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COPRA PROCESSING IN THE COOK ISLANDS

REPORT ON FOLLOW-UP MISSION TO UNIDO PROJECT NO US/GLO/83/033 DEMONSTRATION AND EVALUATION OF A SMALL SCALE OIL EXPELLER UNIT FOR THE PRODUCTION OF COCONUT OIL FROM COPRA IN THE SOUTH PACIFIC.

25th February to 18 March 1989

by T W Hammonds

OVERSEAS DEVELOPMENT NATURAL RESOURCES INSTITUTE CHATHAM MARITIME KENT

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SUMMARY

This report describes an assignment carried out from 25 February to 18 March 1989 by the Overseas Development and Natural Resources Institute (ODNRI), Chatham Maritime, Kent, as follow-up to the 1986 copra expelling project in the Cook Islands, to review operation and consider proposals for establishing the facility on a sound commercial footing.

Since the departure of the demonstration team the expelling unit had processed a further 4 tonnes of copra but had then ceased operation to await a decision on its future location.

The availability of cheap locally produced coconut oil in Rarotonga had resulted in the considerable development of a soap making industry but the objective of marketing an edible oil had not been pursued further.

After the unit was shut down the equipment had become dispersed. The filter press was borrowed by another processing enterprise set up subsequently by the Northern Group Copra Producers Association (NGCPA), and the copra chopper and the screw press were sent to the outer island of Mitiaro as part of a rural development project, but were not commissioned.

Although the filter press later became available when the NGCPA enterprise ran into financial difficulties and ceased operations, it had remained in Rarotonga. Thus no copra processing was being carried out in the Cook Islands at the time of the visit.

At the beginning of the mission it was proposed, with Ministry of Agriculture agreement, that the equipment should be returned and recommissioned on Rarotonga under commercial management.

During the quest for a commercial site, a number of companies expressed interest in managing the equipment and the Kia Orana factory was proposed as the best location. This remains the writer's view.

Nevertheless, at the end of the mission the final decision of the Cook Islands Government was that the processing equipment should be commissioned and operated on the outer island of Mitiaro.

This proposal is seen as a challenging initiative in view of the undeveloped nature of the island, but as Mitiaro has the advantage of being a copra producing area, this would allow closer control of copra quality and facilitate the production of an edible grade oil. Nevertheless, Mitiaro is remote from the major markets for the products of the venture, and the likelihood of attracting adequate technical and managerial expertise to the site is questionable.

If the Government's commitment to locate the venture on an outer island is to be supported by UNIDO, further inputs will be required. These are:

- (i) Provision of analytical equipment for the determination of oil and moisture contents of copra and copra cake, and the free fatty acid content of coconut oil.
- (ii) Provision for UNIDO financing of an ODNRI copra processing specialist to assist with installation and recommissioning the equipment on the island of Mitiaro, training of local operators, and marketing of products.
- (iii) Provision for the UNIDO financing of a local officer to be in charge of the operation for one year.

Contingency funding should also be available to permit:

- (iv) Follow-up mission to review operation after 6 months and examine viability of venture for continued commercial operation.
- (v) Visit by a copra production expert should problems with copra quality occur.

The costs of these further inputs are presented.

COPRA PROCESSING IN THE COOK ISLANDS

SECTION 1 INTRODUCTION

In 1986 a small-scale copra expelling unit was commissioned and evaluated in the Cook Islands by an ODNRI team funded by the United Nations Industrial Development Organisation (UNIDO). The unit comprised a knifemall for chopping the copra, a heater for preheating the copra prior to pressing, a screw press, and a filter press and was installed at the Kia Orana factory, Avanta, Rarotonga.

The evaluation showed that the equipment processed copra very well with few technical difficulties. Processing copra at ambient temperature, throughputs in the range 60 to 70 kg were consistently achieved, with yields of clarified oil and copra cake in the region of 55% and 40% respectively on a weight basis.

The equipment could be envisaged as processing 94.5 tonnes of copra a year (over 250 working days) to produce about 57,000 litres of clarified coconut oil and about 38 tonnes of copra cake.

A consumer survey carried out on Rarotonga suggested that the coconut oil produced would be widely accepted as a cooking oil. It was estimated that approximately 50% of imports of cooking oil could be substituted by locally produced coconut oil. However, this would not absorb the entire potential output of the equipment.

