecting modifications will be effected. <i>CF</i></p>	<p>MOA-SAHNEY MANGRICH</p>	<p>5/84</p>

FINAL REPORT  
MID-TERM EVALUATION  
AGRICULTURAL DEVELOPMENT MARKETING  
PHASES I & II  
November 2 through 22, 1983  
Kingston, Jamaica

Dr. Kenneth Swanberg, USAID/W  
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Alex McLean, Data Bank, MOA  
Herbert Knight, Project Coordinator

Project No. 532-0060  
Loan Number 532-T-013A

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I.

Preface

The evaluation team first met in Washington, D.C. for two days of Team Planning Orientation, led by Bill LeClere, who had previously worked to help structure the current MOA system. The U.S. team was then joined by Ms. Carleen Gardner, a sociologist who had done the original social soundness analysis, Mr. Leslie Orr, from PAMCO, of the Office of the Prime Minister, and Alex McLean from the Data Bank of the MOA.

The team made several interviews with all of the staff during the course of the 3-week period allocated for the evaluation. Several field trips were taken, to a livestock market in Santa Cruz, a smallstock market in Old Harbour, several parish markets, and to six potential producer marketing organizations (PMOs). Visits were made to Douglas Castle, Christiana, Southfield, Bushy Park, Spring Plain and Ebony Park. At each location, except Spring Plain the team met with the board of directors and several farmers.

Many collaborating organizations were also contacted, most notably, Agro 21, National Union of Cooperatives (NUCS), AMC, private exporters, FAO experts, and the Coronation Market.

The team wishes to express its sincere thanks to all members of the MACD staff for their gracious cooperation without which these findings would have been impossible to attain.

## II.

### Review of Project Goals and Purpose

The original project was designed to increase farmer incomes, reduce food costs, and increase higgler or trader earnings. These goals were to be achieved by reducing post-harvest losses, increasing the volume of produce marketed, and reducing marketing margins. The project paper suggested parameters of 35% to 25% for post-harvest loss reduction, an increase of 5% in production and a reduction in marketing margins from 68% to 60%. In reviewing these goals, the evaluation team finds them to be conservative at best, but can find no evidence to suggest that the specific levels of losses and margins currently exist or not. Nevertheless, they do not seem to be unreasonable, nor do the goals appear to be unachievable over the long-run. However, it does seem to be presumptuous that these goals would be achieved within a short time horizon. A ten-year period might be more realistic for achieving these benefits on a global basis.

In looking at farmer incomes, three approaches can be taken. One is to increase acreage at given income levels. The second is to increase productivity rates per hectare. Third is to shift to higher income crops or crop combinations. All of these techniques are to be used in the project with emphasis being given to the first and third. Food costs can be reduced by lowering the price consumers must pay or by increasing the nutritional value per dollar spent. It is presumed the former will be pursued more than the latter. Increasing marketing agent incomes is much more difficult to achieve, but some of the models in VII will show how this can be done.

The elements of this project are fairly standard for a marketing project designed in the late 70's. However, there are few projects like this one which have succeeded and the original design did not take into account the many failures which have occurred over the years in building marketing infrastructures, namely terminal and sub-terminal markets. Nevertheless, with modest adjustments to the size of the infrastructures recommended and increased support for the marketing operations per se, the project should be in a position to achieve a good share of its expected benefits.

Phase I of the project focused on developing an awareness for marketing activities in the Ministry of Agriculture. This was accomplished with a high level of success when judged against the standard of similar projects throughout the third world. A marketing division was established with technical components in market information, market research, training, marketing extension, and quality assurance. A separate structure has been created within the MOA and capable staff have been recruited to work within it. Although not all of the allocated positions

have been filled, some of which are critical, a substantial mass has been gathered together to promote marketing activities. 72 out of 94 slots have been filled, and several activities are on-going and will be reviewed in the next section.

Phase II of the project envisions 25 assembly and grading stations (AGSs) and four sub-terminal wholesale distribution markets (SWDMs). The AGSs will be managed by producer marketing organizations, (PMOs). The project will provide foreign exchange and local currency for constructing these stations and markets, equipment for grading and packaging, vehicles, and some cold storage.

In establishing the MACD in Phase I, the project would provide GOJ funds for its operation. In addition, foreign exchange would be disbursed from USAID for technical assistance and overseas training.

In reviewing this project, it is obvious that Phase I was well designed and has evolved in a timely manner, in spite of the setbacks incurred early in its implementation. The original technical assistance team was incapable of adjusting to Jamaican staff and bureaucracy, and was terminated before a year had passed. A new consulting team from RONCO was contracted in April of 1983, and has worked quite well with the Jamaicans since that time. They are well respected and technically qualified to do the job.

With regard to Phase II and the 25 AGSs and 4 SWDMs, a critique is in order. For an island the size of Jamaica with a population of 2.2 million and only 176,000 small farmers, 25 large scale AGSs is inappropriate. Domestic produce does not benefit to any degree from excessive grading. Some benefits will accrue to assembly activities and spatial coordination of supply and demand, but 25 stations is excessive. However, if the AGSs were to be modified in size and in the volume of through-put required to break even, then 25 could be viable.

On the other hand, 4 major SWDMs would be unrealistic under any circumstances. But since the SWDMs were designed to be half produce and half livestock, a proposition which the MACD and Jamaica Livestock Association feel is inappropriate, two produce and two livestock SWDMs have been suggested at a scaled down level.

### III. Achievements to Date

Phase I of the project can be considered to be successful. The MACD has been established and an awareness of marketing

issues is felt throughout the Ministry. From a technical viewpoint, the following achievements can be observed.

Market news seems to be the most advanced activity, with prices being collected three times a week on over 20 commodities from Coronation market and other satellites in Kingston, plus four regional markets spread throughout the island. Prices are recorded, published, broadcast, and distributed, daily and weekly. Situation and Outlook reports are also being developed for several commodities. The program is the most advanced that the evaluation team has seen operating anywhere in the third world.

The market research unit is saddled with a heavy workload. Initially, this section was charged with developing the feasibility studies for all the PMOs. This is an extensive task, and a lot of staff time has been dedicated to this end. Given the somewhat marginal value of the results of such limited studies, staff may be more efficiently employed if transferred to other research tasks.

The training function within the MACD is still somewhat ill-defined. Discussions over how to accommodate long-term training when short-handed never end. New accommodations for overseas coursework are being developed with the University of Florida, whereby students may study a semester at a time and return to work in the MACD for every other semester. This would reduce the length of their absence. Short-courses and training materials are being developed, and with the new arrangements with NUCs, it is hoped that the effectiveness of the training program will be enhanced.

Marketing extension started slowly but has come on strongly in recent months. A highly motivated staff has been organizing PMO groups in several areas, and six groups are presently being registered. The field staff we met were well qualified and quite capable of organizing and registering the farmers. Peace Corps, ACIDI and PFP were helping out in 3 cases. Organizing the farmers into PMOs was originally left out of the project activities which was a serious flaw in the overall concept. Since this has been corrected, significant strides have been made towards achieving the projects ultimate goals.

In order to assist in PMO organization and training, a separate project grant has been developed with NUCs to select PMO managers and field officers for training and eventual assignment in each PMO, for training of PMO Boards of Directors, and for organizing future PMOs.

Quality assurance has been establishing grades and standards for root crops, commodities which traditionally are not graded except by the traders themselves. Significant progress has been achieved to date. However, grades and standards on domestic

produce may not add value to the crops in terms of the value product after grading. Only some test marketing trials can answer this question. Nevertheless, as more produce is prepared for export, the role of this section will increase proportionately.

In Phase II, achievements have been more modest. It has not been easy to register PMOs, sign up farmers and write contracts with MACD for expensive equipment. At present, five PMOs have been formed, with a few more ready to move ahead. Five groups were visited by the team, and appear to be ready to start operating as a PMO. The team met with the Board of Directors and several farmers in each case.

IV. Viability of the Assembly and Grading Stations (AGSs), Producer Marketing Organizations (PMOs) and the Sub-terminal Wholesale Distribution Markets (SWDMs)

IV.1 Feasibility/Options Concerning PMO/AGS/SWDM Marketing System

- A. The original project paper specifies that twenty-five Agricultural Grading Stations (AGSs) and four Sub-wholesale Distribution Markets (SWDMs) for fresh produce and meat will be constructed during Phase II of the project.
- B. Despite all the "feasibility" studies of positive PMOs/AGs, it is not possible to suggest that the system as a whole, or even its individual parts will be successful (economically or financially sound) in Jamaica. There are simply too many untested and unmeasurable factors affecting total feasibility of the project. Failure in other Caribbean countries of similar systems (U. of West Indies Report), many failures in other countries (Mittendorf FAO, letter to Mr. Zanny) and many failures in southern U.S. suggest that at best the whole project is a speculative venture. The options then are 1) cancel the project, or 2) despite limitations, assume that some PMO/AGS/SWDM system is feasible in Jamaica. If Option 2 is chosen, then change and/or modify the originally proposed system to a more practical and workable system. The following suggestions for changes or modifications in project design are based on Assumption 2.

IV.2 Assembly and Grading Stations (AGSs)

- A. Number - It is recommended that the immediate construction schedule for AGSs be reduced from 25 to about 6. The reason for this will become clearer as the report proceeds, and the six will be specified in more detail.
- B. Sizes of AGS's Buildings and Equipment - As the project was initiated two or three years ago, the original buildings for the first two or three PMO/AGSs were too large and over-designed and the original equipment too expensive for the proposed use or needs. The original building requirements have been scaled down (redesigned by Urban Development Corporation [UDC]) based on specifications furnished by MACD/RONCO.

Some of the original equipment was deemed unnecessary or over-designed and too expensive for Jamaica's initial use. As there has been so much discussion of the originally purchased equipment and its "excessive" cost, the originally-purchased equipment and the "extra" cost involved will be discussed in some detail.

The original equipment purchase was for US\$979,336 to satisfy the needs for the first three PMO/AGS and for a red pea and potato grading line for Christiana Potato Growers Cooperative (CPGA) (see Exhibit A). One red pea line and the potato grading line amounting to US\$166,084 was ordered and funded under the Integrated Rural Development Project. However, the orders for one hydro-cooler, one utility line and three proposed yam lines were cancelled. About US\$80,000 for the hydro-cooler, US\$81,000 for a utility line and US\$133,000 for the yam lines was recovered from the supplier. These cancellations result in a total encumbered funds of around US\$520,000 estimate around \$1,200,000 equipment needs for 25 AGSs.

The original Packing Line Number 1, which combines a pepper, tomato, cucumber and mango packing line (initially scheduled for Bushy Park), was over-designed. The estimate for more appropriate equipment suggests around US\$130,000 could have been saved on this line (US\$80,000 of that figure was saved by cancelling the hydro-cooler). Similarly, for the original Packing Line Number 2, utility packing line for various fruits and vegetables. One was cancelled for a savings of around US\$81,000 of the two lines ordered an additional savings of \$60,000 could have been made if more appropriate equipment was ordered. For Packing Line Number 3, which was three yam lines, all were cancelled.

Packing Line Number 4 - acceptable as is (red pea line).

Packing Line Number 5 - Potato grading, washing and packaging line acceptable as is (for Christiana).

Cold Storage System - the equipment is in storage but will be used.

Of the total equipment ordered so far, perhaps \$50,000 could have been saved on Line 1 and perhaps \$60,000 could have been saved on Lines 2. With a total possible unnecessary expenditure of \$110,000 US, the options for the excess equipment are:

1. Do nothing - use as is
2. Sell Line 1 and buy cheaper equipment (the equipment has been offered to AGRO 21 for sale)
3. Keep the equipment, but MACD/AID pay the excess costs over more practical equipment and that full costs would not be charged to the PMO/AGS that eventually will use the equipment. This would mean that MACD/AID would absorb costs of around \$110,000 US.

Currently, building design and equipment design are deemed to be appropriate for the locations, crops and volumes expected on the proposed AGS's,

### C. Feasibility Analysis

Feasibility analysis for the AGS's have been developed for Southfield, Bushy Park (Thetford), Dias, Douglas Castle, and Guy's Hill. The quality of the analysis has improved through time and the Guy's Hill system and method of analysis will be used as a "model" for future studies.

A recently completed re-evaluation of the Dias AGS has suggested that this AGS is unfeasible.<sup>1</sup> Other analyses are in progress including Moore Town, Wait-a-Bit, Trinityville and South Manchester. A feasibility study of Rhymesbury (Ebony Park) is expected to be undertaken soon.

The feasibility studies are based on the general assumption that the AGS will receive some specified percentage of the total crop marketed from an area in a 5 mile radius of the AGS, and that a certain mark-up for grading and purchasing of 5 to 10% of the value of sales will be received for the grading services rendered. These assumptions are probably untestable until operations actually start.

#### D. Problems of the AGS concept

A grading and packing system contains the following elements for financial and/or economic success.

- 1 - Production
- 2 - Assembly
- 3 - Grading and packing
- 4 - Distribution of the packed product and sale or disposal of off grade products.

As such, a system was not designed. The AGS design was for an AGS to stand in isolation. Project design did not include assembly nor distribution of the product. Assembly and the associated costs of loading and transportation to the AGS was not incorporated into the project design. Assembly can be a very costly and time consuming process. Perhaps a series of assembly locations needs to surround each AGS (Christiana, for example, has 26 assembly points, and CPGA sends trucks to the different assembly points on a certain schedule). Small pick-up trucks, or in some locations a group of donkeys may be necessary for efficient assembly and transport to the AGS. Similarly, large trucks (3-5 ton trucks) may be necessary for both assembly and for transport of graded products to market. A recommendation is for at least one 3-to 5-ton truck to be owned by each AGS.

Finally, from a comparative international as well as regional point of view, production costs are an integral part of the system. Conceptually, then, with an analysis of:

- Production costs
- Assembly costs
- Grading and packing costs
- Distribution costs

one can make comparisons among areas, and comparisons across countries, i.e. tomato production in Southfield compared to Ebony Park, or tomato production in either to costs in Dominican Republic, Mexico, Puerto Rico, etc. when the markets are the same (U.S. and Canada, for example).

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<sup>1</sup>If the proposed road is built to connect Dias to the market road, this area will become feasible.

A systematized approach needs to be taken both in project design concepts as well as in direct operations of the AGSs, as a grading and packing plant cannot exist in isolation but only as a part of a complete system.

- E. Problems of Volume and Scale Economies - The success of an AGS will largely depend on the services offered. Volume, physical quantities per day times the days of operation per year, is extremely important.

Overhead costs of plant and equipment are fixed and the larger the volume the less the cost per unit. This ties in to the concept of assembly and distribution being integral parts of a system.

- F. Capital Costs of Operations - A grading and packaging operation has a need for considerable operating capital. Managers and laborers have to be paid, as well as container costs, and some advance payment (before final sales) must be made to members of the PMO/cooperative. This may call for considerable operating capital. Where, how, and when this operating capital will be supplied to the AGS have not been specified in project design to date.

#### IV.3 PMOs (Producer Marketing Organizations)

Although PMOs are reported separately under another section, a brief discussion will be given here, and then a brief section will be given on PMO-AGS interactions and some of the problems involved. The necessity for developing PMOs and the process for developing specific PMOs was determined after project initiation and instigated approximately eighteen months ago. The establishment of a PMO and a contractual agreement between the PMO and the Ministry of Agriculture (MOA) is a Condition precedent (CP) before agreement on the establishment and funding of an AGS and instigated about eight months ago.

