



## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.

TOGETHER

for a sustainable future

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at <u>www.unido.org</u>

RESTRICTED



DP/ID/SER.A/947 8 January 1988 ENGLISH

#### AGRO-INDUSTRIES DEVELOPMENT

### DP/JAM/87/011/11-01

#### JAMAICA

#### Technical report: Preparatory assistance\*

Prepared for the Government of Jamaica by the United Nations Industrial Development Organization, acting as Executing Agency for the United Nations Development Programme

## Based on the work of William S. Beale, Senior agro processing advisor

Backstopping Officer: B. Galat, Agro-based Industries Branch

United Nations Industrial Development Organization

Vienna

\* This document has been reproduced without formal editing.

## INDEX

1.	Summary	2
2.	Introduction	3
3.	Discussion	4
4.	Other Activities	12
5.	Recommendations	14

## APPENDICES

۸.	Mission Job Description	18
Β.	Preparatory Assistance Document	20
C.	Draft Project Document	23
D.	Work Programme	31
E.	Contacts Made	33
F.	Equipment	35
G.	Bibliography	36
H.	Jamaica Frozen Foods	38

### NOTE

The mention of firm names and commercial products does not imply endorsement by the United Nations Industrial Development Organisation (UNIDO)

## ACKNOWLEDGEMENTS

The mission acknowledges with thanks, the assistance of UNDP and UNIDO staff in Kingston, members of the Government, Agro 21 and other agencies, and private industry contacts made during the course of the project.

#### 1. SUMMARY

The primary objective of the mission was to determine the technical assistance requirements for the execution of the agro-industrial development programme for Jamaica.

It is necessary to improve the development activities for food production to fully utilise the country's agricultural resources and increase the variety and quality of products to enable self-sufficiency in food supply to be achieved.

Discussions were held with relevant industry and Government sectors and the basic problems identified. The number of non-profitable, under-utilized and idle agro-processing factories if of great concern.

The findings of the mission and means of achieving the desired results are discussed and recommendations made for an Agro 21 UNDP funded UNIDO project over a two year period.

A draft project document has also been prepared for the programme to commence in early 1988.

- 2 -

## 2. INTRODUCTION

The Job Description and Preparatory Assistance Document for the mission are appended. (Refer Appendix "A" and Appendix "B")

The request for this mission was initiated by the Prime Minister through The Planning Institute of Jamaica and Agro 21. It followed the UNDP funded UNIDO Agro-Processing Mission to Jamaica by this Consultant in July/September, 1986, which highlighted deficiencies in the agro-industry and recommended a two year programme to develop the Food Technology Institute.

No action was taken on the above project due to a lack of support by the agro-processing industry regarding funding. This later request was based on the need to undertake a programme of development as a matter of urgency.

In the time available, it was not possible to visit many factories or hold discussions with contacts made the previous year. This was partly due to the diversions caused by other activities arranged by the UNDP RESREP, SIDFA and Agro 21 (Refer to 4 - Other Activities) and to the illness of a key Agro-21 Executive during the last half of the mission.

- 3 -

### 3. DISCUSSION

It is apparent that a number of Jamaican agro-processing operations have failed, either partially or completely, due to such basic factors as:

. Ir experience.

- . Failure to study raw material supplies.
- . The use of inappropriate technologies.
- . Poor equipment and packaging.
- . Lack of market knowledge and market testing.
- . Inadequately trained personnel.

A major reason for these failures is that there is no organisation or consultancy in Jamaica with sufficient experience in the planning and implementation of new agro-processing projects or operations.

With the current and planned expansion of a number of important crops, such as bananas, mangoes, papayas and vegetables, considerable improvement in handling and processing techniques will be required. Urgent attention needs to be given to:

- . Improved grower/processor relationships to ensure continuity of raw material supplies.
- . Better post-harvest handling and storage techniques.
- . Plant maintenance and materials handling.
- . Processing technology and know how.
- . More suitable small-scale, high-techgnology plant and equipment for processing and packaging.
- . Identifying market opportunities for specific products developed at pilot plant level and market tested in the target area.
- . Maintaining consistent quality on all products.
- . Better packaging materials.
- . Training management at all levels, but particularly at the foreman/technician level to middle management.
- . Rationalisation of the industry through mergers or industry co-operation.

To ensure the future success of the Jamaican agro-processing industry, there needs to be a greater emphasis on the quality and continuity of raw material supplies. Agro-21 has brought about a great improvement in this position in the past few years and there has been an increase in partial vertical integration by the processors, but many are reluctant to take this step. However, post-harvest handling and storage in the field, in transport, and at factories is still very poor. This could become a very important factor in the future, when it could be necessary to import raw materials from neighbouring CARICOM countries to adequately service newly developed markets.