An additional potential market for the coconut oil was identified as a raw material for soap manufacture. At the outset of the field work no significant soap manufacture took place in Rarotonga, but by the end of the visit the interest generated by the project had led to one entrepreneur establishing a soap making enterprise based on the team's recommendations. The copra cake sold readily to local pig farmers.

The major purposes of this follow-up mission were to review the present status of the copra processing facility and its operation since the departure of the demonstration team in 1986, and to discuss the future of the facility with various public and private sector agencies in order to reach agreement on the final location as well as the organisation required to ensure continuing operation of the enterprise on a commercial footing. The full terms of reference are given in Annex A.

SECTION 2 PRESENT STATUS OF THE COPRA PROCESSING UNIT

(a) Events following the departure of the demonstration team in November 1986.

Expelling continued at the Kia Orana factory in Rarotonga from November 1986 until March 1987 using the copra remaining from the stock supplied for the demonstration and evaluation of the equipment. During this time 4,319 kg of copra were processed yielding 2,140 kg of filtered oil and 1,714 kg of cake. The oil was sold to the soap making enterprises and the cake to the pig farming outlets described in the 1986 study.

By March 1987 this stock of copra was exhausted and processing at the Kia Orana factory ceased pending a decision on the ultimate ownership and location of the equipment.

In September 1987 the filter press was lent to the Northern Group Copra Producers Association (NGCPA) to use in their own copra processing enterprise which had started up in August 1987 on the main island of Rarotonga. This had used equipment from bankrupt stock in Australia and had been ordered before the demonstration of the UNIDO small-scale copra expelling unit had commenced.

At about this time the representatives of the outer islands of Mitiaro and Mauke each proposed that their island be chosen as the location for the UNIDO copra expelling equipment, and in November 1987, on the instructions of the Central Government, the screw press and the copra chopper were dismantled and sent to Mitiaro as the Government's contribution to an Integrated Rural Development Project financed by the South Pacific Commission based in Numea, New Caledonia.

These unilateral initiatives had been counter to the expressed wishes of UNIDO (to whom the equipment technically belonged) who, in a letter dated 12 March 1987, had specifically advised that the equipment should (a) remain together as one unit and (b) should not be moved to another location without UNIDO authority.

At the time of this transfer the NGCPA were still using the filter press and it remained in Rarotonga. The copra heater was also dismantled at this time, and stored in the Kia Orana factory.

By March 1988, the NGCPA copra processing enterprise had run into financial difficulties and ceased operation and the filter press was transferred back to the store in the Kia Orana factory.

At the time of the visit in March 1989 no further initiative had been taken to bring the equipment back together again and no copra processing was being carried out in the Cook Islands.

(b) Condition of the expelling equipment stored in the Kia Orana factory

The filter press was in the uncleaned condition in which it had been returned when the NGCPA expelling operation had ceased. Some of the oil inlet pipework was missing and the outlet pipework of the filter press had unwisely been fitted with unions made from copper. The original oil feed pump had been disconnected but was available for reconnection.

After cleaning and removal of the copper unions which would have a bad effect on oil quality, the filter press appeared to be in a serviceable condition but the missing pipework would need to be replaced before the filter press could be used.

The copra heater was in a dismantled state, but all its parts appeared to be available and reassembly should present no problems.

(c) Condition of equipment on the island of Mitiaro

The screw press and the copra chopper were in good and apparently serviceable condition and were housed in a recently constructed copra shed that appeared to be sound and weathertight. Most of the unit's tools and spare parts including those for the filter press had also been stored in the shed.

Dismantling and inspecting the screw press revealed that the 10 tonnes copra that had been processed had resulted in little or no wear on the wormshaft and barrel rings.

A supply of three phase electricity needed for the copra chopper and for the filter press had not yet been connected although some of the wiring necessary was in place.

It was evident that the initial attempts to insta'l the screw press had been made without proper guidance. The press had been mistakenly mounted on a concrete base only about 2 inches high instead of the 24 inch high concrete block recommended and used for the original installation in Rarotonga.