Several misconceptions in the establishment of PMOs existed at the MOA before the arrival of the RONCO team—and to a certain extent, the same misconceptions affect the progress and length of time to effectively develop an operational system of AGS. These misconceptions were a general misunderstanding and underestimate of the time and effort required to:

1. establish an operational PMO
2. to train PMO members and overcome the organizational problems that would be encountered
3. select and develop leadership
4. in getting enough growers and volume for a PMO
5. in establishing (legal) methods of incorporation when a cooperative was not an acceptable organizational structure.

6. in training and/or selection of appropriate managers the AGS would need.

Currently, the MACD/RONCO teams are being quite realistic. Effective PMO development is regarded as the major stumbling block for the instigation of AGSs. The National Union of Cooperatives (NUCS) is being retained to assist in training of PMOs and assist in the selection and training of AGS managers. The MACD/RONCO unit involved in organization and training must be beefed up and resources of other MACD/RONCO units must assist directly in developing information specifically needed in PMO/AGS development. Specific recommendations concerning this will be presented later. Concerning the legal aspects of incorporation (see 5 above) the MACD is exploring the use of the "Industrial and Providence Societies Act", which may be used in lieu of a cooperative per se.

#### IV.4 PMO/AGS Interaction

As a part of the Conditions Precedent for the establishment of an AGS:

1. A clear title to the site must be obtained.
2. A feasibility study must be conducted.
3. The PMO must be a legal organization.
4. A contractual arrangement between a PMO and the MOA must be agreed upon and signed.

Inherent in the process is that a manager of the AGS must be trained or obtained. This may partially be through NUCS, but the NUCS/MACD relationship is unclear. In effect, as I understand it, the NUCS will train prospective managers in business and cooperative management while the MACD will be held responsible for marketing training of the managers. A definitive agreement of authority, responsibilities, and coordination of NUCS/MACD activities in cooperative and leadership training is being developed.

The CPs have not been fully accomplished by any proposed PMO/AGS to date. And, therefore, no managers have yet been appointed.

#### IV.5 Numbers and Locations of Immediately Possible AGSs

##### A. Potential numbers and locations of AGSs

MACD has been working with 11 potential PMO/AGSs to date, 12 if Christiana is included. Of the 11, feasibility studies of the AGSs have been completed for five: Southfield, Thetford (Bushy Park), Douglas Castle, Dias, and Guy's Hill; other potential locations of AGS are Wait-a-Bit, Trinityville, South Manchester, and Ebony Park (Rhymesbury). A revised feasibility analysis of Dias (Nov 1983) has shown this potential AGS to be non-feasible.

Apparently, the greatest opportunity for establishing operational PMO/AGSs are (not necessarily in order):

- 1) Christiana
- 2) Southfield
- 3) Guy's Hill
- 4) Douglas Castle
- 5) Ebony Park
- 6) Bushy Park

A longer run potential exists at:

- 7) milk assembly
- 8) Mooretown
- 9) Wait-a-Bit
- 10) Trinityville
- 11) South Manchester
- 12) a fish assembly

Feasibility studies for the latter have as yet to be completed.

Because of the tremendous training and educational efforts involved, and because no operational AGSs yet exist, it is strongly recommended that extensive efforts be made to get the first five PMO/AGS operational. Further, that new feasibility studies not be undertaken for any more than the nine PMO/AGS previously listed. If objectives of the total project are to be accomplished, a few operational AGSs are an absolute must. Further, for the time being, no effort would be expended on expanding the list of nine, until one or more AGS are operational.

#### B. MACD Organizational Problems

It is strongly suggested that diffusing the work of the teams involved in organizing the PMOs and obtaining the CPs for each AGS to try to obtain the 25 PMO/AGSs is entirely out of the question from the standpoint of staff time, but also limited by the true politics of these types of operation which might possibly evolve over a 5 to 10 year period in Jamaica.

If and when successful PMO/AGS are established and paying reimbursement for the invested capital, these returns could then be put into a revolving fund to develop possible potential AGS above the nine previously listed.

#### C. Problems and Opportunities to Establish the First Six AGS

It is the team's opinion that perhaps six operating AGS could be established in a very short time. Opportunities and problems exist at all of these. (If there were no problems, they would already be established.) The following are some recommendations for some specific actions which could overcome some current obstacles:

1. Assign the District Marketing Specialist in each area to work solely and entirely on PMO/AGS problems. For example, he might be appointed as an ex-officio member of the board and as Secretary of the PMO/AGS. In that capacity he could take care of many communicational, educational, and organization functions and obtain faster action by PMO leadership.

2. Opportunities for Christiana - The CPGA is an established cooperative and is not a problem organizationally. An opportunity may exist for the development of a frozen french fried potato operation. Apparently there are three small scale frozen french fry processors in Jamaica (at least 2 in Kingston and 1 in Montego Bay). As frozen french fry production is a weight reducing technology (only 50% of the weight of the raw product is shipped), the optimum locations are in productive areas rather than consuming areas. Finally, refrigeration needs are high in frozen french fry production and CPGA currently has excess refrigeration capacity. Finally, Burger King and other operations have expressed interest in frozen french fries. Perhaps a brief study by outside consultants could explore the potential feasibility of this opportunity.

3. Southfield - Apparently progress at Southfield is being held up by the Conditions Precedent. (CP) largely because of an early report which questioned water availability for the AGS. MACD/RONCO specialists suggest that water is needed only for a carrot working line and that their estimates of water needs are a fraction of those in the original report. Our information suggests that the water needs are adequate for an AGS and that the development of the AGS not be held up because of the misinformation in the earlier reports.

4. Bushy Park - A problem here is in leadership being unable to get an action project going (see item 1 above as a possible solution). Further, USAID apparently doesn't accept the idea of an AGS for 8 to 10 larger farmers. Possible solutions are the expansion to many more small farmers (which several of the leaders agree to), a possible change in leadership and direct involvement of the District Extension Marketing Agent as his sole activity.

5. Ebony Park - An immediate abbreviated feasibility study should be conducted. As this is a new development, approximately 110 farmers with 5 irrigated acres each, the farmers can easily be reached. Further, a facility, electricity, and water are already available. Essentially all that would be needed is packing and grading equipment. A higgler interview probably would not be necessary because of the "newness" of the area.

6. Guy's Hill - The feasibility study for this proposed AGS was probably the best feasibility study. The results are quite favorable.

7. Douglas Castle - The farmers, in general, in this area are not as advanced as in some other areas. This area will need considerable "hand holding" - See comment 1 above.

#### IV.6 Organization and Operation of MACD/RONCO

The organization and operation of MACD/RONCO will be reviewed only as it affects the direct establishment of operational AGSs. Phase I, of the total project, the establishment of an MACD division has been accomplished. The MACD was established in the MOA and most units are functioning quite well, although the Market Research Unit has been constantly and seriously understaffed. Phase II, the development of operational AGSs and SWDMS is considerably behind schedule.

The establishment of legal PMOs was not started until RONCO appeared on the scene in March or April 1983. Since then, the work load of the unit and individuals given this assignment (to establish PMOs) has been tremendous. While the unit and individuals are highly competent and dedicated, the pressure to develop operational PMO/AGSs has been high. Therefore, we strongly suggest that the units responsible for Market News, Quality Assurance, Training, Market Research and other units divert some of their efforts toward work more directly related to the establishment of PMOs/AGSs.

Market Research has largely been tied to feasibility studies in the sense of a legal requirement -- as a part of the CPs. Each potential AGS had to have a feasibility study conducted which showed social, economic and financial feasibility of the venture. In a non-legal but practical approach, even after a feasibility has been accepted, there is much market and economic research to be conducted for the PMO/AGSs.

We recommend that except for Ebony Park, no new feasibility studies be conducted at the present time. Those substantially in progress might be completed but no new ones initiated. And, that the Market Research Unit reallocate its efforts, along with other MACD units to (but not restricted to) the following concepts and/or approaches:

1. Detailed market analysis for PMOs/AGSs.
  - (a) In depth studies of Hotel, Restaurant and Institutional (HRI) markets in Jamaica
  - (b) More definitive work on sales through retail stores
  - (c) the potential export market
2. Experimental research - Does it pay to grade? Actual experimental sales tests at retail, wholesale, higgler and HRI markets of various graded commodities should be conducted.
3. Seasonal cropping patterns of each PMO as related to seasonal prices, possible modifications of cropping patterns to take advantage of seasonal price increases.

4. Opportunities for special crops or commodities for special markets.
5. Types and costs of packaging of graded products
  - (a) By type of market, commodity by commodity
  - (b) Reusable containers for special markets
  - (c) Packaging requirements for export.
6. Economies of Scale in Transportation
  - (a) Size of Higglers vs. Size of AGS TRUCK and comparative costs from various producing areas to principal consuming areas.
7. Economies of scale in Packing House Operations (AGS)
  - (a) Cropping patterns and commodities to expand length of packing season. (Increase volume and time of operation to reduce overhead cost).
8. Marketing costs and margin studies
  - 1) cost of production
  - 2) cost of assembly
  - 3) cost of grading and packaging
  - 4) cost of distribution (freight)
  - 5) wholesale and retail margins
    - (a) To HRI
    - (b) To Higglers
    - (c) To Retail
    - (d) To Export.

This work load should be a cooperative endeavor involving all MACD units, and activities should be coordinated through the MACD manager, with advice and counsel of the Market Research Unit of the MACD. There are many examples where cooperation among various units on market research of direct potential value could be conducted. For example, item 2 above, "Does it pay to grade?" Quality assurance could do the experimental grading, Market Research could set up the experimental design, and Market News monitor sales, and Market News or Quality Assurance do the analysis of and publication of results. Of course assignments may vary - but the concept of units working together to accomplish objectives to directly aid in PMO/AGS establishment and operation is a must.

#### IV. 7 The Establishment of Subterminal Wholesale Distribution Markets (SWDMs)

The suggestion in the original Project Paper that 4 SWDMs be established in Jamaica to handle produce and meat, as redistribution centers is considered to be impractical. This is the

consensus of the review team. This review team consensus is backed by discussion with many MACD officials and unit heads. However, we wish to modify the original concept of the 4 SWDMs to undertake wholesaling functions more needed and more functional in Jamaica. The concept of additional wholesale marketing facilities is sound. We recommend that funds be allocated from the original SWDM budget for the following:

- 1 - A wholesale cattle and livestock "auction" associated with abattoir.
- 2 - A separate wholesale or retail cattle auction not associated with abattoir.
- 3 - Produce wholesale/retail facility in Kingston (a conversion of the Agriculture Marketing Corporation (AMC) building in Kingston).
- 4 - Place on reserve, the potential of a wholesale or sub-terminal produce and meat facility in Montego Bay.

#### IV.8 Summary and Conclusion

If a PMO/AGS and SWDM system is feasible in Jamaica, and many factors suggest that it is, then the organization, structure, and expertise is largely in place to operationalize the system. The MACD/RONCO personnel are by and large, eminently qualified, hard working, and geared to accomplish the objective of a more efficient assembly, grading and packing and distribution system for fresh produce, meat and milk in Jamaica.

However, the original project paper proposal must be geared down and modified to fit operational conditions in Jamaica.

The recommendation for an immediately attainable objective is to get six AGS in operation rather than the originally proposed 25. These six would most likely be -

Christiana  
Southfield  
Bushy Park  
Guy's Hill  
Ebony Park  
Douglas Castle

Others can come on line in the future as efficient operations after the above six are attained.

Finally, the original 4 SWDMs concept is considerably changed. The recommendation is for wholesale markets specified by commodity and locations as indicated below:

1. a wholesale/retail livestock auction market with an abattoir. (This would count as two SWDMs, one for each component)\*
2. convert the Kingston AMC market facility to a sub-terminal wholesale market for produce.
3. hold SWDM number four in reserve for a possible wholesale sub-terminal market for produce and meat in Montego Bay.

The costs for these markets would be reduced significantly as well, as is shown in the new or revised budget, page 6 of Annex 2.

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\*The abattoir would be included if the MACD/USAID livestock team agrees it is necessary.

BID SCHEDULE <sup>1</sup>NAME OF BIDDER: AMERICAN CONVEYOR CORPORATION

IFB NO. MACD-2

ITEM NO.		QUANTITY	PRICE OF EQUIPMENT	PRICE OF INSTALLATION	TOTAL PRICE
1	PACKING LINE NO. 1 - COMBINATION PEPPER, TOMATO, CUCUMBER, AND MANGO PACKING LINE WITH HYDROCOOLER	1	243,816.00	11,990.00	255,806.00
2	PACKING LINE NO. 2 - UTILITY PACKING LINE FOR VARIOUS FRUITS AND VEGETABLES	3	223,602.00	18,570.00	242,172.00
3	PACKING LINE NO. 3 - YAM AND ROOT CROP WASHING AND PACKING LINE	3	127,128.00	6,225.00	133,353.00
4	PACKING LINE NO. 4 - KIDNEY BEAN CLEANING, ELEVATING, DRYING AND PACKING LINE	* 2	58,276.00	N.A. <sup>2</sup>	58,276.00
5	PACKING LINE NO. 5 - POTATO WASHING, SIZING AND PACKING LINE	* 1	119,512.00	6,045.00	125,557.00
6	COLD STORAGE SYSTEM	3	99,906.00	15,000.00	114,906.00

\* ONE KIDNEY BEAN LINE AND POTATO LINE ORDERED AND FUNDED BY INTEGRATED RURAL DEVELOPMENT PROJECT

TOTAL PRICE OF ALL ITEMS	<u>930,070.00</u>
INSURANCE	<u>7,835.00</u>
FREIGHT	<u>41,431.00</u>
GRAND TOTAL	<u>979,336.00</u>

1. THIS BID IS VALID FOR 60 DAYS FROM DATE OF OPENING OF BID.
2. N.A. THIS EQUIPMENT FORMS AN INTEGRAL PART OF THE STORAGE AND FUMIGATING FACILITY AND WILL BE INSTALLED BY BUYER AT SITE AS BINS ARE CONSTRUCTED.

## V. Social Soundness Revisited

### V.1 Introduction

The purpose of this report is to summarize the findings of the evaluation of the progress of PMO development and the effectiveness of MACD strategy for promotion and establishment of PMOs. To date, 6 PMOs are being established, feasibility studies have been completed on one other and organizational work on Moore Town has been initiated. The pace of development of PMOs has been slow and a number of organizational problems have arisen which indicated a need for more intensive inputs with regard to the social and educational components of the project. The proposed NUCs project will provide support for this aspect of PMO development. MACD has meanwhile assigned staff to work with each PMO and is proceeding with a reasonable strategy of organization. This report will summarize some of the problems and make recommendations for strategies to expedite organizational development.

The original social soundness analysis identified possible socio-cultural constraints which might affect PMO development. In brief, these were:

1. Farmers dependency in government
2. Farmers lack of understanding of marketing
3. Farmers unwillingness to participate in cooperative organizations because of fear of elite control and inequity in benefit distribution and past experiences with other cooperative ventures
4. Farmers risk management strategies which could prevent them from selling produce to the AGS in preference for the certainty of higgler purchases
5. Farmers low level of education
6. Farmers individualism and consequent unwillingness to become financially involved with other farmers
7. Political partisanship and clientelism which result in inequity
8. Community decisions along district lines

While these constraints are evident in most of the organizations examined, MACD has attempted to address them and in most cases, has controlled the negative effects.

During our evaluation visits, we met with the Steering Committee of Douglas Castle, Bushy Park, Ebony Park, Southfield and with the management of the Christiana Potato Growers Association. In general, the progress of all PMOs, while behind schedule, is impressive. Below we list the constraints and facilitators in each area relating to the development of the organizations.