The standard of plant maintenance and materials handling at every factory visited in the past two years is extremely low and needs urgent attention. More properly trained plant and maintenance engineers and technicians are required. Some equipment used for export production does not meet acceptable p oduct safety standards. In some cases, processors blame Government policies on the import of replacement parts as the cause of their problems and this aspect needs an industry approach.

There is a great lack of knowledge of modern processing technology and know-how in most operations, resulting in high costs and low-quality products which have lost a lot of their natural food value and flavour. The availability of low-volume, high-technology equipment is generally unknown, particularly that produced by countries other than the U.S.A. - eg. Europe.

- 6 -

Not enough attention has been paid to marketing at any level. Many products are manufactured without due regard to markets and costs. In general, Jamaicans have a liking for very sweet products and processors are probably restricting their local and export markets by refusing to recognise this fact - many have an "I like it, so what" attitude. There has been little study of market requirements, even of their Jamaican needs. Efforts to find any valid evidence of Jamaican dietary habits or requirements proved unsuccessful. The Government, industry and health care organisations need to give attention to this matter.

The quality and consistency of many of the products is poor and is a major factor in their lack of acceptance on both local and export markets. Some particular examples are: "black-neck" in sauce bottles, "very thin" jams - one lime marmalade had a low lime rind but over-sweet high lime-essence content; rancid and soft banana chips. A product of concern is canned peas, unhygienically produced from imported peas, either canned in large containers, or frozen and allowed to thaw at ambient temperatures. The economics of these operations are also very suspect.

- 7 -

The current food laws controlling standards and inspection services need closer monitoring and assistance, as in many cases they are ineffective, expensive, and not in the best interests of Jamaica for either local consumption or export. Appropriate studies by an independent expert need to be made in respect of these matters.

The standard of local cans, bottles and jars is very poor and a major deterrent to the development of an export market for retail packs. A co-ordinated effort by processors to finance the production of new sizes and shapes could be beneficial as it should then be possible to amortize the costs over a longer term.

Many of the Companies are operated by inexperienced and untrained people, particularly at the foreman/technician level to middle management. They need training at the polytech type of institution or in "training within industry" courses as sponsored by industry in a number of countries.

The Agro-Processing Industry is very disjointed, with little attempt by most of the companies to become involved in common industry affairs. Whilst there are a few very active members in the Food Processors Group within the Jamaican Manufacturers Association, the general support is

- 8 -

poor, except when it involves self-interest. It is necessary to strengthen this Group and largely through this channel, develop closer and better relations with the Government. A strong and co-ordinated Group could achieve a great deal for their industry, particularly in regard to items mentioned above as well as tariffs and incentives.

Rationalisation of the industry is of prime importance. There are many idle, under-utilized, unprofitable and over-capitalised agro-processing plants in Jamaica. It is of vital importance for the economic development of the industry that this problem be overcome by rationalis tion through mergers or co-operative industry action. For th. export market at least, the adoption of common brands of standardised products must be considered a viable option. The increase in volume would also enable consideration of better packaging materials.

The whole range of product groups produced in Jamaica requires attention. These include: jams and jellies, sauces and chutneys, vegetables, fruits, ethnic and gourmet foods. Many of these need development in order to replace imports and make the country self-sufficient in processed food supplies. Of major importance are: tomatoes, winter vegetables, pineapples, oranges, ackres and other ethnic products.

- 9 -

A number of the above products are also important in terms of developing export markets, but the major thrust here would appear to be best suited for the tropical fruits, such as bananas, guavas, mangoes and papayas, particularly in bulk packaging.

Bananas are of prime importance due to the large and increasing volume of export rejects. Special efforts must be made to develop new banana products in various forms for local as well as exports. Dried forms such as flakes or powder appear to offer the best opportunity, particularly for the European markets. A considerable improvement could also be made in the snack food products with the introduction of better tehcnology.

There is a limited local market for processed tropical fruits and the big opportunity would appear to be in the European export areas, particularly in bulk forms, such as juices, purees, concentrates, powders, flakes, frozen and freeze flow. In developing these markets, it could well be necessary to import raw materials from other CARICOM sources in order to ensure volume supplies. Asceptic processing and packaging is well suited to these products.

- 10 -

A restructured Food Technology Institute organisation is essential to the future of the Jamaican Agro-Processing Industry. It is of paramount importance that a dialogue be established between the Government and Industry in this matter. A non-profit Foundation with Government, Agro-industry and associated commercial interests (banks, insurance companies, suppliers, equipment and service agencies, etc.) is believed to be the most appropriate basic mix for such an organisation in Jamaica.

## OTHER ACTIVITIES

At the request of the UNDP RESREP, the Consultant held discussions with Mr. R. Reuter, former President of Kraft, Inc., USA and a Member of the Industry Council for Development and STAS Committee. This resulted in interest being expressed in a STAS mission to aid Jamaican Frozen Foods Limited.