SECTION 3 UTILISATION OF LOCALLY PRODUCED COCONUT OIL

(a) Progress of the soap making enterprises

At the time of the demonstration and evaluation of the equipment in 1986, soap making trials using the coconut oil produced by the copra expelling unit had stimulated the development of two soap making enterprises in Rarotonga and by March 1989 the availability of locally-produced coconut oil had resulted in a considerable expansion of soap production.

Both soap making enterprises had obtained secondhand soap tablet stamping machines and were manufacturing guest soap tablets for the hotels and guest houses in the Cook Islands. Of a total estimated market of about 150,000 tablets a year about 100,000 tablets were being supplied by the local soap makers.

The manufacture of tablets of toilet soap for the tourist souvenir market had similarly expanded and an estimated 40,000 tablets of soap were sold in 1988.

The total amount of locally produced coconut oil required to make this amount of soap in 1988 was about 7,000 litres, equivalent to about 31 days production of the UNIDO copra expelling unit.

Export markets for the soap were also being pursued and one of the soap making enterprises had recently obtained an initial order from an Australian firm for 6,000 cakes of toilet soap and 500 cakes of guest soap at a total value of about SNZ 7,515.

(b) Consumption of coconut oil for cosmetic oil

The amount of coconut oil used to make cosmetic oil in 1988 was estimated to be about 1,400 litres, equivalent to about 6 days production of the UNIDO unit.

(c) Production of oil for edible purposes

Despite the favourable Consumer Survey in 1986, the production of edible oil had not been pursued further. The organisation of supplies of the fresh high-quality copra needed to produce it would be an important element of establishing a commercial venture. However, Mr John Wichman, the manager of Foodlands, the largest store on Rarotonga, said that he would be very interested in encouraging the local production of edible coconut oil and would support its marketing in his store. He suggested that the oil could be sold at a retail price of about \$NZ 3.5 a litre, a price slightly below that of imported soyabean oil. Mr Wichman did not agree with the suggestion that tariffs should be imposed to protect locally produced coconut oil and soap. He thought that this would interfere with normal business and would be unfair to his customers.

SECTION 4 ACTION TAKEN

(a) Initial discussions

Initial discussions on the permanent location of the processing facility were held at the Ministry of Agriculture with the Permanent Secretary, Mr W.Hosking and the Head of the Agricultural Planning Unit, Mr T.Raui. The location in Mitiaro was considered.

Mitiaro was not a large producer of copra, from 1979 to 1983 annual production had averaged about 7 tonnes, and in recent years had been negligible owing to low world prices. The maximum amount per year that could be produced in Mitiaro was estimated to be about 30 tonnes which is considerably less than the expelling unit's potential annual capacity (90 tonnes). Additional supplies of copra available from the nearby islands of Mauke and Atiu, which were marginally larger copra producers than Mitiaro, were considered to make a processing operation on Mitiaro feasible. As a relatively undeveloped outer island with a small population (about 300), Mitiaro did not possess the back-up facilities or the ease of supplies available in Rarotonga. Most of the inputs would need to be imported. Lack of management skills would also be a problem.

It was concluded that it would be preferable to relocate the equipment in Rarotonga close to the main markets for the coconut oil and oilcake, and where financial and technical management would be more readily available.

It was also agreed that it would be preferable for a private company to run the expelling equipment and so a suitable location in the private sector in Rarotonga should be sought.

A visit to Mitiaro should be made to familiarise the writer with the location and to ascertain the present condition of the equipment there. This visit would be followed by a meeting with the Minister of Agriculture to discuss and confirm the proposals for the relocation of the equipment.

(b) Visit to Mitiaro

The business activity apparent in Rarotonga was not present in Mitiaro. The main exports were said to be peppers and limes. Subsistence farming appeared to be the major occupation. There was an Agricultural Officer, some four or five Agricultural Workers and a Ministry of Agriculture station on the island.

There appeared to have been no attempt to fully transfer the technology and expertise for copra expelling to the island. The Ministry of Agriculture staff experienced in the operation of the unit on Rarotonga had not visited Mitiaro and had not assisted with the installation of the equipment nor trained the islanders in its operation. It had therefore not been commissioned.

(c) Organisations wishing to manage the expelling unit in Rarotonga

Of the companies approached the following had indicated that they would like to run the copra expelling unit.