### Douglas Castle

A Steering Committee has been formed and a site identified. Land acquisition is in progress and the PMO has employed legal assistance. A membership drive has been launched to broaden the organization. Staffing for MACD includes an experienced extension man and a promotions officer with training experience.

The PMO is poised for take-off, but requires considerable training and community support. Present constraints are:

- Dependency on MACD for decision making and action
- Poor planning and decision-making
- Lack of a strategy
- Poor analytic skills
- Unrealistic expectations in access to export market
- Low mobilization of farmers
- Difficulties in communication
- Need for input supply
- Lack of data on production and marketing costs
- Low literacy level of farmers

There are, however, moving facilitators which make the success of the organization quite feasible.

- Large volume production
- Secure land tenure
- Some farmers have direct access to market linkages
- Considerable experience with JAS-AMC
- Enthusiastic leadership
- No political interference or partisan rivalries
- Land availability
- PCV involvement and assistance
- Good MACD staff
- Effective control of clientelism

### Recommendations

- . Mobilization of farmers and community support

Meetings on a district basis are necessary to effect registration of farmers, since the present strategy of individual registration is slow and there is not enough manpower to effect it in the time available.

- . Training for Steering Committee

The present committee lacks planning skills and has no strategy for its own development. Early involvement of NUCS in this PMO is recommended.

- . Marketing and Production Information

This PMO requires technical assistance regarding production costs for the crops that they are now growing. Information

outputs and various types of markets is also necessary. The Research Unit of MACD should provide assistance at an early date.

#### Bushy Park

This PMO is already a formal organization and is being assisted by 2 PFP officers. Membership is limited to a few larger farmers and there has been little progress due to lack of clarity on the role of the organization viz a viz the MACD. This organization has received an offer for export marketing which it has been unable to utilize because of production constraints, e.g., water and cost of inputs.

#### Constraints

- Poorly defined mission
- Elite membership to the exclusion of small farmers
- Poor leadership
- Lack of water for production
- Unrealistic expectations regarding MACDs role
- Delay in design decisions for AGS

#### Facilitators

- Market opportunities
- Considerable small farmer interest
- PFP staff
- Considerable institutional support from MACD, Agro 21
- Well educated membership

#### Recommendations

##### . Redefine the mission

The Permanent Secretary has agreed to assist the leadership to clarify its mission and develop a strategy for broadening the base of membership

##### . Farmer Education

Considerable information is required to prepare farmers for participating in the PMO, particularly since there has been a misconception of the role of the PMO.

##### . Water and other production constraints

The PMO is unable to address the marketing functions until production constraints have been removed. The need for water and cheaper input supplies dominates the concerns of members. MACD strategy should be to focus the PMO on alleviating these problems before attempting to deal with the AGS.

##### . Production Costs

The farmers require data on production costs for the proposed

crops and for the crops they now grow. Data can be gathered from the farmer who is now growing for an export market.

#### Ebony Park

This pre-cooperative has had three years of technical assistance and training with at least one years experience of contract growing for exporters. The management is in place and the organizational structure is well established. The cooperative is in the process of registration and is now seeking credit assistance from ACB.

The only constraint is the speed with which MACD can process the request for an AGS. No organizational work is required here; perhaps the only training and extension work required is in packaging and handling.

#### Southfield

There exists an established cooperative organization which is being developed with NUCS assistance. A site has been identified and production volumes make an AGS quite feasible.

#### Recommendations

- . Production costs

Standardized production costs for existing and proposed crops is required.

- . Markets

Considerable information on local and export market opportunities is required and the PMO has already made a request to the MACD.

- . Financial Management

Because of the past experience of the cooperative in its farm store venture, this PMO is concerned about financial viability and credit. We recommend that MACD develop a business plan for first year operation in conjunction with the cooperatives management at an early date.

#### Guy's Hill

The Guy's Hill feasibility study indicates financial feasibility and the organization is ready for registration and training.

#### Recommendations

- . NUCS

We recommend early involvement of NUCS in this PMO to initiate training of the committee.

### Conclusions

MACD has been able to identify 6 suitable PMOs and has achieved some measure of success in organizing these groups. Since MACD does not have the appropriate skills to undertake further development of PMO to the stage of cooperative management, the NUCS project was initiated to close this skill gap.

MACD has taken quite some time to carry out this first phase organizational work, because of its overt skill deficits and also because organizational development does take time. Since the extension staff has not had experience in organizational work, it will be difficult for them to develop more PMOs without considerable neglect to those which now exist. Most of the PMOs are at the critical stage of mobilization which requires a high level of motivation, and enthusiasm to recruit membership, develop a clear mission and undertake tasks which should have a high success rate to carry the groups through to the next stage. This requires close monitoring and a lot of staff support.

A missing element in the present MACD strategy has been technical information. The groups now require information and training in compiling production costs and evaluating the cost/benefit of marketing opportunities. The Research Unit should examine this as a priority task.

Community support is also required and the various institutions in the target communities should be informed of the objectives of the project. Churches, schools, PTAs and Health authorities can be used to assist with farmer registration, disseminate information, etc.

The proposed involvement of NUCS appears to be just what the project requires at this time. Nevertheless, the institutional arrangements are not conducive to timely delivery of services and clarity of roles. The memorandum of agreement between the two organizations is just the first step towards avoiding overlap and duplication. Accountability for the NUCS operation in the PMOs should rest with MACD Extension and some mechanism for ensuring this should be developed. The NUCS curriculum outline appears to be appropriate, however, full curriculum development should be accompanied by definition of the tasks and performance criteria for the PMO managers. A management system for PMO managers is required. It would be useful for the MACD Extension Staff to participate in aspects of the NUCS training since they will work along with or perhaps operate in a supervisory role with the PMO managers.

## Summary of Recommendations for PMOs

### 1. Mobilizing Farmers

The process of obtaining wide-spread membership in PMOs has been slow and we recommend that MACD Extension Staff

- hold district level meetings for educational and need definition purposes
- solicit assistance for existing community institutions to encourage membership and to register farmers
- call a general meeting where registration has reached adequate levels

### 2. Training

Most committees lack skills in planning, decision-making and analysis of information. This has restricted their ability to progress on a self-propelled path. We recommend early training to include the development of an organization plan of action for each Steering Committee.

### 3. Information

Production costs and marketing information are critically needed to support PMO decision-making at this time. We recommend that the Research Unit provide this to each PMO.

### 4. Reducing Dependency

Wherever possible, MACD extension agents should act as facilitators or advocates for the PMO leadership. MACD staff should not undertake tasks for the PMO but with representatives of the PMO.

### 5. Future PMOs

The team has agreed that a strategy of concentrating on the 6 PMOs which have been initiated allows a much better opportunity for success than attempting 25 PMOs. Assigning one staff member to each PMO would then allow for the kind of attention and activity which would accelerate the development of these organizations. This would also allow MACD time to gather data on success criteria and development approaches which can be employed in developing less suitable sites.

6. Peace Corps involvement in the PMO aspect of the project would not have a detrimental effect on the project, providing that the role of the PCV is clearly defined. Since critical support staff, 2 NUCS officers and a marketing extension officer will be in place, additional manpower could hardly have adverse

Short term training, and diploma courses and in-service training are also useful strategies for immediate skill up-grading which would have immediate impact on the project.

#### Recommendations

- . MACD needs to identify the skills required for short and long term maintenance of the project. The training advisor, as a priority activity, should conduct a needs assessment and develop a training plan to meet these needs. We strongly recommend that a management development course be conducted for first and second level managers in the project.

This training plan should seek to exploit local in-service training opportunities as well as short-term overseas courses.

- . Training opportunities should be provided on a merit system and following staff appraisal.
- . Training can also be used as an incentive to retain staff for the duration of the project

## V.2 PMOs

With the difficulties being encountered by MACD in establishing PMOs, no training has been mounted for these groups, except for Southfield, where NUCS has begun to train the committee in cooperative management. The constraints to MACD's delivery of appropriate training services in cooperative management have been identified and the ACDI-NUCS proposal is an attempt to reduce these problems.

This proposal provides an adequate methodology for training and management development for PMOs. It removes the responsibility for mobilizing PMO members from the MACD which does not now have the skills, manpower or experience base for this kind of activity.

Interviews with the Permanent Secretary of the Ministry of Agriculture suggest that there is considerable institutional support for divesting the Ministry of this function.

The Ministry is an excellent resource for technical information on production and the MACD is the only resource for information and training on marketing. There does not, however, exist a coherent plan for this aspect of training. Considerable development work on visual aids, demonstration kits, manuals and other methods appropriate to the level of education of the target groups will have to be done. At present, the role of the training unit has not been defined in light of the proposed role of NUCS, and this could create serious overlap and duplications in the project.

The NUCS organization has the experience and skills to undertake cooperative development and the proposal is feasible. The only modification which may be required is the time for manager training which may have to be extended, depending on the level of education of the managers recruited. The proposal outlines a good training program which requires only development of a more skill-oriented curriculum.

### Recommendations

- . A memorandum of understanding regarding the joint and separate responsibilities of NUCS and MACD is to be prepared. This should be regarded as an initial stage in the clarification of roles as more specific planning and coordination is required to achieve coherence. A direct reporting relationship between NUCS and the MACD's Marketing Development Unit must be developed, with MACD having responsibility for planning and coordinating.
- . A plan for marketing training should be developed

- . A set of performance criteria for PMO managers should be developed jointly by MACD and NUCS and a system of appraisal should accompany the employment of these managers.

### V.3 Marketing Intermediaries

The project has not yet defined its objectives regarding intermediary development. Some efforts have been made to up-grade skills for butchers in the new markets being developed under the IADB rural markets program, and this has had some success. However, training in produce handling, grading and packing for intermediaries in the agro-produce trade has not been addressed. There is a proposal to direct training to exporters in order to support the implementation of the grades and standards now being developed. This seems to be a useful application of the limited training resources available to MACD. The task of market intermediary training is enormous given the number of intermediaries operating, the level of education and the methods of business management and produce handling now being used.

#### Recommendations

- . Given the limited resources of MACD, the Division should clearly identify the target intermediary groups to which it intends to deliver training services.

## VI. MACD Structural Problems

### Purpose of Project

The overall purpose of the project still has validity - that of improving the incomes of producers, intermediaries and consumers involved in the Jamaican food system. However, whether these goals are mutually consistent is open to question. The marketing system can improve farmers' incomes by its effect on farm gate prices or on the volume of sales. If demand is elastic, reduced prices can cause an increase in sales as well as in total revenues. Further, if intermediary costs are excessive due to an inefficient distribution system the quantities of product consumed will be reduced. This is a basic hypothesis of the MACD project.

There is need for consumer demand analyses for the range of fruits and vegetables, roots and tubers that are expected to be marketed through the PMOs - AGSs. These would provide a method of estimating the possible quantities that would be demanded at alternative prices. Estimates of elasticities of demand would provide the key coefficient necessary for making reasonably reliable projections. Consequent to demand relationships showing the potential price (and income) responses, analyses of distribution costs need to be carried out to determine marketing margins for the same range of products.

### VI.1 Ability of MACD to recruit and retain staff

MACD, as is true of all government organizations in Jamaica, has had and continues to have difficulty in competing for qualified skilled personnel. Typically, private enterprise is able to entice a majority of the dynamic, qualified persons. MACD was able, during the first phase of the project to reduce the apparent disparities by starting many of its employees at higher than normal levels and accelerating their levels of remuneration through merit increases which permitted salary advances of 10-15% per year.

This monetary incentive is about to disappear as the salary and salary advancement system reverts to government wide standards. The staff is frightened of this prospect. Many staff have already resigned and those who have other opportunities are giving them serious consideration. The MACD, if it is to attract and retain the calibre of staff capable of achieving the challenging objectives of the project will need to maximize its use of non-monetary incentives such as opportunities for training and acquisition of advanced degrees.

Attitudes of some senior management officers do not support long-term training opportunities ostensibly because the MACD cannot afford to lose the services of staff for up to two years. This view is probably short-sighted and, if not modified, will

defer the achievement of the skill levels needed to upgrade and maintain a high level of functioning. So far, no long term training opportunities have been afforded and not a great deal of short-term. As mentioned, management policies have militated against long-term training.

#### Recommendations

- . That the MACD division develops a strategy for improving the financial incentives for recruitment and retention of staff consistent with the legal and regulatory constraints of the GOJ and AID. Possibilities include greater use of contracts, houses and merit increases.
- . That MACD develop a coherent set of policies and strategies for employing opportunities for long-and short-term training in its recruitment and retention system for staff.
- . That MACD develops a plan to accommodate a significant number of staff in opportunities for long-and short-term training. These could include both Masters and Bachelors degrees as well as summer intensive courses leading to certificates and diplomas. Non-degree internship programs should also be pursued.
- . That staff be utilized in capacities that adequately challenge their abilities and that non-monetary reward systems be developed to provide the psycho-social gratifications necessary to maintain a high level of morale.
- . That all members of the diverse units be integrated into the total program, i.e., perceive how each member's and each unit's contribution affects the performance of the total MACD system.
- . That management should, in concert with staff, develop goals and targets for each member of the unit and give appropriate recognition for individual achievement. Underperforming staff should receive timely and appropriate counselling and training to correct deficiencies and improve performance.

#### VI.2 Impact of Phase I on Intended Beneficiaries (Assessment of Marketing Services Infra-Structure and Performance)

It is not easy to assess the overall impact of Phase I on its intended beneficiaries i.e., farmers, intermediaries and consumers. No systematic surveys have been carried out to assess the impact of any of the components of the project. Thus, not much can be said in regard to the effects on post-harvest losses, marketing costs and increased production. In fact, it is probably safe to say that the actual effects have not been great. The potential impacts are nevertheless important. Realization of these potentials will depend on continuity of many of the MACD's current functions

with a higher level of coordination and more focused direction of efforts. The various units in the division have achieved differing levels of operation and performance.

### VI.3 Marketing Economics Information and Research Branch

#### Market News and Information

The market news information component of the MACD system is well along in the development of its system for data gathering, analysis and dissemination. Already, the Market News Service collects and reports on wholesale market price, supply and demand. Markets covered include Coronation, Christiana and Newmarket. Retail prices from Brown's Town, May Pen, Mandeville and Montego Bay are being collected and reported. Sav-la-Mar and Port Antonio are being brought into the system. The news reports are currently broadcast on Radio Central on Tuesdays and Thursdays.

A system for collecting and reporting on retail meat prices has been put in place. Situation and Outlook Reports for non-traditional crops are being published. The Situation and Outlook Report for Coco is a good beginning (as a model) for the development of these reports. It presents and organizes data in 'a concise', readable manner. What is missing at this time is more detailed analysis of the underlying factors and motivations for change in variables such as production, yield, demand, prices and margins. The analysis is as important as the data. Hopefully, as the MNI system matures and staff become better trained in economic analysis, the report will take on more of an analytical flavor. The current head of the unit is taking classes in Economics at the University and will likely be able to do more of the economic analysis. The analysis will need to draw on the knowledge and expertise of agronomic and other technical staff.

The Situation and Outlook Report should also report f.o.b. prices for exports and wholesale and retail prices in the key export markets in the U.K. and the U.S.

The discussion format currently used on radio reports of weekly price and situation reports seems appropriate for the Jamaican setting. The basic objective of the MNI should be kept in mind always, i.e., the benefits of market information for decision-making. The information may be short-term, in which case the daily and weekly reports are appropriate. They may be longer-term in which event the Situation and Outlook reports will prove more appropriate. But decision-makers-exporters, wholesalers and farmers need inputs for more rational economic planning and MNI can supply that information, or at least some of it through its various media.