Held discussions with the UNDP RESREP and the Australian High Commissioner with a view to his Government providing training in Australia for selected Jamaicans particularly foremen/technicians from agro-processing industries.

Attended a meeting of a visiting South Pacific Agro-Industry Mission at the request of UNIDO's SIDFA and gave a brief talk on development of agro-processing industries.

The Consultant attended some Agro-21 organised Seminars with leading Jamaican Agro-Processing Companies, including Jablum Jamaica Limited and Dr. Ian Sangster & Company Limited. Whilst these Companies are basically very successful, the discussions indicated that both still have considerable scope for development and improvement in foreign exchange earnings. A meeting was attended at Agro-21 with a visiting potential investor in the agro-industry from New York, U.S.A., which highlighted the need for "on-the-spot" expertise within the organisation, particularly as the factory needs could probably be located within an existing under-utilized plant.

Visits were made to an unprofitable factory - Jamaican Frozen Foods Limited - with large debts and to an idle one - Rich's "Freeze Flow". These and other similar plants are of concern to the Government and require urgent professional study.

A report on Jamaicar Frozen Foods Limited was prepared for Agro-21 at the urgent request of the Prime Minister and a recommendation made for a short term specialist fish processing/marketing advisory team to undertake studies as soon as possible with a view to identifying solutions to the problem. This activity took some six days of the Consultant's time. (Refer Appendix "H")

## 5. RECOMMENDATIONS

Agro-21 has been a catalyst in the development of the primary sector of the agro-industry and is seen as the natural organisation to extend its activities to become the focal point for the development of the agro-processing sector, which is currently not achieving its full potential. It is, therefore, recommended that an Agro-21 UNDP funded UNIDO project be undertaken over a two-year period as the major thrust in the execution of the agro-processing development programme for Jamaica.

The project should result in better utilization of existing agro-processing plants and in aiding the sound economical development of new operations, the major thrust being a concentrated project effort with a small number of co-operating companies : specific sectors. Companies which have indicated their interest include: Grace Kennedy Canning Limited, Brico (Successors) Limited, Roberts Products Company, Scotts Preserves Limited, Virginia Dare (Jamaica) Limited and Challenge Enterprises and Salada Foods Limited. Tangible results should be achieved from the establishment of industry guidelines as well as in factors such as an increase in the product range, quality, productivity, the introduction of new techniques, packaging, marketing and employment.

The project team should be comprised of:

<u>A Project Co-ordinator to act as Agro-21 Director</u> <u>of Agro-Processing</u> – a Senior Industry Specialist with a broad knowledge of food processing, related technologies and marketing, and experience in the promotion of investment and joint ventures in developing countries. (Technical qualifications in the food processing sciences are not considered to be as important as practical knowledge in the formation and execution of agro-industrial projects in developing countries.)

- 24 man-months, with local and overseas travel.

<u>Agro-21 Agro-Processing Counterpart</u> - a Senior Industry Specialist with a broad knowledge of the Jamaican agro-processing industry and practical experience in food processing, related technologies and marketing, particularly as related to tropical fruits. (There are resident Jamaicans well suited to this post.)

- 24 man-months, with local and overseas travel.

Short-Term Senior Agro-Processing Specialists in the following general categories, as required:

- . Food Technologist Product Development and Improvement.
- . Production, Process and/or Plant Engineering.
- . Post Harvest Handling and Storage.
- . Marketing Local and Export.
- . Food Processing Financial/Cost Analyst.

to be selected by the Project Co-ordinator as required for specific target sectors.

All to be experienced senior people in their area of speciality, which could include the following sectors:

- . Jams and Jellies
- . Sauces and Chutneys
- . Vegetables
- . Fruits, Juices, Purees and Concentrates
- . Ethnic, Exotic, Gourmet and other products
- . Other relevant products
- . Canned, Frozen, Dried Products, Juices, Pulps, Concentrates, Freeze-flow, Asceptic, etc.

- 12 man months total (12 x 1 month average) (It could well be that some of the short-term specialist requirements are sourced from other programmes, such as: SIS, STAS and IESC.)

- 16 -

### Training

Provision to be made for the training of agro-processing industry personnel from foreman/technician level to middle management in appropriate courses and/or companies in English-speaking countries. This training could be of the in-plant type of work experience available from co-operating U.S. Companies ("SUSTAIN") or short-courses followed by work experience, such as those conducted by polytechnics in the U.S.A. and industry organisations in other countries. Selection should be made by the Project Co-ordinator.

- 12 man months total.

#### Recruitment of Major Personnel

Recommendations have been made to UNDP, UNIDO and Agro 21 in Jamaica regarding suitable personnel for the two key positions, both of whom are known to Agro 21 and currently available.