(i) Kia Orana Ltd, Avarua

This was the original location used for the demonstration and evaluation of the equipment and the wiring and concrete installations were still in place and serviceable. The factory also manufactured bottles which could be used for packaging coconut oil and had a functioning quality control laboratory which would be necessary for the production of edible oil of a consistent standard. The managing director, Mr Michael Benns, said that, provided the responsibility for the equipment was made his, he would be keen to manage the venture.

(ii) Ariki Cosmetics and Perfumes Ltd, Avarua

This was one of the soap making enterprises established during the 1986 trials. Although there was no housing for the equipment at present, space was available at the back of the factory where the housing could be built. The governing director, Mr John Abbott wished to use the equipment as a source of oil for his soap making enterprise and also as a tourist attraction for his factory.

(iii) Colonial Crafts Ltd, Matavera

This was the other soap making enterprise on Rarotonga. There was no housing for the equipment but there was space available for a suitable building and this would take an estimated 3 months to construct. The managing director, Mr Travis Moore, also intended to use the equipment as a source of oil for soap making and as a "craft industry" tourist attraction to his business.

(iv) Daniel Apii, Arorangi

This was a recently established enterprise intending to formulate animal feeds locally. The enterprise was housed in a packing shed in which space was available to install the expelling equipment. Mr Daniel Apii wanted to use the equipment as a source of oil cake for animal feed formulations.

(v) Cook Islands Dairy Food Ltd, Nikao

This was a company with wider interests than its name indicated. At present the company also markets fruit juices and is interested in diversifying into copra processing. It does not have space available for the equipment but a suitable site could easily be found.

- (d) Organisations not wishing to manage the expelling unit.
 - (i) Northern Group Copra Producers Association

The manager, Mr Reuben Tylor, said that he was not actively seeking to manage the expelling unit, but would consider it provided government support was provided. This would consist of support for a loan to finance the working capital requirement and assistance in the form of an increased import levy on vegetable oil (currently at 10%) and the re-imposition of the import levy on soap which had recently been removed. A 25% levy was described as being required.

Mr Tylor suggested that the expelling equipment should be leased on a soft loan and a financial package provided to guarantee the salary of a manager for 2 years in order that a person with the appropriate skills might be attracted to the position.

(ii) Cook Islands Coconut Products, Matavera

The manager, Mr Hugh Baker, said that the company was fully occupied with the production of coconut cream at present and no time was available to manage the expelling unit. There would also be some problems in finding the space to accommodate the expelling equipment.

(e) Overall view

Technically it appeared that the best location for the expelling unit would be the Kia Orana factory since the original housing was available and the equipment could easily be re-installed. This location also had the benefit of a quality control laboratory and previous experience in running the expelling operation. In addition at the Kia Orana location there would be an interest in marketing both the oil and the oil cake.

Location at one of the soap making enterprises could endanger the continuing expansion of the other soap making enterprise which would jeopardise the object of utilising the maximum amount of Cook Islands copra.

The Daniel Apii animal feed enterprise was in the initial stage of establishing itself as a business and so had virtually no processing experience. The major interest of the enterprise would be the production of oil cake which was not the major product of the expelling operation.

Although Cook Islands Dairy Foods Ltd was interested in managing the equipment, it was felt that copra processing was not consistent with the present interests of the company

(f) Preliminary meeting with the Minister of Agriculture

A recent election had resulted in a change of government in the Cook Islands. The newly appointed Minister of Agriculture, Mr Vairie Tairea, was familiar with the expelling equipment, having seen it operating during its demonstration and evaluation in 1986. He apologised for the way in which the equipment had been dispersed and said that he wanted to see it brought back together again. He supported the idea that it would be preferable to re-establish the equipment on Rarotonga in the hands of private enterprise. He asked about the possible locations under consideration on Rarotonga. A preliminary list of possible sites was discussed, basically those listed above in (c). The Minister said that he favoured the location at Colonial Crafts Ltd as he was particularly impressed by the previous business performance of the company.

SECTION 5 COPRA SUPPLIES

(a) Production

The manager of the Northern Group Copra Producers Association, Mr Reuben Tylor, advised that as a result of low world prices, no copra was being produced at present in the Cook Islands and consequently the NGCPA was no longer operating. It could, however, be readily re-established if required.

Mr Tylor held the view that the revival of the NGCPA was not essential to secure the 90 tonnes a year needed for the processing unit. He thought that the manager of the copra expelling unit would be able to arrange for this supply himself and that a landed price in the region of \$NZ 500 a tonne would be sufficient to stimulate production and transportation.