### Work Plan for MNI System

The objectives of the MNI work plan are quite appropriate and if achieved, would substantially satisfy the functions that one would expect from a Market News Service. Achievement of these objectives will depend on the quantity and quality of staff. The unit is currently budgeted for 16 professionals and 2 secretary-stenographers. This should be more than adequate in terms of quantity. In fact, the number of professional technical staff may be more than adequate to do the job. On the other hand, the analytical potential of the staff may be inadequate in relationship to the tasks outlined in the work plan. Careful attention needs to be given to position descriptions and to matching personnel with job requirements.

In particular, MNI needs to recruit and/or train 2 or more economists to fill some of their professional positions. But, this should await a thorough review of the organizational structure and staffing patterns of the Marketing Economics and Information and Research Branch of the MACD. There may be opportunities to consolidate activities to achieve greater levels of utilization of professional staff and improve the performance of individual units.

### Recommendations

- . That the MNI unit follow its work plan for 1983/84 as much as possible.
- . That the analytical capability of the MNI be improved through recruitment and/or training.
- . That a review of the staffing pattern of the unit be carried out with a view to consolidating activities and improving the performance of the unit.

### Market Research Unit

Overall objectives of the Market Research Unit are:  
To undertake research dealing with the marketing of agricultural and food products. This includes both commodity and market structure research, some of which are conducted on an "as needed" basis.

### Observations

A review of the goals for the reporting period as well as output to date suggests that there has been too great an emphasis on the feasibility studies for the AGSs and SWDMs. These have consumed an inordinate amount of time. Dr. Feaster, in particular, has been burdened with developing and redeveloping methodologies for the feasibility studies along with his responsibilities to the MNI unit. The feasibility studies that have been done for

Guy's Hill and Dias are quite sophisticated and are fairly standard for development and investment analyses. They are, however, very time consuming. If the project focuses on a limited number of AGSs as the evaluation team is suggesting, there should be increased opportunities for the Research Unit to undertake other kinds of research that are needed beyond the feasibility analyses.

Demand studies are very important to point out opportunities as well as limits in the marketing of the many kinds of produce that are marketed locally as well as internationally. Demand studies need to focus on domestic as well as international demand. If other agencies such as JNEC or JETCO are already involved in this kind of research, they should be consulted with and resources coordinated so as to avoid the implicit waste in duplication of research effort.

Certainly there is a body of existing literature on consumption and demand, domestically and internationally, that is relevant to the potential market for Jamaican produce. Someone needs to develop a fairly comprehensive bibliography on these publications and sift through them in order to distill relevant information that can help the MACD, producers and intermediaries in developing appropriate strategies for production and marketing.

The Research Unit needs to carefully define its sphere of operation and match potential tasks with the skill levels needed to carry out the tasks. A cursory observation of the present staffing pattern suggests a mismatch of professional backgrounds and the potential tasks.

The Ronco Status Report of November 2, 1983 details a number of weaknesses in the information structure that constrain the effectiveness of project implementation. Those appear on pages 37-40. The evaluation team concurs in those observations and support the recommendations with respect to priority directions for the Market Research Unit. Those observations and recommendations are reproduced below.

11. LACK OF INFORMATION AND BROADER PROJECT PERSPECTIVE.

Lack of information on the characteristics of production and marketing and the factors that affect these has been an important constraint on project implementation. These information deficiencies include:

- a) Market structure, channels, characteristics and roles of different participants.
- b) Volume of current production, amounts marketed and losses.
- c) Prices at different levels in the marketing system structure.
- d) Quality and quality (price) differential at different levels; quality standards or grades in use.
- e) Exports as a sub set of the above volumes, channels, quality, prices of products exported from Jamaica.
- f) Relevant data on prices, qualities etc. in foreign markets.
- g) Supply, distribution channels, and users of different production inputs.
- h) Public policies affecting pricing, exports and imports, production incentives and related factors.

Efforts are currently being made to develop facilities and institutions to perform various functions with little information on how and where these functions are now being performed and what value may be placed on such services. E.g., what is the market structure within which PMO's will operate marketing facilities and provide services. There appears to be little felt need by producers for help to improve the marketing of their produce, nor understanding of how an AGS will operate. Nor is MACD able, with confidence, to tell the PMO how the operation of an AGS will improve the income of individual members. What will be the differences in prices they receive, in volumes they can sell?

#### RECOMMENDATIONS:

A systematic program of study should be initiated to provide information on a-h listed above. It should answer questions such as:

a) Who is currently providing produce to retail food stores, restaurants hotels, etc? What services are being provided by the supplier? What pricing structure does the supplier use? Is the retail outlet satisfied with the current source of supply? If not, what would the retail outlet like to have as additional services? Whether or not the retailer is satisfied, can the PMO, either directly or through a wholesale market provide the services, quantity and quality of produce that the

retail outlets want and particularly important, can they be supplied at a price competitive with the current system? How large is the retail food store, restaurant and hotel market? Where is this market located? How is this market now supplied in terms of produce transportation from the field to the outlet? Is this transportation satisfactory? What will it take to develop a transportation unit to service these needs? What will the impact on those currently providing transport, or can the current system be utilized and what will be the cost?

- b) Who are the current wholesalers in Jamaica? What size operations do they have? Do they have their own facilities? If so, will they be willing to transfer their operations to a wholesale terminal? What kind of services would wholesalers want in a wholesale terminal that would assist wholesalers to better serve their customers? Where should wholesale terminals be located and how many should there be to adequately serve existing and projected needs? What costs will be incurred to provide services to wholesalers and/or retail buyers and are they willing to pay these costs?
- c) What is the specific role of higglers? What services do they provide to producers? How do higglers establish price? What are their costs? Will they utilize the services of an AGS?

d) Who are the current exporters in Jamaica? What products are they handling? What volumes do they handle? Where do they get their produce for export? Are they satisfied with this source? Are they considering handling additional volume? What are their quality and quantity requirements? <sup>Where</sup> are the markets for export? What export requirements must be met? What are current imports? What is imported and at what price? Under what conditions / <sup>could they be</sup> produced locally? What would this require in the way of incentive<sup>s</sup>, inputs, marketing structure, prices, quality standards etc.

The above array of questions are illustrative of the types of questions that need to be answered to provide the type of information required to adequately design improvements and enable MACD to assure farmers marketing their produce through the PMO/AGS of greater profits. Once producers are convinced of this, it should not be difficult to correct the primary problem faced at the present time -- that there generally does not exist an adequate membership base to provide the volume of products required to make the AGS's an economically viable enterprise."

## Staffing

The present staffing pattern of the Market Research Unit seems neither adequate nor appropriate for the tasks confronting this unit. There is need for at least one marketing economist, an agricultural economist and possibly a specialist trained in business organization and management. By reviewing the structure, performance and requirements of the entire Marketing Economics Information and Research Branch, the Director may gain information on how resources can be better deployed in the Branch to improve the actual and potential performance of the various units including the Market Research Unit.

### VI.4 Marketing Economics and Credit Unit

This unit appears, for all intents and purposes, to be non-existent. And the rationale for this unit is tenuous at best. Moreover, it is a very small unit and may not possess the critical mass needed for effective functioning. Budgeted for three professional staff, it currently has only one recently hired person. Ostensibly, demand and supply analyses would be handled by this unit.

#### Recommendation

That the Marketing Economics and Credit Unit be merged with Market Research as part of a rationalization of the entire Branch and that its functions be subsumed under the expanded functions for that enlarged unit.

### VI.5 Quality Assurance Branch

The Quality Assurance Unit of the project is in the process of developing a comprehensive system of quality assurance which will include the development of grades and standards, acceptance and dissemination of same among vital components of the system and the provision of training for food handlers, shippers, supermarket personnel, etc. The unit will undoubtedly be making a significant contribution to the performance of Jamaica's food production and distribution system. That contribution, in all likelihood, will begin with improvements related to exports of produce since there is already an implied demand for product differentiation as reflected in grades and standards. Export markets are already well attuned to the system of product grading - at least at the market level. If Jamaican products are to compete with products from other Caribbean areas, they must at least meet, if not exceed, the quality of the competition. They must also establish some record of consistency and predictability, and given the increased emphasis on foreign exchange earnings, the attention to quality is inescapable and the potential impact of a quality assurance system potentially significant.

Initially, it is perceived that the Quality Assurance System will similarly have a positive impact on the domestic market. Questions have been raised as to whether Jamaican consumers are willing and able to pay for the costs of standardizing and grading the array of produce.

There is, however, little empirical evidence as to consumer demand for and response to product differentiation based on grades and standards. Some experimental projects to test consumer responses to differentiated quality and price might serve to buttress a priori notions and help in the design and/or redesign of grades and quality standards as well as provide some indications as to demand elasticity for the various grades.

If the various components of the food chain perceive benefits from changing the present heterogenous system to one of standardized quality, the implementation phase will proceed more smoothly and expeditiously. It would be helpful to identify the expected benefits for each component of the system. These have been identified in general terms. Now it remains only to specify these expected benefits for farmer, PMO, wholesaler, exporter, grocer and consumer.

The successful performance of a Quality Assurance System requires constant monitoring, testing and feedback. It requires well trained personnel whose activities place them in constant contact with products and those responsible for the movement of products. Ensuring the appropriate staffing and management of the unit should, therefore, be of high priority. In addition, equipment for testing and monitoring product quality must be acquired before the quality assurance system can go forward. Needed items are estimated to cost \$10,000.

The Quality Assurance System is currently operating as a low profile technical operation. This may be an appropriate posture during the early exploratory and developmental phases. However, its contribution may be enhanced with greater attention to outreach, communication and extension. The unit and/or the Project Coordinator will need to take determined steps to communicate the goals and achievements of the QA unit to Ministry hierarchy, Ministry staff, other agencies related to the promotion of agriculture. Perhaps, the QA unit could coordinate their extension and communication activities with the Marketing Information unit. Farmers, traders and wholesalers would thus come to see QA and Marketing Information as complementary parts of a total system.

Documents outlining the objectives, achievements and work plans of the Quality Assurance Branch of MACD indicate that there is a very good conceptual grasp of the role of the QA system in the marketing of Jamaican products. Work plans for 1983/84 and for 1984/85 may be somewhat ambitious. They are, nevertheless, very complete in their scope-covering research, development of standards and training. If achieved, these activities would have served to institutionalize and demonstrate the potential role of QA in the marketing of non-traditional crops.

## VI.6 Marketing Development Branch

The overall objectives for this unit are outlined in their Half-Yearly Report, covering the April-September 1983 period. Those objectives include the following:

1. To improve the quality and value of agricultural crops (domestic/export) available to consumers
2. To improve efficiency in Marketing, to reduce post-harvest losses and improve packaging and distribution methods
3. To assist farmers and marketing intermediaries with solving particular marketing problems

Our brief experience here as an evaluation team does not suggest that objectives 1 and 2 have or are being met. This is partly a consequence of the slowed schedule of constructing the AGSs which themselves have been retarded by the difficulty in organizing and chartering the PMOs.

The third objective has been and is being dealt with perhaps to the detriment of the first two objectives. Farmers are using marketing extension officers to solve immediate problems related to the marketing of their crops. Wholesalers, processors and exporters, on the other hand, use the same officers to find sources of products. This informal brokering function has expedited the exchange of information necessary to improve the efficiency of the marketing system and has probably resulted in an increase in the volume and value of products in the market, both domestic and export.

The unit has established a close liaison with a number of agencies and organizations through which timely information can be exchanged to facilitate decisions related to competitive imports.

## VI.7 Development of PMOs/AGSs and JAS Collecting Stations

The objectives of the unit are as follow:

1. To provide technical assistance and training in organizational methods to staff responsible for initiating and developing PMOs/AGSs.
2. To provide training and guidance to PMO personnel; that is, farmers, members, boards of directors, managers, and other staff, in their various roles as they relate to the organization, and development and operation of a viable marketing organization.
3. To provide assistance to JAS groups in establishing Informal Collecting Stations.

The inability to plan, organize and deliver appropriate training to MACD staff re. organization of PMOs is at least, partly responsible for the slow development of the PMOs. The effectiveness of MACD staff in PMO identification and development varies from region to region and PMO to PMO. It has not all been the fault of MACD staff. Organizing farmers in rural Jamaica is quite a task-formidable even for seasoned, experienced organizers. The task was further complicated by the project design which called for 25 PMOs and AGSs in a 5-year period.

- Given all these limitations, the Marketing Extension unit has brought several PMOs to an intermediate point, and this within only the last 9 months or so. The MACD marketing extension unit is to be congratulated for achievements to date.

Nonetheless, if the pace of PMO-AGS development is to be quickened, some changes will need to be made.

#### Recommendations

- . That the Marketing Development and Research Groups collaborate in developing a set of criteria for ranking PMOs in terms of those more likely to become operational with a reasonably good chance of success in the short run.
- . That the MACD Marketing Development Unit focus its attention and energies on a limited number of PMOs for the next couple of years. Given the constraints, probably no more than 6 can be given adequate attention.
- . That a plan of training be developed for the MACD staff responsible for PMO identification and development and that members of the research unit be involved in the training in defining the critical socio-economic, ecological and other variables important to the spatial and socio-economic definition of PMOs.
- . That MACD Marketing Development Unit work closely with NUCs in developing an educational program for farmers and managers of PMOs - the MACDs input to include technical and economic information related to the marketing aspect of the PMOs.
- . That MACD staff involved in PMO development meet frequently (once per month, at least) to share information on problems encountered or successful strategies in PMO organization.
- . That training in sociological and psychological material related to their tasks be provided to MACD staff.
- . That staff incentives-material and non-material be developed and provided for goal achievement related to PMO development and operation.

In actuality, with the prospect of NUC's involvement, the MACD role in the early organizational work should diminish. It should, however, strongly support the NUC's effort with technical and economic input related to marketing and the potential benefits of the FMO marketing system on prices, quality and farmers' incomes.

## VI.8 Management and Decision-Making

The recent appointment of a Project Coordinator could improve the management and decision-making system of the MACD. We must acknowledge that it took a tremendous effort of initiative, leadership and management skills to launch and institutionalize the MACD division. And commendations are in order for the top management team that accomplished this. With the departure of Ms. Viv Logan, however, the effectiveness of the management system was reduced as the position of Project Coordinator which she left vacant remained so for several months.

A project of this size, scope and complexity can ill afford to be without a coordinator. Once policies are set, priorities must be determined and resources must be programmed and coordinated to achieve goals and objectives. It is in this latter area that the project has been deficient over the past year or so. Priority setting and coordination have not been sufficient to clearly focus the energies of the staff on those activities that were the next logical steps in the evaluation of the project.

The problem was exacerbated by the goals of the project (25 PMOs and AGSs) and 4 SWDMs, etc. Unit heads and some of their staff were confronted with great challenges but lacked the experience in management and decision-making to sort out priorities. Furthermore, while they may have done well in terms of the goals and objectives of their own individual units, they needed a greater sense of integration of the total project. At this stage, the project cannot afford too much fragmentation of effort.

In short, the project needs an active coordinator who can expedite decision-making, identify constraints and take steps to remove or mitigate them. The coordinator must promote interaction among units and communicate the goals and objectives, problems and achievements to all members of the MACD staff.