## - 18 -UNITED NATIONS

APPENDIX A



# UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

## UNIDO

July 1987

Request from the Govefnment of Jamaica

JOB DESCRIPTION

DP/JAH/87/011/11-01/J13103

Part title	Expert in agro-food processing development
Duration	1.5 man-months
Date required	As soon as possible
Duty station	Kingston
Purpose of project	To improve the development activities for food production in order to fully utilize the agricultural resources locally available and to increase the variety of
Duties	foods, upgrade the quality of the products and thus ensure food self-supply in the 1988 - 1990 period.
	In close co-operation with the Hinistry of Industry, the administration of Agro-21 and the UNDP office the expert will specifically be expected to carry out the following duties:
	<ul> <li>Determine the technical assistance requirements (expertise, training, equipment) for the execution of the agro- industrial development programme;</li> </ul>
	<ul> <li>Based on the findings of the mission the expert will</li> <li>be expected to formulate a Draft Project Document and advise on future project activities.</li> </ul>
	The expert will also be expected to prepare a final report setting out the findings of the mission and his recommendations to the Government for future action which might be taken.

. . . . **/** . .

Applications and communications regarding this Job Description should be sent to:

Project Personnel Recruisment Section, Industrial Operations Division UNIDO, VIENNA INTERNATIONAL CENTRE, P.O. Box 300, Vienne, Austria  
 Qualifications
 Expert in agro-processing development with broad experience in food processing related technologies and practical knowledge in formulation and execution of agro-industrial projects in developing countries (with preference in Jamaica).

 Language
 English

Beckground information

Not available.

6

## UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Government of Jameica

### PREPARATORY ASSISTANCE DOCUMENT

TITLE	Development of agro-industries
PROJECT NUMBER	DP/JAM/87/011
DURATION	1.5 man-months
SECTOR, UNDP CLASS & CODE	Industry (05)
SUB-SECTOR, UNDP CLASS & CODE	Industrial Development (0510)
GOVERNMENT DAPLEMENTING AGENCY	Agroindustrial Forum - Agro 21
EXECUTING AGENCY	United Nations Industrial Development Organization (UNIDO)
ESTIMATED STARTING DATE	August 1987
GOVEHNMENT INPUTS	US\$ 15,000
UNDP_INPUTS	US\$ 15,000

Approved on behalf of UNDP

3

Ĵ

.

Date

## Part I - LEGAL CONTEXT

This document shall be the instrument (therein referred to as a plan of operation) envisaged in Article 1, Paragraph 2 of the Agreement between the Government of Jamaica and the United Nations Development Programme, covering assistance under the Special Fund Sector of the UNDP, signed by the parties on

#### PART II - THE PROJECT

#### (A) <u>Development Objective</u>

To improve the development activities for food production in order to fully utilize the agricultural resources locally available and to increase the variety of foods, upgrade the quality of the products and thus ensure food self-supply in the 1988 - 1990 period.

### (B) <u>Immediate Objectives</u>

The immediate objectives of the Preparatory Assistance are the following:

- Prepare a national food processing development plan for most cost-efficient and effective methods of modernizing the agro-industrial sector;
- Prepare a technical report and a project document that defines the objectives, expected outputs, time schedule for the provision of the inputs for a subsequent full scale project of technical assistance.

#### (C) <u>Special Considerations</u>

Not applicable.

#### (D) <u>Background and Justifications</u>

To be collected and formulated by a UNIDO expert.

(E) <u>Outputs</u>

The outputs of the project will be as follows:

- A plan of action on how to develop new products and technolog for selected food products in Jamaica, including preparatory activities for the main project;
- 2. A project document covering UNDP/UNIDO assistance specifying the type of products to aim at and the technology to develop, the type of equipment to be purchased and the training of local personnel to be undertaken, including a comprehensive work plan for the project.

## (F) <u>Activities</u>

During the preparatory assistance the following activities will be carried out:

- 1. Recruitment of the expert
- 2. Detailed agro-industry status study and plan of action
- 3. Preparation of a final report and draft project document for future UNDP/UNIDO assistance, which should be submitted, discussed and finalized before the consultant's departure from Jamaica.

## (G) <u>Inputs</u>

1. Government Inputs

The Government of Jamaica, through Agro-21, will provide the counterpart staff, secretarial assistance and transport facilities and an office for the consultant as well as 1.5 m/m daily subsistance allowance at the UN applicable rate for a UNIDO expert.

- 2. UNDP Inputs
  - (a) A 1.5 m/m consultancy mission to study the status of the Jamaican food processing industry, plan the future development and prepare a draft project document. This mission should start in August/September 1987, for which an allocation of US\$ 14,500 has been made.
  - (b) Miscellaneous expenses, i.e. US\$ 500.

## (H) <u>Preparation of Work Plan</u>

A detailed work plan will be prepared by the expert in consultation with UNDP and the Government counterpart staff upon his arrival in the country.