Mr Tylor indicated that the best quality copra was made in the islands of Puka Puka and Rakahanger in the Northern Cooks. Puka Puka could produce about 200 tonnes a year and Rakahanger about 300 tonnes.

(b) Shipping

The Islands supply ship had recently been wrecked on a reef near the island of Nassau and there were no regular shipping links with the outer islands operating at the time of the visit. A replacement ship had been chartered to commence services the following month.

The representatives of the major shipping concern in the Cook Islands, Silk and Boyd Ltd, said that the normal shipping frequency was about one ship every 2 to 3 weeks to the islands in the Southern Group, including Mitia and every 4 to 6 weeks to most of the islands in the Northern Group, including Rakahanger. The more remote Northern Group island of Puka Puka was only visited every 8 to 12 weeks.

SECTION 6 GOVERNMENT DECISION

In the final week the writer was joined by the UNIDO representative, Mr H Koenig, for discussions with the Government on the future ownership and operation of the equipment.

An initial meeting with Mr Tai Mannela, Director, and Mr Tere Nicholas, Programme Officer, was held at the Ministry of Planning and Economic Development, which is directly responsible to the Prime Minister and is the counterpart organisation of UNIDO in the Cook Islands. The need was stressed for the Cook Island government to make a firm commitment for the final location for the expelling equipment in the form of a letter of intent.

Mr Mannela undertook to get agreement on the final location before the forthcoming meeting to discuss the proposals with the Minister of Agriculture later that week and also to have a letter of intent prepared by the end of the week.

At the final meeting with the Ministry of Agriculture the Minister announced the Government's decision to establish the equipment on the island of Mitiaro under the management of the Mitiaro Working Committee. He described how determined he was that the enterprise should be a success and he agreed that a regular progress report would be made available to UNIDO. The personnel that would be allocated to the project were David Tuaeu, who was the counterpart officer for the UNIDO copra expelling demonstration in 1986, and Mr Alistair Young, a consultant employed by the Department of Trade, Labour and Transport, who had had previous experience with running the NGCPA copra expelling enterprise. Mr Young would be in charge of installing the equipment and Mr Tuaeu would train the local people in the expelling process.

The writer and the UNIDO representative acknowledged that the government had made a firm commitment on the future use of the expelling equipment but reiterated the problems of management, supplies and distance from markets that would be incurred by locating the equipment on an outer island. Further UNIDO inputs would be needed to implement such a challenging undertaking.

At the final meeting at the Ministry of Planning and Economic Development, Mr Tere Nicholas handed over the government's letter of intent on the final location and operation of the expelling equipment (see ANNEX B) and undertook to send a progress report every 3 months to UNIDO.

SECTION 7 CONCLUSIONS AND RECOMMENDATIONS

So far, the major outcome from the installation of the copra processing equipment has been the development of a soap making industry in the Cook Islands with the benefit of increased employment opportunities and import substitution.

Continued local production of oil would be a useful adjunct to this industry and would provide the advantages of increased copra utilisation and a supply of coconut oil at a lower price than that of imports. This will require the successful establishment of the copra expelling equipment as a commercial enterprise in the Cook Islands.

The potential remains, as shown during the 1986 trials, for the production of edible grade oil from premium quality copra.

The view of the writer and the UNIDO representative is that the best location for the expelling unit is on the main island of Rarotonga with its known market for both oil and oilcake, the ready availability of management and engineering skills, the quality control laboratory, and locally manufactured bottles for the oil.

However, this view was not shared by the Government, who preferred that the expelling equipment should be used as part of a development project for the outer island of Mitiaro despite the absence of back-up facilities and business experience, and the need to export the products to the main markets in Rarotonga.

Although recent copra production levels on Mitiaro have been negligible it is said to have a production potential of about 30 tonnes of copra annually. This is less than the expelling unit's processing capacity of 90 tonnes a year and additional supplies will need to be imported.

One plausible benefit from the location on Mitiaro would be the opportunity to encourage the production of the quality of copra needed to make edible oil. Effective management will be required to maintain such quality standards.

If the government's commitment to locate the expelling unit on Mitiaro is to be supported by UNIDO, further inputs will be required. These are detailed and costed in Section 8.