## VI.9 Quality of Technical Assistance

The quality of technical assistance supplied to the MACD has improved. Admittedly, the first team of consultants were not able to contribute as much as had been hoped for. The feeling on all sides now is that the RONCO team is a considerable improvement over the first group. There does, however, seem to be a somewhat uneven distribution of responsibility among the various consultants. The slow pace of development of the PMOs, AGSs is probably partly responsible for the apparent disparities. Research and Market News, Quality Assurance and the Livestock T.A.s are already deeply involved. The Training component, for a variety of reasons, is off to a slower start. For one thing, the RONCO consultant has had no local counterpart until quite recently. In addition, few of the MACD staff have met criteria for overseas long-term training, and management policies have not supported long-term training abroad.

Thirty-six person months of short-term external training was budgeted. Nineteen have so far been completed. In view of the proposed reduction in the scale and pace of development of the PMO-AGSs and SWDMs, there ought to be an increase in the allocation of short-term external training for MACD staff.

The goal of ten persons to receive long term external training may be difficult to achieve. This goal could be reduced to 5 over the next five years (assuming the life of the project is extended.) Consideration should be given to including persons with JSA diplomas for external training leading to Bachelor's degrees. This will upgrade the staff professionally. Training will be critical to the success of this project and the Training unit will need to accelerate its efforts and creatively design and develop courses and programs for MACD staff, PMO and AGS staffs.

The slow pace of development of the PMO-AGSs has also reduced the immediate impact of the consultant responsible for post-harvest engineering and technology. The consultant has, nevertheless, contributed significantly to a reevaluation of the designs of AGSs and a reassessment of equipment and technology appropriate for various types of AGSs. The consultant's experience and expertise is undeniably extensive. Hopefully, as the priority list of AGSs become operational, his expertise will be used more fully.

The Ronco November 2<sup>nd</sup> (1983) report points out what they perceive as a weakness in the organization of the project and the team which reduces the potential effectiveness of the consulting team. Presently, consultants operate largely within the narrow frames of reference of the units to which they have been assigned. Ronco perceives greater benefits from increased levels of collaboration and cooperation at a project level in addition to the contributions now being made at the Branch and Unit levels. While there has not been sufficient time to examine this proposal in more than cursory fashion, it merits examination. An effective system of project coordination by the MACD division may preclude the need for a Ronco TA coordinator to help coordinate the TA team as well as serve as a counterpart to the MACD coordinator.

What is clear is that more coordination, collaboration and cooperation among the TA team would enhance their effectiveness and enhance achievement of the project's effectiveness. All TA consultants should be involved in the development of PMOs and AGSs and should gear their efforts to supporting the process. They should become actively involved even before PMOs or AGSs become operational.

#### Recommendations

- . That MACD promote greater levels of cooperation and coordination among RONCO TA team.

That consultants become more involved in the developmental work related to the PMO-AGSSs.

#### VI.10 Potential Peace Corps Involvement

Peace Corps volunteers could supply an important increment of resources which may facilitate the community development activities which precede the formation and registration of PMOs. They could also possibly be helpful in the early stages of implementation of the PMO-AGS system. Responsibility for the supervision of the Peace Corps volunteers would rest with the MACD extension officers and the NUC's trained PMO management team after PMOs become operational.

Mr. Gregg, a Peace Corps volunteer currently working with the Douglas Castle group has obviously been of considerable usefulness to the fledgling farmer group there. Mr. Gregg blends in well with the community and has established good rapport with local farmers and community leaders.

Peace Corps volunteers should be selected carefully. Knowledge of rural community dynamics is important, but as important are personality characteristics that enhance or inhibit their effectiveness among rural Jamaicans. Patience, tact and a minimum of arrogance and intolerance are characteristics that could prove beneficial to quick and continuing effectiveness in the host communities.

#### Recommendation

That where feasible, Peace Corps volunteers be assigned to targeted PMO areas to assist in the development and operation of PMOs. They should, however, play subordinate roles to MACD and NUC's staff. This is critical. The initiative and responsibility for organizing PMOs must come from the Jamaicans and be so perceived by the farmers and the rest of the community.

## VII. Team Recommendations

Given the discussions in the preceding sections, the evaluation team recommends jointly with the MACD, to concentrate all efforts on a limited number of fairly advanced areas as a pilot set of activities. To this end, six sites have been selected for this effort, namely, Christiana, Southfield, Bushy Park, Douglas Castle, Guy's Hill, and Ebony Park. In each case, a PMO is registered or about to be registered, and all conditions precedent have been met or will be met in the near future. It is recommended that USAID facilitate all actions necessary to put these six in operation as soon as possible, waiving the need for strict adherence to the CPs, if necessary, until a later date. The project needs this added momentum, especially as it faces the transitional state dictated by a change in director at the end of the year.

By concentrating all activities on these six, to include assigning a marketing extension agent exclusively to each one, dropping further feasibility studies until proper demand analysis is carried out, and assigning more resources to help each one get off the ground financially, the probability of success will be much greater than appears at the moment.

Several reasons exist for justifying this action. The first is the need for placing in operation some of the PMOs to get an idea of how feasible the overall concept really is, especially in terms of its economic and financial feasibility. Only through actual experimentation can this be demonstrated.

Several parameters have changed since this project was designed. Demand for produce has increased and production costs have changed because of the parallel market. Several economic models are presented below to demonstrate what effect these changes may have on demand and supply of produce from the PMO/AGSs envisioned by the project.

### Reasons why a strategy of a limited set of pilot activities seems viable

1. Evidence exists from several studies and conversations with farmers, that the higglers market less than 100% of a farmer's crop. An AGS should be in the position to guarantee a market (not a price) for a larger percentage of each member's crop than traditionally goes to market at present.
2. Through grading, a quality product will emerge which should be able to penetrate the supermarket and hotel markets, to include restaurants near the hotels. This will have the effect of increasing

demand. Moreover, as legislation protects local producers against food imports, demand will increase even further. And the hotel trade should increase in the short-run because of the parallel market exchange rate. Import protection is needed in the short-run until the producers and PMOs learn how to provide for this market. Initially, risks will be high and not all contracts will be honored. Until the participants learn how to deal with these risks, protection will be required. Although all imports are licensed now, that is, there are no free imports at present, specific policy analysis is required in order to understand how imports affect fresh produce production and what controls may be necessary. Even though a policy paper is at the cabinet level to restrict powdered milk imports, there has been an announcement of \$13 M (US) credit for dairy products to include powdered milk. These controls are especially critical in the early stages of development, when establishing the new crops is important. Once these production and distribution systems are functioning efficiently, the controls can be relinquished.

3. The impact of the August 3 CBI legislation will be to increase competitiveness of Jamaican produce in U.S. markets. The costs of marketing will decline and the derived demand curve in Jamaica will shift up to the right, expanding Jamaican supply along the existing supply curve.

4. Ethnic and winter vegetable demand is increasing in the U.S. Produce as a % of supermarket sales has increased from 5% to 15% in the last decade and is expected to reach 25% within 10 years. This moves the U.S. demand curve outward, expanding total demand. The repercussion in Jamaica is to increase derived demand with the same consequences as #3 above. Since Jamaica has already penetrated this market with private exporters, it is certain that this trade will expand.

5. If labor as a percentage of total cash inputs exceeds 50%, the cost of production of Jamaican produce will decline in relation to U.S. costs, making Jamaican produce more competitive. Reducing production costs will shift the supply curve to the right as shown in the accompanying diagram.

6. The AMC marketing system failed financially because it bought high and sold low. Margins to pay for the costs of marketing were squeezed down to zero. The reason for this was because any market of last resort with a fixed floor price ends up buying more at a higher price than would be bought if the price were allowed to fall down the derived demand curve. Farmers, seeing the security of a floor price, over produce and sell more than they should when compared to a free market. By taking away the floor priced purchases, uncertainty will rise, and supply will

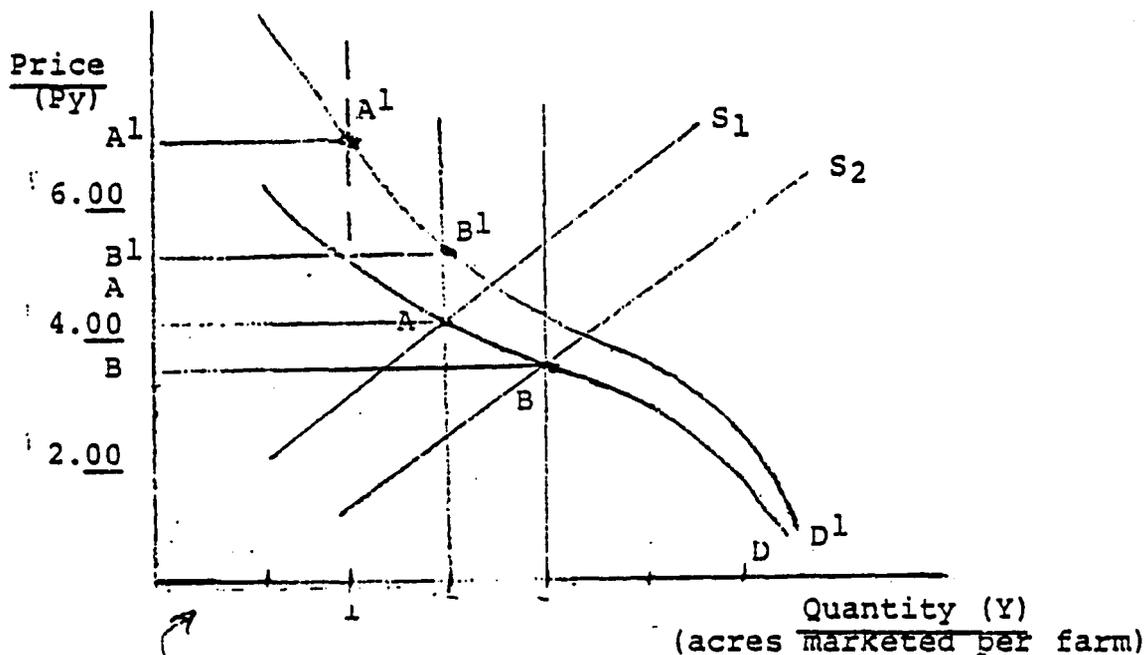
decrease, and in turn, drive prices upwards. Until a degree of coordination or certainty is reintroduced into the market, supply will remain at a lower level with obvious consequences on price.

7. Reducing spoilage and transportation costs will reduce the margin between final and derived demand. This will lead to an increase in farm gate demand and will lead to greater supply. See diagram #3.

8. Locating markets and organizing production schedules, plus giving better advice on production technologies, will reduce uncertainty, thereby lowering imputed costs, and increasing supply as shown in number 5.

The models which follow are simply for reference, and were used by the consultants to carefully predict the impact of changes which have occurred in various conditioning parameters over the last two years.

Case 1. Increase % of production marketed.

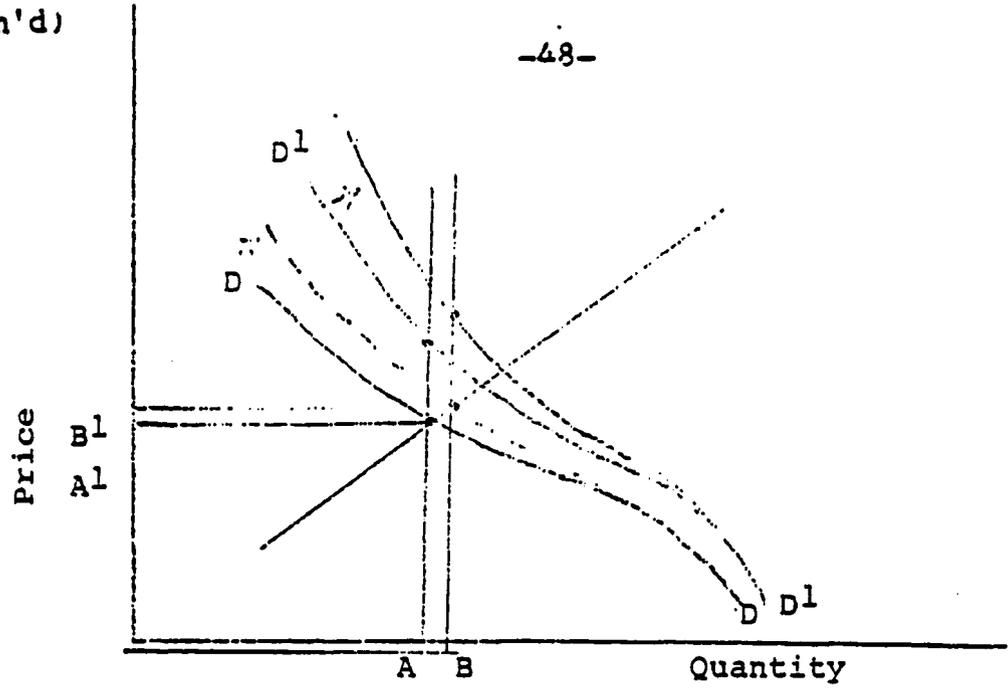


	Price (Py)	Quantity (Y)	Value (PyY)	$Py^1$	$Y^1 = PyY^1$	$\pi$
A	4.25	3	= 12.75	$A^1$ 7	2 = 14	1.25
B	3.75	4	= 15.00	$B^1$ 5.5	3 = 16.5	1.5

A - 33% spoilage, B - 25% apoilage  
 Reduced transportation cost will increase  $\pi$  or raise D  
 meaning farmer will earn more, PyY.

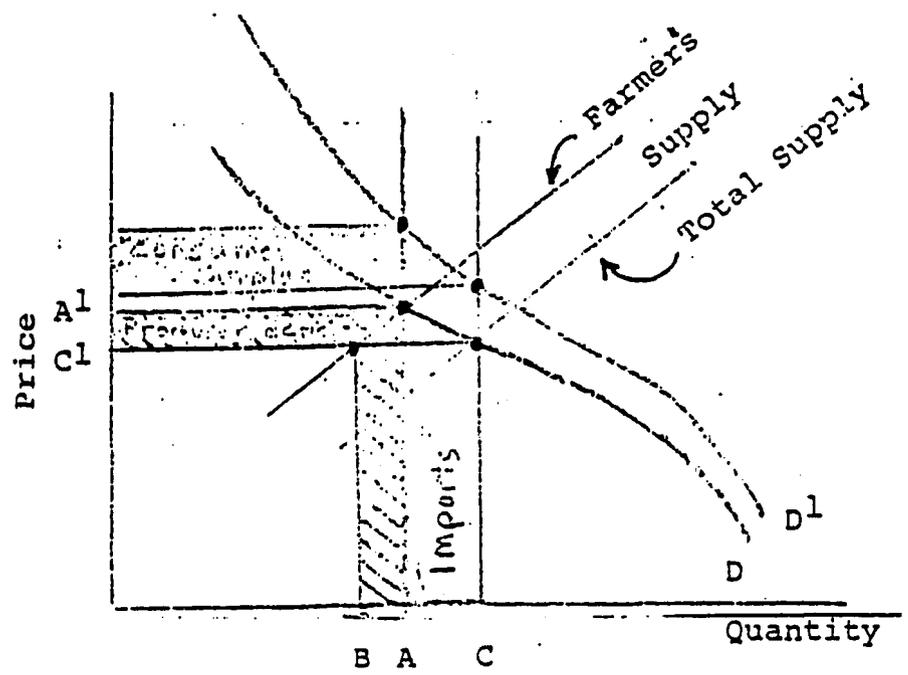
Case 2.  $D^1$  will shift to the right (in the upper portion) causing farmers to respond with more supply of higher quality. (See diagram on following page.)