(I) Future UNDP Assistance

Will depend on the results of the expert's mission.

(J) <u>Institutional Framework</u>

Not applicable.

APPENDIX C

#### AGRO-FOOD PROCESSING INDUSTRY (November 1987)

DRAFT PROJECT DOCUMENT

## PART 1 - BACKGROUND OF THE PROJECT

## 1.1 Government Development Objectives and Strategy

The Government of Jamaica has encouraged the development of the agro-industry as part of its programme aimed at expansion of the country's export market, thus improving its foreign exchange position. The strategy adopted has been to increase production of traditional and non-traditional crops. This has resulted in an increase in agro-processing production and facilities.

Whilst considerable progress has been made in the development of the agro-processing industry in recent years, Jamaica does not yet have the capability to implement a full-scale expansion programme. There is a lack of confidence within the industry, which is also unwilling to share the cost and other relevant information required to establish the baseline data necessary to establish guidelines.

The current status of the industry is covered in the UNIDO Agro-Processing Technical Report of 26th November, 1987. (DP/JAM/87/011/11-01/J13103)

## 1.2 Project Relevance

Agro 21 has been a catalyst in the development of the primary sector of the agro-industry and is seen as the natural organisation to extend its activities to become the focal point for the development of the agro-processing sector, which is currently not achieving its full potential.

The project should result in an improvement in the foreign exchange position by ensuring better utilization of existing agro-processing plants and in aiding the sound economical development of new operations, the major thrust being a concentrated project effort with a small number of co-operating companies in specific sectors. A number of Jamaican food companies have signified their willingness to co-operate.

Tangible results should be achieved from the establishment of industry guidelines as well as in factors such as an increase in the product range, quality, productivity, the introduction of new techniques, packaging, marketing and employment. The services provided by the introduction of Short-Term Senior Agro-Processing Specialists, as selected, will provide an important input for this programme.

- 24 -

Other benefits should accrue from the increased demand created for the supply of Jamaican raw materials, changes to the food law structure, improvements in Government/Agro-Processing Industry/Grower relationships and, in the longer term, the development of the Food Technology Institute.

Under the guidance of the Project Co-ordinator, the Senior Agro-Processing Industry Specialist (Agro-21 Counterpart) should have developed the necessry skills by the end of the project to ensure the on-going development of the industry.

The craining/study programme will also play in important role in the more efficient operation of processing factories.

## PART 2 - MAIN ELEMENTS OF THE PROJECT

## 2.1 Immediate Objectives

- 2.11 To improve the foreign exchange position by providing guidance aimed at better utilization of locally available food resources and of existing agro-processing plants and facilities.
- 2.12 Provide assistance in the development of new operations, increase the variety of foods, and upgrade the quality of products to ensure food self-supply in the 1988-1999 period.
- 2.13 Establish models for a small number of target projects in specific agro-processing industry sectors, particularly tropical fruits, and provide special technical assistance to ensure the objectives are achieved.
- 2.14 Liase closely with both the agro-processing industry and relevant Government instrumentalities to establish guidelines for the on-going development of the industry.

## 2.2 Outputs

#### Human Resources

- 2.21 One Project Co-ordinator/Agro-Processing Industry Director (Agro 21 Director) - a Senior Industry Specialist with a broad knowledge of food processing, relat d technologies and marketing, and experience in the promotion of investment and joint ventures in developing countries.
- 2.22 One Senior Agro-Processing Industry Specialist (Agro 21 Courterpart) - a Senior Industry Specialist with a broad knowledge of the Jamaican agro-processing industry, with practical experience in food processing, related technologies and marketing, particularly related to tropical fruits.
- 2.23 <u>Twelve short-term (1 month average) Senior</u> <u>Agro-Processing Industry Specialists</u> in the following general categories:
  - . Food Technologist Product Development and Improvement.
  - . Production, Process and/or Plant Engineering.

- . Post Harvest Handling & Storage Technologist.
- . Marketing Local and Exported

to be selected by the Project Co-ordinator as required.

2.24 <u>Twelve Agro-Processing Industry Personnel</u> from foreman/technician level to middle management for training (12 x 1 month average) in appropriate courses and/or companies in English speaking countries. To be selected by the Project Co-ordinator.

## 2.3 Workplan

An initial workplan outlining key activities for the project period is to be prepared by the Project Co-ordinator, in conjunction with the Senior Agro-Processing Specialist, by 1988, and updated semi-annually.

## 2.4 Inputs

2.41 Government Inputs

- 1) Personnel
  - Secretary (1) (24 m/m)

- 28 -

2) Premises

Office facilities at Agro 21 (24 m/m)

3) Miscellaneous

Utilities, postage, stationery, etc.