SECTION 8 INPUTS REQUIRED TO ESTABLISH OPERATION OF THE PROCESSING UNIT ON MITIARO

To facilitate operation of the expelling unit on Mitiaro the present project will need to be extended to encompass the following provisions:-

(1) Laboratory equipment for quality control of	of coconut	oil and c	opra
Costs:		£	
(a) Burette, 25ml, polypropylene,	x 3	75	
(b) Pipettes, 5ml, polypropylene,	x 3	6	
(c) Flasks, 250ml, glass,	x24	33	
(d) Burette stand,	x 2	20	
(e) Electric hotplate	x 2	50	
(f) Volumetric flasks, polypropylene, 500ml	x 3	15	
(g) Volumetric solutions, concentrated,			
for making 500ml lots of 0.1N NaOH,			
pack of 6 ampoules	x 6	42	
(h) Phenolphthalein solution, 1%,250ml bottle	х3	11	
(i) Pasteur pipettes, polypropylene, box of 50	00 x1	10	
(j) Funnels, polypropylene, 35mm	x 3	1	
(k) Funnels, polypropylene, 115mm	х3	8	
(1) Filter paper, No 1, 18.5cm, box 100	х3	13	
(m) Cheese grater, stainless steel	x1	5	
(n) Infratester for copra moisture content			
determination	x1	500	
(o) Shipping cost of equipment		200	
(p) Laboratory instruction sheet to be prepare	ed		
by ODNRI to give a simple guide to free fat	tty acid		
analysis and its interpretation with regard	i		
to edible oil quality and to copra quality	Cost	: 500	
	Sub total	1,489	

(2) An ODNRI copra processing specialist to assist with the installation and recommissioning of the copra processing equipment on the island of Mitiaro, training of local operators, and marketing of products.

Costs:	(1989/90)
	£
Return airfare London to Rarotonga	3,860
Subsistence, 28 days, Cook Islands	2,130
Staff costs, 28 days, Cook Islands	7,000
Staff costs, 5 days, UK	1,150
Return airfare Rarotonga to Mitiaro x 2	144
Sub total	14,284

(3) UNIDO financing of one local expert experienced in the operation of the equipment to be stationed in Mitiaro to manage the enterprise for about one year and to train counterparts. This local expert would probably be David Tuaeu, who was the counterpart officer during the demonstration and evaluation of the equipment in 1986. The expert should maintain direct communication with UNIDO and provide simple progress reports monthly.

Estimate based on discussions with UNIDO representative \$US 15,000 @ £1=\$US 1.65 £9,090

In addition contingency funding should be made available to permit:

(4) A follow-up mission by an ODNRI officer to the Cook Islands about 6 months after the expelling operation has got under way on Mitiaro in order to investigate how the operation is progressing and whether further inputs are required. Special regard will be paid to copra quality and edible oil production.

This would comprise a visit of about 15 days, made up of 2 days in Rarotonga at the start for liaison with the Ministry of Agriculture, followed by 10 days in Mitiaro, with a final 3 days in Rarotonga for final discussions followed by 5 days in the UK for report preparation.

Costs:	(1990/91)	
	,	£
Return airfare London to Rarotonga		4,246
Subsistence, 15 days, Cook Islands		1,255
Staff costs, 15 days, Cook Islands		4,050
Staff costs, 5 days, UK		1,240
Return airfare Rarotonga to Mitiaro		79
Car hire, 5 days, Cook Islands		93
	Sub total	10,953

(5) Funding to be available to provide for a one month visit by an ODNRI copra making expert to improve copra production methods and copra quality should problems with oil quality become apparent after the expelling equipment becomes operational. Also to include 5 days for report preparation in the UK.

Costs:	£
Return airfare London to Rarotonga	4,246
Subsistence, 28 days, Cook Islands	2,342
Staff costs, 28 days, Cook Islands	7,560
Staff costs, 5 days, UK	1,240
Return airfare Rarotonga to Mitiaro	79
Sub total	15,467
TOTAL COSTS	
(i) Items 1,2,3	24,863
(ii) Contingency funding for items 4 and 5	<u>26,420</u>

ANNEX A TERMS OF REFERENCE

- (i) to review the present status of the copra processing facility and its operation since the departure of the demonstration team in 1986,
- (ii) to discuss its future with the various public and private sector agencies involved, in order to reach agreement on:
 - (a) the final location of the equipment,
- (b) the financial management and administrative structure/ organisation required to ensure continued successful operation of the enterprise.