(Case 2 con'd)



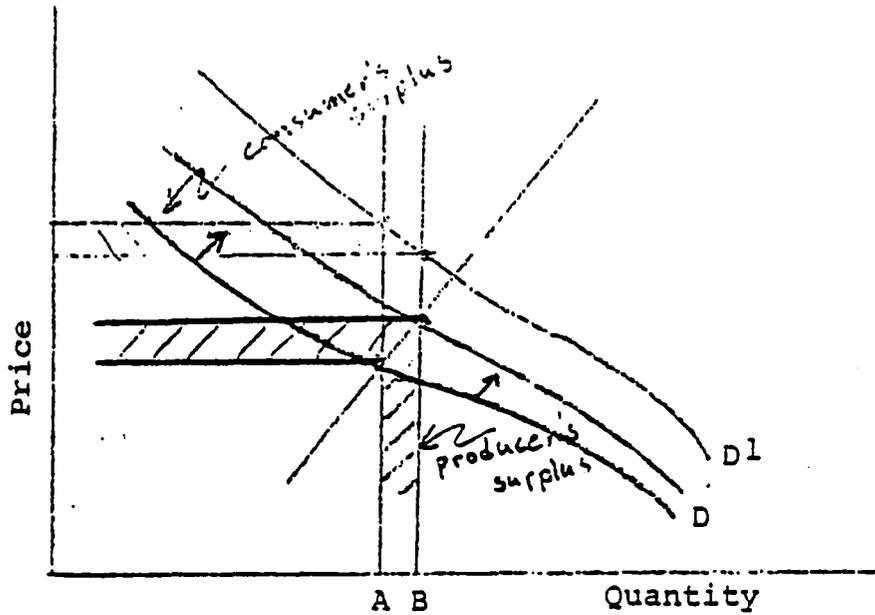
$$\begin{aligned}
 B^1B &> A^1A \\
 B &> A \\
 B^1 &> A^1
 \end{aligned}$$

Quantity supplied by farmers will increase and they will fetch a higher price. Moreover, returns to marketing will increase marginally.



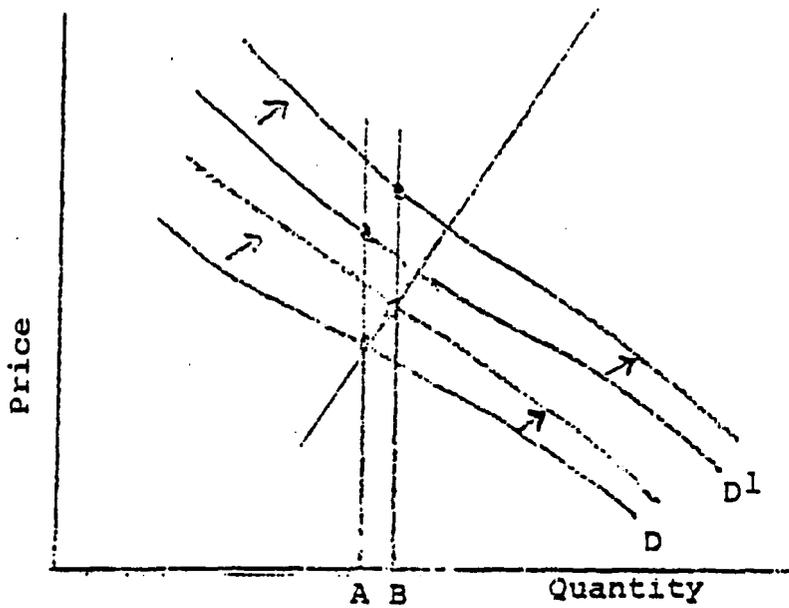
A farm supply without imports  
 B " " with imports      C-B = quantity of imports

Case 3.



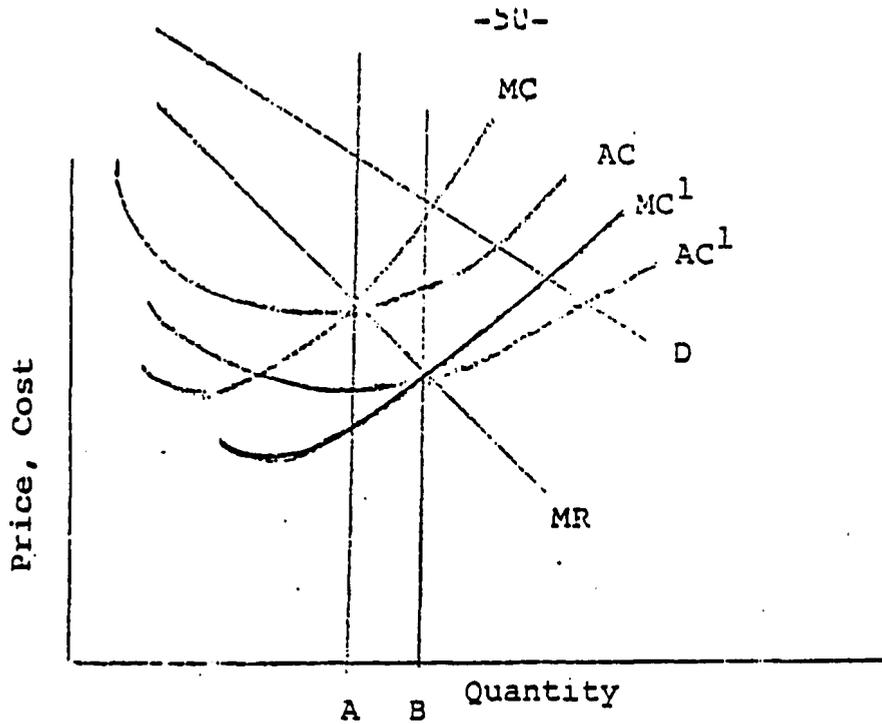
Moving from A to B, due to reduced marketing costs (CBI legislation) will create producer's surplus in Jamaica and consumer's surplus in U.S.

Case 4.

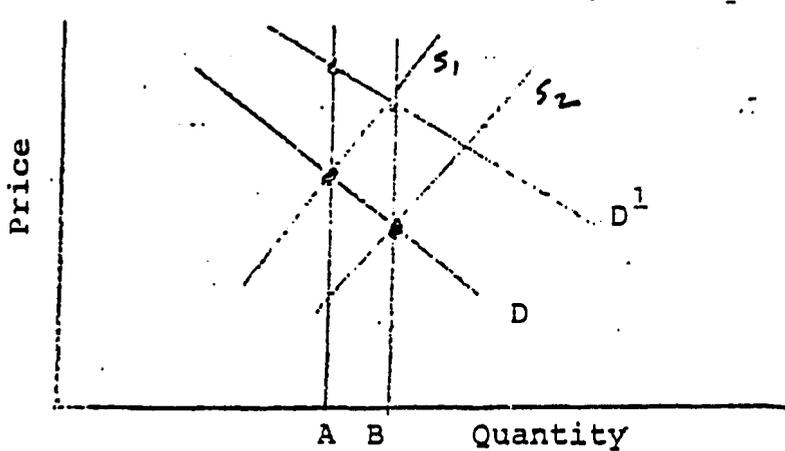


An increase in demand in U.S. will lead to a Jamaican supply response, i.e., price and quantity increases.

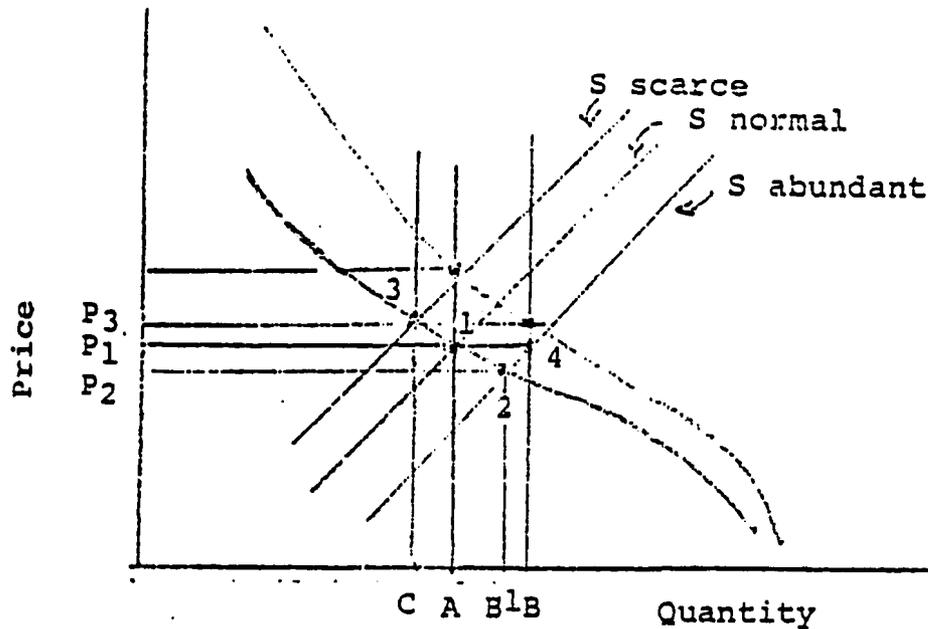
Case 5.



If labor as a percentage of total cash production costs is greater than 50%, which it generally is for annual high valued vegetables, then the effect of the parallel market would be to lower costs of production vis a vis the U.S. market. With given demand, supply would increase as shown in the diagram above. The total industry-wide affect would be a shift in the supply curve as shown below.



Case 6.



In a normal year, supply is A, farmers price is  $P_1$ , and AMC takes 1%. In an abundant year, price stays at  $P_1$ , supply expands to B, and AMC is supposed to take 1% plus  $B-A$ . Without AMC, price would fall to  $P_2$ , and supply would be  $B^1$ , with a sufficient margin to cover marketing costs. At B and  $P_1$ , demand price is not sufficient to cover marketing costs. In a short year, AMC would not purchase and price would be at  $P_3$ , absorbed 100% by the higglers and traders. Because of the floor price guarantee, even though AMC did not always have the cash to purchase, supply tended to expand. There was more expectation of a favorable price even during a glut. However, without AMC, supply will fall because uncertainty will increase and be added to costs as a premium. The reverse of number 4 above will occur.

VIII. MOA Response

The recommendations derived in the previous section were developed in close consultation with the MOA's marketing division and the technical assistance team. Each point and issue has been agreed upon and actively supported by these groups. It is felt that at this point a major redesign is not necessary but rather a shifting of budget amounts from one line item to another is all that is necessary through letters of implementation. The principal objectives of the project and the expected outputs remain the same. It was known by everyone involved that the original project design could not achieve its objectives in five years, and with the false start in terms of TA and equipment miscalculations, everyone recognizes that an extension in the EOPs is required.

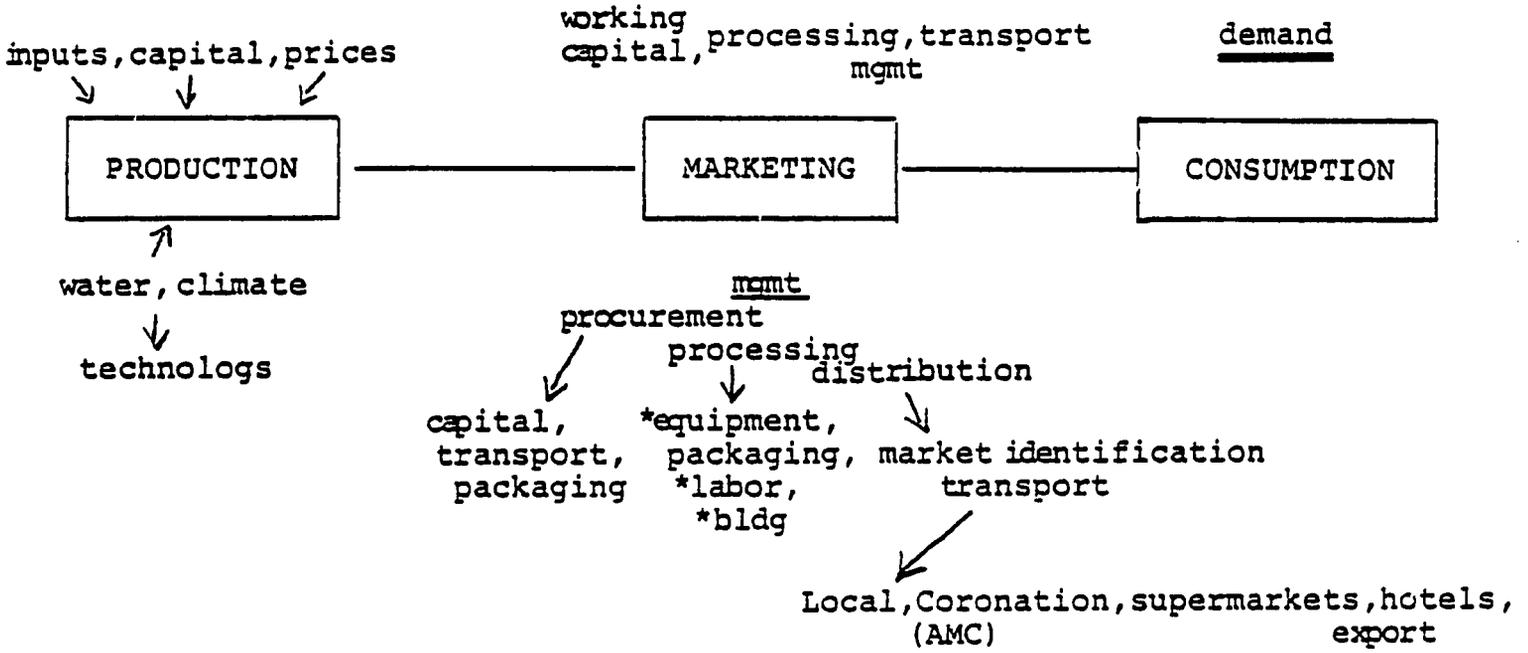
When the team first discussed the project with the Permanent Secretary, and on the last day, with the Minister of Agriculture, it was obvious that there was quite some concern about trying to do the original twenty-five AGSs and four SWDMs all at one time. Moreover, there was a concern about overlapping between MACD and other divisions of the Ministry and to some extent with regard to outside agencies such as JAMCO, JCTC, JETCO and AMC. However, when the recommendations which emerged from the evaluation were presented, both the Permanent Secretary and the Minister agreed in principle to the strategy developed. The evaluation team is not afraid to unconditionally recommend movement on the six to eight PMO/AGSs and three SWDMs identified as the pilot set by the MACD. Sufficient production to support the operations clearly exists in these areas, and with a concerted effort to organize and supervise the operations on the part of the marketing extension unit with the assistance of training and staff from the NUC's project, ACDI, PFP and the Peace Corps, it is felt that a real breakthrough in small farmer marketing is imminent in Jamaica, and the whole Caribbean for that matter. Key to this effort is the shifting of resources from the excessive SWDM budget to the provision of added support for creating

the PMOs, by providing more operating cost assistance, financing vehicles as equipment, and discounting interest and some principal charges for excessive design of equipment. The MACD in its entirety as well as the Permanent Secretary and Minister support these adjustments. That is the key to evaluation, that the folks responsible for implementation feel that they own the recommendation, that they were instrumental in guiding their design, and that they are committed to carrying them out. Since the evaluation team feels this to be the case with respect to the blitz on the pilot set of AGS's, we strongly recommend that AID/Jamaica look with favor on the MOA request that will be forthcoming in early December and that is attached in draft form to this report.