## 2.42 UNDP Inputs

1) Personnel

- a) Project Co-ordinator (24m/m)
- b) Senior Agro-Processing Specialist (24 m/m)
- c) Short-term Senior Agro-Processing
   Specialists (12 x 1 mth average)(12m/m)

2) Training

Study tours overseas - to be selected (12 x 1 mth average) (12m/m)

- 3) Travel
  - a) Project Co-ordinator:
    Kingston to USA and Canada,
    (1 trip 2 weeks) and to Europe
    (1 trip 2 weeks) total 4 weeks.

- b) Senior Agro-Processing Specialist:
  Kingston to USA and Canada
  (1 trip 2 weeks); and to Europe
  (1 trip 2 weeks) total 4 weeks.
- c) Training/Study Tours: Kingston to USA and other destinations (12 trips - average 1 month) - total 12 months
- d) Internal travel of project personnel to agro-processing plants throughout Jamaica.
- 4) Non-Expendable Equipment

One (1) motor vehicle 5/6 seater for transport of project personnel to agroprocessing plants throughout Jamaica.

## 5) Miscellaneous

- a) Printing of technical reports
- b) Sundry: such as postage, telephone and telex.

- 30 -

## APPENDIX D

## WORK PROGRAMME

1987 AUGUST	
Wed 19	Arrived Kingston p.m.
Thu 20	Reported to UNDP/UNIDO
Fri 21	Reported to Agro-21
Mon 24	Attended meetings at Agro-21
<b>Tue</b> 25	Visited Rich "Freeze-Flow" plant in Freezone and Roberts Products Limited.
Wed 26	Attended weekly Executive Committee Meeting of Agro-21.
Thu 27	Visited Jamaica Dairy Technologies Ltd. and Virginia Dare (Jamaica) Ltd.
Fri 28	Visited Deryck A. Gibson Ltd. and Grace Kennedy & Company Ltd.
Mon 31	Attended Agro-21 Seminar with Jablum Jamaica Limited and dinner at Australian High Commission with UNDP Resrep, at which potential Australian Government assistance in training programmes was discussed.
SEPTEMBER	
Tue l	Visited Brico (Succs) Ltd., then Scientific Research Council and Food Technology Institute.
Wed 2	Visit to Grace Canning Company factory.

Thu 3 Meeting with New York banker Mr. R. Sardi at Agro-21. Attended Agro-21 Seminar with Dr. Ian Sangster. Visited Salada Foods Limited.

Fri 4 Visit to Jamaica Frozen Foods.

Mon	7	Visit to Scotts Preserves Limited.
Tue	8	Visit to Jamaica Frozen Foods.
Wed	9	Visit to Food Technology Institute.
Thu	10	Visit to Mr W. Woodham, Managing Director, Jamaican Industrial Development Corporation.
Fri	11	Visit to Jamaican Frozen Foods. Discussion with Mr. R. W. Reuter of Industry Council for Development and UNDP Resrep.
Sat	12	Discussion with Mr. Reuter re potential STAS interest in food processing industry problems.
Mon	14	Visit to Jamaican Frozen Foods
Tue	15	Agro-21
L'ed	16	Visit to Jamaica Frozen Foods
Thu	17	Agro-21, UNDP, Australian High Commissioner.
Fri	18	Agro-21, UNDP, UNIDO.
Mon	21	Agro-21
Tue	22	Agro-21, UNDP, UNIDO.
Wed	23	UNDP, Agro-21 and visiting South Pacific Mission.
Thu	24	Agro-21, UNDP. Depart for Vienna.

- 32 -

.

## CONTACTS MADE

## 1. GOVERNMENT

.

.

Mr. W. WoodhamManaging Director,<br/>Jamaica Industrial<br/>Development Corp.Mr. R. Thompson<br/>(and staff)Managing Director,<br/>Agro-21 Corp Ltd.Dr. V. Taylor<br/>(and staff)Executive Director<br/>Scientific Research Council.Mr. G. Lynch<br/>(and staff)Manager, Food Technology<br/>Institute.

2. MULTI-LATERAL AID

Dr. B. McSweeney (and staff)	Resident Representative, UNDP.
Dr. S. Dello-Strollogo (and staff)	Senior Industrial Advisor, UNIDO.

3. OTHER GOVERNMENTS

His Ex. M.A.S. Landale Australian High Commission	His	Ex. M.A.S.	Landale	Australian	High	Commissione
---	-----	------------	---------	------------	------	-------------

## 4. PRIVATE SECTOR

Mr. C. Alexander (and staff) Mr. D. Gibson

Mr. Robert Evelyn (and staff)

Mr. D. Duncanson

Mr. I. Wong

Mr. J. Sterling (and staff)

Dr. I Sangster (and staff)

Mr. J. Fletcher

Mr. R. W. Reuter

Mr. R. Sardi

Miss M. Orane

Mr. B. Perez

Grace Kennedy Group. Chairman, Deryck A. Gibson & Grieve Company.