During the final week of the visit the ODNRI officer will be joined by a UNIDO official to confirm that the proposed agreement fulfils UNIDO's requirements regarding the official transfer of ownership.

Discussions will also be held with relevant organisations on the most effective mechanism for:

- (i) establishing a supply of sufficient quantities of copra of adequate quality for edible coconut oil production,
- (ii) organising the marketing and promotion of the processing products (edible coconut oil and copra cake)

The Recommendations made in this context may include costed proposals for further ODNRI/UNIDO assistance.

ANNEX B LETTER OF INTENT ON FUTURE LOCATION AND OPERATION OF COPRA EXPELLING UNIT

ANNEX C PERSONS CONTACTED AND ORGANISATIONS VISITED

Ministry of Agriculture, Government of the Cook Islands

Mr V Tairea,

Minister

Mr W Hosking,

Permanent Secretary

Mr T Raui,

Head, Agricultural Planning Unit

Mr N Pouao.

Agricultural Officer, Mitiaro

Mr D Tuaeu,

(on special leave without pay)

Mi..istry of Planning and Economic Development

Mr T Mannela,

Director

Mr T Nicholas,

Programme Officer

Department of Trade, Industry and Labour

Mr A Young,

Food Processing Consultant

Mr B Bartrum,

Executive Officer of Trade

Kia Orana Food Corporation, Avarua, Rarotonga

Mr M Benns,

Managing Director

Northern Islands Copra Marketing Board

Mr R Tylor

Manager

Ariki Perfumes and Cosmetics Ltd, Avarua

Mr J Abbott,

Governing Director

Mr R Kingan,

Managing Director

Colonial Crafts Ltd, Matavera

Mr T Moore,

Managing Director

Cook Islands Coconut Products, Matavera

Mr H Baker,

Manager

Animal Feed Formulation Company, Arorangi

Mr D Apii,

Managing Director

Mr K Schutter,

Advisor

Foodlands Supermarket, Avarua

Mr J Wichman,

Manager

Rarotonga Pharmacy, Cook Island Trading Corporation, Avarua Mr K Walters, Pharmacist

Cook Island Dairy Food Ltd, Nikao

Mr N Willis, Managing Director
Mrs C Willis, Assistant Manager

Triad Group, Avarua

Mr G Meinke, Accountant

Silk and Boyd Ltd, Avatiu

Customs Office, Avarua

Mr K Mataroa, Customs Officer



GOVERNMENT OF THE COOK ISLANDS

MINISTRY OF PLANNING AND ECONOMIC DEVELOPMENT

P.O. Box 41, Rarotonga, COOK ISLANDS Phone: 29-511, 29-516 Telex: 62082 MINDEV RG Fax: 682 - 21511

16 March 1989

Mr Horst Koenig UNIDO Representative P 0 Box 300 Vienna **AUSTRIA**

Dear Mr Koenig

(ii)

US/GLO/83/033 - Small Scale Expeller Unit Re: For Production of Coconut Oil from Copra

The Government of the Cook Islands has been pleased to accommodate your visit to the Cook Islands.

Government's view towards the above project at present are as fullows:

That the complete unit be installed on the (i)island of Mitiaro.

That Mr Alistair Young, a Food Processing Technician/Engineer be charged with the task

of installing the unit in Mitiaro. That Mr Davie Tuaeu of the Ministry of (iii) Agriculture be charged with the task of training the people of Mitiaro in the process of operating and extracting oil from copra.

That the unit be used for no other purpose (iv) than the production of filtered coconut oil

from copra.

That the operational management of the project (v) be given to the Mitiaro Working Committee which consists of most of the adult population of Mitiaro.

As you are fully aware as a result of our meeting with the Minister of Agriculture today, the idea of setting up the unit in Mitiaro is to create an incentive to the people of Mitiaro becoming fully sustainable in its own economy.

ours sincerely

Nicholas PROGRAMME OFFICER FOR ACTING SECRETARY

cc Minister of Agriculture Secretary of Agriculture Acting Secretary, MPED