#### Missing Elements

Phase I of the marketing project has concentrated its efforts on developing market information, demand analysis, and feasibility studies. In Phase II, the focus has been on developing PMO's to operate assembly and grading stations complete with buildings, equipment and some vehicles. Sub-terminal wholesale markets are also to be constructed to handle the produce in major consumption and staging areas for export.

Although the project properly addresses the major marketing activities, there are some missing links in the chain from production to consumption. Visualize, if you will, three major activities - production, marketing, and consumption. Each of these activities requires capital, technology, labor and management. The project covers several of these inputs for the marketing activity, and most effectively the technology component and management issue. However, working capital is not provided. Although it is recognized that a properly functioning PMO must finance its own working capital, by marketing members crops on consignment in the initial stages, leaving this component out has led to marketing project failures in the past. Moreover, it is very rare for donor-funded projects to provide such credit because it is extremely



survey  
producers higglers

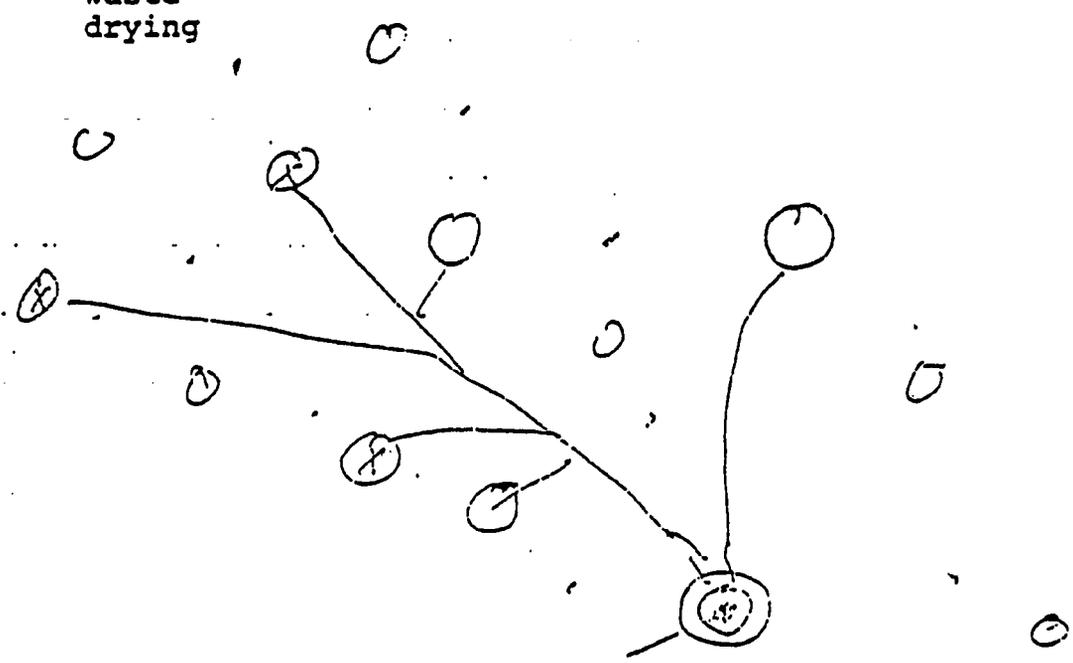
financial analysis  
?

register PMO  
clear title  
contract PMO/MACD

study title

Subsidiary activities

- credit
- input supply
- processing
- waste
- drying



risky and often carries no collateral. Nevertheless, it remains an unaddressed issue in the original design. For this reason, the MOA is requesting AID to consider reallocating some of the excess funds from the SWDM budget to the designated Special Fund, to be used for offering a guarantee to the ACB if they open up a window in their portfolio of agricultural credit to the PCB or other commercial banks for working capital to PMO's or other traders/higglers who would market PMO produce on a cash or partial pay basis. It is suggested that the primary banking source manage the credit on strictly commercial terms as if it were not guaranteed at the secondary level and insist that no loans at the primary level be forgiven outright but that all means of refinancing, collection postponement, or lien on buildings, equipment, vehicles, stock or produce be applied until exhausted. Since this activity would be run on a trial basis, with a limited amount of guarantee capital, it would be evaluated in two years to see how effective it is.

One other use of this fund could be for the financing of secondary activities to the assembly and packaging function. Pre-cooling or cold storage is already being considered at some sites. Consultant team member Smith Greig feels that a frozen french fry operation at Christiana is feasible. He would be willing to come back down with a technician to work up the feasibility study for such an operation early next year. Apparently, the cooperative has already considered this option. Coupled with the trimming of produce could be the feeding of hogs. Ripening or drying of produce such as onions is also a possibility. Input supply should be an integral component of each AGS, including seeds, fertilizer, dust and sprays, and animal feeds. Consultants under RONCO have already been contacted to assist JAS in straightening out their operation so that they may purchase in bulk for the PMO affiliates. The last suggestion is to manage the vehicles in the off-season and the back-haul to insure full loads for each trip. Trucking for profit should be the motto.

It is the profit earned from these secondary activities that will probably make the PMOs viable. There is a tendency for any farmer-managed marketing operation to force higher prices for the producers. Consumers (retailers) will always try to get cheaper produce and expanded supply will drive prices down. Only by expanding and totally integrating the PMOs operations will profitability be insured.

Specific Recommendations

1. Concentrate all efforts on the pilot set of six PMO/AGSs for the next year.
2. Add resources to extend coverage of start-up costs, namely,
  - a. Double coverage of operating costs to 100% for two years and 50% for two years,
  - b. Add vehicles to equipment schedule and finance the same way,
  - c. Discount excessive equipment costs.
3. Extend life of project by 3 to 5 years.
4. Change approach to SWDM development as indicated in MOA draft request.
5. Accept MOA Request for Disbursement Waivers, as per attached draft.
6. Consider revised budget attached to MOA draft.
7. Develop the Special Fund as requested.
8. Include NUC's contract under MACD management portfolio.

9. Consider NUC, PFP, ACDI and Peace Corps PMO development contracts under MACD management portfolio.
10. Upgrade staff and improve incentives by promoting more long- and short-term training as suggested in Section V.1.
11. Pay particular attention to the role of professional staff in the Market Research Branch. Demand analyses, market channel analysis, and production studies are essential, particularly targeted to crops designated for the first 6 PMOs/AGSs.
12. Restructuring of the marketing economic and Credit Unit seems to be in order as stated in V.4.
13. Consider reducing total number of AGSs to 15.
14. Extend life of project according to request of MOA/J.

#### Follow-Up

The evaluation team has been in constant contact with the MACD in preparation of their proposal for AID/J consideration. The team leader has also briefed the LAC Bureau in Washington.

If agreement is reached on the GOJ proposal, seven follow-up actions are recommended:

1. That the mission invite Dr. Gupta, from the International Trade Center, Geneva, to visit Jamaica in early 1984 to discuss plans for second-tier bank portfolio guarantees, based on his work along these lines in the agribusiness sector. The SFMA Project could arrange this.

2. That Dr. Smith Greig return early 1984 with an engineer, on the request of Christiana, to do a feasibility study for frozen fried potato processing.
3. That in collaboration with RONCO, consultants be invited to study the feasibility of expanding the Jamaican Agricultural Societies input stores program.
4. That a consultant on farming systems be invited to advise the GOJ on how to integrate on-farm adaptive research techniques into the PMO program.
5. Redirect market research unit towards costs of production, demand analysis, export potential and transport and processing costs studies, for the six pilot PMOs. Include production and price variation in the analyses.
6. Pursue concept of secondary activities, i.e., processing, transportation services, input supply, hog production, frozen french fries, etc., as real money-making operations of PMOs/AGSs. Let's prepare concepts paper on this.
7. Contract de Balogh to carry out market channel study as per attached proposal, Annex 3.

PRODUCER MARKETING ORGANISATION PROJECT

MEMORANDUM OF UNDERSTANDING OF  
RESPECTIVE RESPONSIBILITIES  
BETWEEN MACD & NUCS

The successful establishment and operation of the Producer Marketing Organisations (PMOs) require clarity and agreement on the precise functions of each agency which will be involved and perfect co-ordination of the in-puts of these agencies. There must be understanding and agreement in respect of the agency which will perform the lead role and be responsible for co-ordination.

The two (2) agencies involved are :-

1. The Ministry of Agriculture Marketing and Credit Division (MACD)
2. National Union of Co-operative Societies Ltd. (NUCS)

MACD has laid the ground work and began development of some PMOs and in fact a PMO which is part of Christiana Potato Growers Co-operative Association Ltd., is operational.

AGENCY FUNCTIONS:

1. MARKETING AND CREDIT DIVISION (MACD):

The role of the MACD in the establishment of PMOs will be :-

- . Identification of areas with the need for and the potential to develop viable PMOs
- . Responsibility for the infrastructure required by PMOs to start and continue operations - acquisition of land, supervision of buildings, procurement of suitable equipment
- . Conducting the necessary feasibility studies
- . Providing marketing extension services - marketing research and marketing information
- . Providing quality control guidance - grading standards etc.
- . Co-ordinating with NUCS' Co-operative College in deciding on the marketing component of the PMO training and curriculum
- . Conducting training in marketing as required in the PMO training programme to be developed and implemented by NUCS' Co-operative College
- . Analysing marketing problems of PMOs and recommending solutions
- . Assisting in the evaluation of marketing performance of PMOs
- . Co-ordinating with NUCS' Co-operative College in developing the technical farming component of the PMO curriculum in keeping with specific needs
- . Conducting technical agricultural training at various levels in PMOs as dictated by the training programme developed by NUCS' Co-operative College

- . Analysing technical farming problems experienced by PMO farmers and recommending solutions
- . Assisting in the evaluation of PMO farmers production performance

2. NATIONAL UNION OF CO-OPERATIVE SOCIETIES LTD. (NUCS):

The role of NUCS in Producer Marketing Organisations will be as follows :-

- . To identify farm leaders in prospective PMOs in which there is no existing organisation through which to work
- . Recruiting staff for new PMOs - Manager and Assistant Manager in co-ordination with MACD and Farm Leaders
- . Development of comprehensive training programme for all sectors of PMOs to meet all areas of training needs - leaders (Committee) staff and rank and file members
- . Responsibility for effective implementation of training programme in PMOs. This will involve :-
  - (a) Organising in-house training and obtaining expert resource in-put from other agencies as required
  - (b) Organising local on-going training on similar lines as in (a)
  - (c) Arranging for and conducting PMO personnel on visits to other PMOs and marketing agencies locally as training exercise
  - (d) Arranging for PMO personnel to go on overseas visits to marketing agencies as part of training.
- . Monitoring performance of all sectors of PMOs to evaluate training and its effect on attitudes, detect weaknesses and need to re-inforce, intensify or expand training in subject areas
- . Ensuring that adequate accounting system is instituted and maintained in PMOs
- . Ensuring effective flow of information and communication to PMOs and within PMOs structure
- . Guiding PMOs to find solutions to problems likely to affect PMOs and developing the necessary strategy to avoid them
- . Ensuring that PMOs receive all the required in-puts from the other agencies involved.

RESPONSIBILITY FOR OVERALL CO-ORDINATION:

The National Union of Co-operative Societies Ltd. (NUCS) as a voluntary organisation

representing over 400,000 persons of which a large proportion is PMO type farmers, should and will maintain overall co-ordination of in-puts by the two (2) agencies concerned as it relates to training.

In executing this role, NUCS will :-

- . Plan and document a co-ordinating policy approach
- . Seek and obtain agreement from MACD
- . Maintain clear cut lines of communication and understanding between MACD, PMOs and NUCS.
- . Avoid over-lapping of agency and other resources or the creation of gaps in resource in-puts.

NUCS will maintain harmonious working relationship between MACD, PMOs and other agencies that may be involved from time to time .

CO-ORDINATING CONTACT PERSONNEL:

The Contact Personnel through whom co-ordination will flow in the respective agencies are as follows :-

1. NATIONAL UNION OF CO-OPERATIVE SOCIETIES LTD. (NUCS) : GENERAL MANAGER
2. MINISTRY OF AGRICULTURE MARKETING AND CREDIT  
DIVISION (MACD) PROJECT MANAGER

Signed.....  
H. R. DIETRICH

GENERAL MANAGER, NUCS

Signed.....

PROJECT MANAGER, MACD

17th November, 1983

مرفوع

Annex 2  
في المرفقات

مرفوع

On the occasion of the visit of the USAID mid-term Evaluation team comprising five (5) USAID Consultants and four (4) GOJ staff members\* and based on field visits and discussion, the Ministry of Agriculture requests consideration of the following adjustments to the Project Financial Plan and Loan Agreement, amendment number one (1) March 31, 1982, including Annexed Amplified project description;

I. With regard to the development of four (4) Sub-terminal Wholesale Distribution Markets, it is requested that the following adjustments be made:

1. That the AMC facility on Spanish Town Road be renovated and reopened to serve the Kingston area, as a wholesale market and staging point for exports, to be managed by a private contract to JCTC, AMC or some other entity designate;
2. That the CP for fifty percent (50%) lease commitment for the AMC Market be waived;
3. That the Livestock Center in Bushy Park, St. Catherine, be considered as a SWDM;
4. That because of the design of such a center and its functioning, that the fifty percent (50%) lease requirement be waived as not relevant;
5. That the proposed abattoir, to be located next to the Livestock Center or other site to be determined, be considered as an SWDM, with the same waiver of the fifty percent (50%) lease requirement;
6. That funds for one (1) SWDM be reserved for Montego Bay, or other site, as and when feasibility studies, to carried by MACD, so indicate.
7. That savings on the SWDM budget be released for application elsewhere within the project. (See attached Budget Reallocation Table).

II. With regard to the AGS development and PMO contracts, it is requested that USAID accept the MOA and Evaluation Team recommendations to concentrate<sup>on</sup> pilot set of six (6) produce stations. This concentration will require special support as outlined below. The MOA requests USAID to facilitate this focus by approving disbursements immediately based on recognition of the status of each PMO as presented in the listing to follow.

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STATUS ON PMO ACTIVITIES(1) CHRISTLANA

- (a) Socio-Economic Study - Completed
- (b) Registration - Completed
- (c) Land Acquisition - to be addressed by P.S.
- (d) PMO/MACD Contract - to be signed 29/11/83

(2) SCUTHFIELD

- (a) Socio-Economic Study - Completed
- (b) Registration - Completed
- (c) Land Acquisition \* - Ministry of Finance has indicated that funds for purchase of land can be paid out to account general. (P.S. needs to expediate)
- (d) PMO/MACD Contract - Being reviewed by PMO.
- (e) Water Supply \* - Present level sufficient to operate equipment. Water Commission in the the process of increasing supply to Cooperative. (P.S. needs to expediate).

(3) BUSHY PARK

- (a) Socio-Economic Study - Completed
- (b) Registration - Completed
- (c) Land Acquisition - Completed
- (d) PMO/MACD Contract - Being reviewed by PMO.

(4) GUY'S HILL

- (a) Socio-Economic Study - MACD will submit to AID for approval 30/11/83.
- (b) Registration - Documents being prepared for submission to registration. Expected date of registration 15/1/84
- (c) Land Acquisition \* - Permission needed for AMC to transfer building to PMO/MOA. (P.S. needs to expediate).
- (d) PMO/MACD Contract - Being reviewed by PMO.

(5) DOUGLAS CASTLE

- (a) Socio-Economic Study - MACD will ask USAID to accept Staff College feasibility study on Douglas Castle.

(5) EBONY PARK

(a) Registration

- attached to the ...  
to ...