Chairman, Roberts Products Co.

Chairman,

Managing Director, Brico (Succs) Ltd.

Managing Director, Challenge Enterprises

Managing Director, Jamaica Dairy Technologies Ltd.

Dr. Ian Sangster Ltd.

Managing Director, Salada Foods Ltd.

Kraft Inc., SA - Member of Industry Council for Development and STAS Committee.

Executive Vice President, American Express Bank Limited, New York - Potential Jamaican Investor in Agro Industry.

Manager, Scotts Preserves Ltd.

Managing Director, Jamaica Frozen Foods Limited.

- 34 -

APPENDIX F

#### EQUIPMENT

## UPDATED INFORMATION ON SOURCING AND COST OF THE FOLLOWING FOOD PROCESSING EQUIPMENT WILL BE REQUIRED IN JAMAICA.

- 1. Asceptic Processing and Packaging.
- 2. Pouch Packing.
- 3. Slicing and Dicing (Fruits and Vegetables).
- 4. Soft Freeze for Fruit.
- 5. Butter Patting.
- 6. Jam, Tomato, Paste, Sauce, Pickling, Puree.
- 7. Cheese (Slice individual wrap).
- 8. Concentrate Plants for Tomatoes and Tropical Fruits.
- 9. Beef Grinding, Patting.
- 10. Soft Freeze (Milk, Ice Cream Pack).
- 11. Blast Freezers for Meat, Fruit and Vegetables.
- 12. Labelling Cans and Glass Containers.
- 13. Large and Small Animal Slaughter Plants (Turn Key).
- 14. Smoker Plant.
- 15. Cut and Wrap, Stuffer, Grinder, etc.
- 16. Controlled Curing and Storage for the following: Yams, Ginger, Nuts, Fruits, Vegetables, Holding Meats.
- 17. Dehydration/Drying Plants for Fruits and Vegetables.

APPENDIX G

#### BIBLIOGRAPHY

Reference has been made to the following reports:

#### 1. AGRO-21 CONTRACT

- a) The Agro-Industrial Potential for Fresh Pineapple in Jamaica - Agpro Associatés - September, 1984.
- b) The Agro-Industrial Potential for Solo Papaya in Jamaica
   Agpro Associates September, 1984.
- c) Jamaican Speciality Foods U.S. and Jamaica. Am. Grad. School of Mgt. - Fall, 1985.
- d) Analysis and Recommendation for the U.S. Market Entry of Selected Jamaican Industrial Food Products. Am. Grad. School of Mgt. - December, 1985.
- e) Jamaican Agro-Industrial Development Project Commodity Profile - Hawaiian Agroeconomics Int. Inc. - February, 1986: 8 Volumes.
- f) A marketing Feasibility Study and Entry Recommendations for Gourmet and Speciality Foods - Am. Grad. School of Mgt. - May, 1986.

#### 2. AGRO-21 STUDIES

- Agribusiness Investment Opportunities in Jamaica Agribusiness Associates, Massachusetts, USA, December 1981.
- b) Jamaican Agro-Industry Survey Gaston J. Kohn, August, 1983.
- c) Agro-Processing Industry (Food). Five Year Strategic Planning Policy Statement - Rinella - October, 1983.
- d) Economic Profile on Production of Mangoes
   December, 1985.
- e) Economic Profile on Corn Self Sufficiency Programme
   1985.
- f) A Study of Agro-Processors Operating in the Rio Minho/Rio Cobre Watershed Areas of Jamaica - Agro Socio Economic Research, August, 1986.

## 3. OTHER REPORTS

- a) Revised National Targets for Agro-21 Agricultural and Regional Planning Division, Planning Institute of Jamaica - February, 1986.
- b) The Export Market in the U.S. for Jamaican Processed Foods - Arthur Young & Company for the JNEC - July, 1981.
- c) Jamaica Agro-Industry Survey Dr. Gaston G. Kohn: August, 1983. (For USAID)
- d) The Processed Food Sector Paper Prepared by the Jamaica National Export Corporation 1983.
- e) Issue Paper on Export Expansion for Jamaica Report from ITC Programming Mission - July, 1985.

## JAMAICA FROZEN FOODS

MEMORANDUM

TO : MR. RALPH THOMPSON

FROM : WILLIAM S. BEALE

SUBJECT : JAMAICA FROZEN FOODS

DATE : SEPTEMBER 21, 1987

### SUMMARY

The financial and operating position of the Company is such that the only commercial decision one should make is to close it down immediately.

However, should the Government and financial institutions involved be prepared to take the type of action suggested by the Consulting Accountants in their report (attached), as well as make some management changes, it may be possible to turn the Company into a viable operation, with potential for future divestment.

The general theme of the Consulting Accountant's recommendations is supported as a first, but preliminary step, and it is recommended that a detailed study of the operations be made as soon as possible by a competent team of agro-processing specialists.

Due to time and cost restraints, this would best be done by a "STAS" team (who could also make a preliminary study of other problem factories whilst in the country).

Comment is also made on the financial analyses, other products currently produced, additional production capabilities, management and the over-valuation of fixed assets.

## 1. INTRODUCTION

A number of visits were made to the factory, discussions held with the management and inspections made of the buildings and facilities.

The following documents were obtained:

- Financial Analysis of the Projections for Five years ending 31st July, 1992.
- o Financial Statements at 31st March, 1987.

- Report and Valuation on the Land & Buildings dated
   5th July, 1985.
- Valuation Report on Machinery & Equipment dated 18th June, 1985.

## 2. Financial Analysis

The Lee Clarke Chang report would appear to be a fair analysis of the current situation in respect of pickled mackerel, but does not mention peanuts and ginger. However, the projections are based on a great number of unknown factors in respect of raw material and other costs as well as uncertainty regarding selling prices, partly due to competition and price contrasts.

The control on the selling price of mackerel is probably the key factor in the potential profitability of the enterprise and therefore a major one for consideration by the Government. However, a large increase in volume would certainly improve the overall financial position.

### 3. Individual Products

The profit and Loss Accounts for the Year Ended 31st March, 1987, show the basic contributions made by the individual products, but do not include any allocation of common factory overheads, for which no historical data was available.

a) Mackerel

There is a detailed reference to this major production item in the Accountant's Report. The Profit and Loss Accounts show a basic contribution of \$2,036,389 prior to allocation of common factory overheads. It is not possible to make a proper judgement on this product without complete data on overheads.

b) Peanuts

The basic contribution shows a loss of \$123,553, prior to the addition of common factory overheads. The continuation of this product requires detailed study. The cost of raw material is a major factor and there is the problem of who else could process the peanut crop.

## c) Ginger

The production of ginger appears to make a small basic contribution of \$329,734, but the potential

to improve profitability is doubtful, as this is a contract packing operation for the Ministry of Agriculture. A major concern is that the ginger takes up a great amount of factory and storage space for almost half the year, which creates a problem in the consideration of other potential product lines and contract packing. Detailed study is required.

### 4. Other Production Capabilities

The plant has some basic equipment for the production of such items as mayonnaises and peanut butter, but the potential to compete in these products is extremely doubtful. There is also some vegetable equipment mainly suitable for string beans, but again, profitability would be doubtful at this time.

It must also be noted that it is not considered good practice to produce other products in a fish-processing plant. The USDA would certainly not permit the import of such products. This factor would need to be considered in any future development plans.

The major option to be considered is the feasibility of a major increase in the processing of fish or fish-based products with the removal of peanut, ginger and other non-fish production from the factory. The basic facilities exist for a large operation of this type.

Alternately, the location, basic facilities, and labour source are well suited to adaptation for other purposes - food production or general manufacturing.

### 4. FIXED ASSETS

#### a) Machinery and Equipment

The condition of these assets is, in general, a great deal worse than stated in the valuation report, most probably due to inadequate maintenance. There is ample evidence of rust and one retort and one boiler are out of action.

The financial statement shows the depreciation rate as 3.3% per annum, which is quite inadequate. In most countries the minimum rate for depreciation of such items would be in the order The maximum current value of the assets listed is estimated to be J\$5,000,000.

#### b) Land and Buildings

An inspection of the buildings indicates there has been a general deterioration since the report, particularly in respect of some of the roofing. In general, the overall condition could only be described as fair. However, I am not in a position to assess land and building valuations in Kingston.

There is a large cleared area of unused land of some 2 acres, which must have appreciated in value. However, I would consider a realistic value of the land and buildings to be J\$7,000,000.

c) On the basis of the above assessments, the total value of the fixed assets is estimated at J\$12,000,000, and not J\$21,717,950, as indicated in the balance sheet.

#### 5. Management

The Company lacks management experienced in the Agro-processing industry at the General Management, Production and Technical levels. It also needs a competent Cost Account.

### 6. STAS

The advantage of a STAS team is that it could be organised quickly through the UNDP at minimal cost. It is suggested the team comprise a food technologist, production manager, process/plant engineer, cost accountant/analyst and marketing manager.

An experienced group, organised by an ICD Member, such as Mr. R.W. Reuter, former President of Kraft, Inc. USA, should be able to provide guidelines for the future of this Company during a two-week visit; provided full access was given to the facilities and available data.

It is also possible, time permitting, that this team could make preliminary studies of some of the other problem factories whilst in the country - Rich Freeze-flow, Cassava Plant, Antillean Food Processors, Southern Processors, etc.