(b) Land Acquisition\*

- ...  
- ...  
- ...

(c) TWO-ACRE Contract

- being reviewed by ...

(6) EBONY PARK

(a) ...-Economic Study

- To be done by Research Unit &  
reduced scope as ...

(b) Registration

- complete

(c) Land Acquisition

- complete

...-ACRE Contract

to be submitted to ...  
10/12/53.

**Best Available Document**

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STATUS ON THE FILES

Given this status, MOA will expedite those <sup>stalled</sup> ~~stalled~~ items, and requests USAID give blanket approval to proceed immediately with construction, financing, and delivery of equipment for the six (6) pilot activities, as justified by the scheduling of conditions precedent presented above.

In addition, the MOA requests the following shifts in budget allocations:

1. That \$500,000 US\$ of the excess generated (exhibit A) be allocated to double the assistance provided each of the six (6) pilot PMO's, on the basis of 100% operating cost assistance for two (2) years and 50% for two (2) years;
2. That vehicles be added to the equipment provided each PMO as listed in the table, to be financed <sup>of</sup> ~~of~~ equipment under the same terms for said items;
3. That the general guidelines for equipment and construction be approved ~~of~~ the revised budget; to be finalized by engineering specifications as they become available;
4. That the LOP and EOPS be extended as indicated in the revised construction schedule (exhibit B)
5. That the excess saved (A) from the original budget be transferred to the special fund for market development, broken down as follows:

\$2,500,000      Credit Guarantee for PMO and farm input and working capital line of credit through ACB, PAB or other banking facility.

\$1,000,000      Technical Assistance

~~\$ 100,000      Test marketing of graded produce and market development activities.~~

\$ 200,000      Pilot farms for each PMO and farming systems research.

\$ 100,000      Test marketing of graded produce and market development activities.

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~~\$ 200,000~~ = ~~Phase funds for each PMO and training systems research.~~

\$ 150,000 <sup>ing</sup> Market/extension support.

\$ 50,000 Post harvest handling laboratory and quality assurance equipment.

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\$4,000,000

Up to \$2,000,000 additionally will be available from inspect contingency and inflation reserves to be further allocated as deemed appropriate by MOA and USAID.

□ When necessary MOA requests permission to assign  
a PMO to  
a manager to work on PMO development,  
preconditions for construction, supervise construction,  
and to begin marketing functions.

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ANNEX 1

ORIGINAL AND REVISED BUDGETS FOR 25 AGS's and 4 SWDMs  
(November 1983) (In US Dollars)

	ORIGINAL BUDGET	COMMITTED 6 AGS 2 SWDM (LVSTK) 1 SWDM (AMC)	PROJECTED 17 AGS 2 LVSTK 1 SWDM	SURPLUS (Deficit)
<u>AGS</u>				
Land	127	30	190	(93)
Construction and Site Development	2,370	975	1,894	(499)
Equipment	1,058	915	545	(402)
A & E	445	215	303	(109)
Vehicles	--- 0 ---	300	1,170	(1,470)
<b>TOTALS</b>	<b>4,000</b>	<b>2,471</b>	<b>4,102</b>	<b>(2,573)</b>
<u>SWDM</u>				
Land	202	60	40	82
Construction Development	6,849	700	400	5,749
Equipment	1,145	500	250	395
Vehicles	897	250	100	547
A & E (UDC Fees)		105	60	(165)
<b>TOTAL</b>	<b>9,093</b>	<b>1,635</b>	<b>850</b>	<b>6,608</b>
<b>GRAND TOTAL</b>	<b>13,093</b>	<b>4,106</b>	<b>4,952</b>	<b>4,035</b>

Total Programmed	9,058
Budget Surplus	4,035
Inflation allowance on surplus (.21x4,035)	847
Contingency on Surplus (.05x 4,035)	202
Contingency on programmed (.05x 9,058)	453
Inflation allowance on equipment already purchased	180
Construction savings: (Bushy Park & Southfield) (potential)	300
<b>TOTAL</b>	<b>6,017</b>

FX - Foreign Exchange (US Dollars)  
LC - Local Currency (Converted to US Dollars at \$1.78)

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## BUDGETS FOR 6 PILOT AGS (In U.S. Dollars)

	EQUIPMENT	CONSTRUCTION AND SITE * DEVELOPMENT	TRUCKS (FX)	LAND ACQUISITION (LC)
1. Christiana (a) Yam line (b) Bean line (c) Potato line	213,452 <sub>FX</sub>			
2. Guys Hill Utility Line	29,760 <sub>FX</sub>	33,708 <sub>LC</sub>	60,000	-----
3. Bushy Park (a) Combination line (b) Cold Store	313,813 <sub>FX</sub>	291,011 <sub>LC</sub>	60,000	10,112
4. Southfield (a) Utility Line (b) Cold Store (c)	129,977 <sub>FX</sub>	341,573 <sub>LC</sub>	60,000	10,112
5. Douglas Castle Utility Line Auxiliary Equip- ment	89,760 <sub>FX</sub>	140,449 <sub>LC</sub>	60,000	10,112
6. Ebony Park  Unassigned Cold Store	25,000 <sub>FX</sub> 13,090 <sub>LC</sub>  40,217	168,539 <sub>LC</sub>	60,000	-----
*LC and FX				
TOTAL	915,069	957,280	300,000	30,336
UDC FEES		14,628		

FX - Foreign Exchange (US Dollars)  
LC - Local Currency (Converted to US Dollars at \$1.78)

ANNEX 3

**BUDGETS FOR SWMDS**  
(In US Dollars)

	EQUIPMENT (FX)	CONSTRUCTION & SITE DEVELOPMENT*	TRUCKS (FX)	LAND ACQUISITION (LC)
1. Renovate AMC Building	200,000	200,000	100,000	-----
2. JLA Livestock Centre	200,000	200,000	75,000	40,000
3. Abattoir	100,000	300,000	75,000	40,000
TOTAL 3 SWDM	500,000	700,000	250,000	80,000
Fourth SWDM	250,000	400,000	100,000	40,000
TOTAL 4 SWDMs	750,000	1,100,000	350,000	120,000
UDC FEES (AGE)		165,000		
* LC and FX				

FX - Foreign Exchange (US Dollars)

LC - Local Currency (Converted to US Dollars at \$1.78)

ANNEX   C  

BUDGETS FOR 17 FRUIT AND VEGETABLE  
AGS's AND 2 LIVESTOCK COLLECTION STATIONS  
( In US Dollars)

	EQUIPMENT*	CONSTRUCTION & SITE DEVELOPMENT *	TRUCKS (FX)	LAND (LC)
17 AGSs	435,000	1,445,000	1,020,000	170,000
FISH COLLECTION STATION	42,697	112,360	75,000	10
MILK COLLECTION STATION	67,416	337,072	75,000	10
TOTAL	545,113	1,894,435	1,117,000	172,000
UDC FEES		284,165		
* FX and LC				

FX - Foreign Exchange (US Dollars)

LC - Local Currency (Converted to US Dollars at \$1.78)

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ANNEX SCHEDULE FOR 25 AGS AND  
 FOUR (4) SWDM (YEAR 1 BEGAN APRIL 1, 1991)

I. AGS Schedule

Six (6) Pilot AGS

Christiana Year 2  
 Guy's Hill Year 3  
 Bushy Park  
 Southfield Year 4  
 Douglas Castle  
 Ebony Park

Nineteen (19) Projected AGS

Milk Collection Station Year 5  
 Fish Collection Station  
 Four (4) Fruit & Vegetable Year 6  
 Four (4) Fruit & Vegetable Year 7  
 Four (4) Fruit & Vegetable Year 8  
 Five (5) Fruit & Vegetable Year 9

II. SWDM Schedule

One (1) SWDM (AMC Facility) Year 4  
 Livestock Auction Center Year 5  
 Abattoir  
 Fourth SWDM Year 7

	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9
Christiana		1							
Guy's Hill			1						
Bushy Park									
Southfield				4					
Douglas Castle									
Ebony Park									
Milk Collection Station					2				
Fish Collection Station									
Four (4) Fruit & Vegetable						4			
Four (4) Fruit & Vegetable							4		
Four (4) Fruit & Vegetable								4	
Five (5) Fruit & Vegetable									5
One (1) SWDM (AMC Facility)				1					
Livestock Auction Center					2				
Abattoir									
Fourth SWDM							1		

## MARKETING ORGANIZATION IN RURAL MARKETING PROJECTS

Objective of the study: To formulate strategies for development of an effective marketing system for agricultural products (fruit, vegetables and root crops) and inputs for small and medium size farmers, linking marketing channels at the production, wholesale and retail levels.

To define the potential involvement of the proposed Producer Marketing Organizations in the marketing process through the Assembly and Grading Stations.

### 1. Diagnosis of production aspects

- 1.1 Products grown, varieties, quality, yields, production costs according to type of farms, seasonality of production.
- 1.2 Research and extension service available
- 1.3 Production credit available.

### 2. Evaluation of present marketing organization and identification of major constraints, specially for the regions of the proposed marketing centres. (Southfield, Thetford, Moore Town, Guys Hill and Christiana)

#### 2.1 Existing marketing channels

##### 2.1.1 Sales by producers according to different size farms

- . Small scale producers ( less than 5 acres )
- . Medium scale producers ( between 5 and 10 acres )
- . Large scale (commercial) producers ( more than 10 acres )
- . Sales at farmgate to higglers, rural merchants, industry and exporters
- . Direct sales by farmers in nearby markets (indicate site)
- . Direct sales by farmers in other markets (indicate site)
- . Usual sales arrangements (sporadic sales, regular sales, contracts)

##### 2.1.2 Harvesting, grading, packing at farm or by market intermediaries (quality differences, crates and other packing material used, weighing)

##### 2.1.3 Collection at farm level and transport utilized

- . Transport to markets : assembly of individual lots, transport of products to markets and passenger services. Higglers and rural merchants own vehicles or transport provided by others: bus, truck, van, pick-up.

##### 2.1.4 Technical skill of market intermediaries

2.1.5 Pricing at the farms. Price differences according to quality

- .Price differences between production zones and markets
- .Price formation at different markets, rural parish markets (local and regional) and consumer centres (Kingston Metropolitan Area: Coronation market) and other institutional trade. Supply of institutional buyers, supermarkets and green grocers.
- .Influence of export and import situations

2.1.6 Assessment of the activities of the market intermediaries

- . Marketing costs and margins at each level of the channel

3. Ways to rationalize the marketing functions and services through Producer Marketing Organizations as well as to create alternative channels for marketing

- 3.1 Problems which had been identified (seasonality of production, deficient quality of products for national and export market, inadequate marketing outlets, physical losses at farm level and during the marketing process, etc.)
- 3.2 Assistance to farmers with respect to production
  - 3.2.1 Growing of products of adequate variety and quality
  - 3.2.2 Taking into consideration effects of seasonality in production and consumer demand
  - 3.2.3 Ways to increase productivity and decrease production costs
  - 3.2.4 Supply of agricultural inputs
- 3.3 Defining exact functions of the proposed Assembly and Grading Station, set operational methods and estimate costs and benefits in comparison to alternative marketing methods
  - 3.3.1 Define differences in market orientation of the various types of farmers
  - 3.3.2 Propose purchase arrangements with farmers and selling arrangements with potential buyers
    - . Receive products for farmers account, prepare for market, process and sell: on firm or commission base)
    - . Purchase products from farmers, prepare for market, process and sell: on firm or commission base)
    - . Make advance supply contracts with farmers
    - ✓ Make advance sales contracts with trade, industry and exporters

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- . Day to day selling for national market: at packing house, at selected markets at wholesale level having own stalls/depots or to intermediaries
- . Selling for export markets: to exporters at packing house or at shipping points or direct exports
- . Direct sales to industry at packing house or delivered to processing plant

### 3.3.3 Additional marketing services required

- . Grading. To what extent required and what grades will be applied
- . Washing. To what extent required
- . Packing. For which products required, types of crates or other material proposed, how they will circulate
- . Sales according to quality. Export markets, national markets, industry. What use will be made of rejects and what percentage of different qualities is expected.
- . Transport. From producer to assembly and grading station. From assembly and grading station to markets or other destination (export, industry) institutional buyers) Alternatives: Farmers organization owns vehicles, negotiated arrangements with transporters, organization facilitates credit to entrepreneur or make contracts with transporters
- . Storage. Organization owns storage facilities in the production zone or markets. Participates in storage or leases facilities. If necessary organization rents available storage facilities.
- . Agro-industrial processing. Contract sale to processors, sale of part of the marketed products. Installing own processing facilities.
- . Market and price information service. Requirement for short, medium and longterm information. Provisions available. Continuous study of present and potential markets.
- . Credit for marketing. Requirements and sources for institutional credit for operation. Conditions

### 3.3.4 Ways of achieving farmers cooperation. Views of farmers

### 3.3.5 Creation of vertical coordination between farmers and traders. Power in negotiations and leadership.

4. Organizational, administrative and operational aspects

4.1 Organization

- . Rights and obligations of members
- . Executive functions of staff. Decision making and problem solving

4.2 Administration

- . Organization of the marketing enterprise and physical facilities covering production, marketing, processing and finance
- . Terms of Reference for each employee

4.3 Operation

- . Development of a pilot project
- . Support to producers: planning of production, technical assistance for production and marketing, input supply.
- . Operation of the centre: buying, selling and providing services: assembly, transport, grading, packing, storage, processing.
- . Provision of credit for marketing at producer and organization level
- . Technical assistance for the operation of the centre. Training in marketing and operation of the centre.

4.4 Financial aspects

- ..What are the estimated minimum costs of these services provided by the centre. Competitive situation with the traditional trade. Reduction of waste, costs and margins

5. Performance analysis

A systematic performance analysis of all Producer Marketing Organizations is necessary, comparing the operation with the development targets, plans and orientations. An up-to-date assessment permits to define

- Targets achieved
- Outstanding tasks not yet fulfilled
- Indications of shortcomings and bottlenecks
- Positive and negative experiences
- Opinions and suggestions of producers, traders and staff

Among others the following questions should be answered:

Are constructions and equipment suitable and fully utilized ?

Are marketing services adequate and utilized ?

Is administration adequate ? Financial situation sound ?

Is operation satisfactory ? Could the Producer Marketing Organization contribute to improvement in the marketing process ?

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Appendix

MARKET IMPROVEMENT PROGRAMME IN JAMAICA

		<u>Remarks</u>
<u>National Market :</u>	KSAC Coronation	Wholesale/Retail Improvement under consideration through IDB credit
<u>Regional Markets:</u>	Montego Bay (Ch.Gordon)	Limited wholesale/retail
	Santa Cruz	IBRD credit
	Newmarket	Supply local products
	Savanna-la-Mar	IBRD credit
	May Pen	IDB credit
	Christiana	IDB credit
	Kellits	IDB credit
	Frankfield	IDB credit
	Browns Town	Decreasing importance as regional market
<u>Local Markets:</u>	Old Harbour	IDB credit
	Port Antonio	IDB credit
	Grange Hill	IBRD credit
	Falmouth	IBRD credit
	Linstead	Refurbished locally
	Lucea	IBRD credit
	Chapelton	IDB credit
	Balaclava	IDB credit (small size)
	Maggotty	IDB credit (small size)
	Montego Bay, satellite	IBRD credit (small size)
	Claremont	IDB credit (small size)
	Little London	IBRD credit (small size)
	Petersfield	IBRD credit (small size)
	Whitehouse	IBRD credit (small size)
	KSAC Papine	Needs local funds for refurbishing