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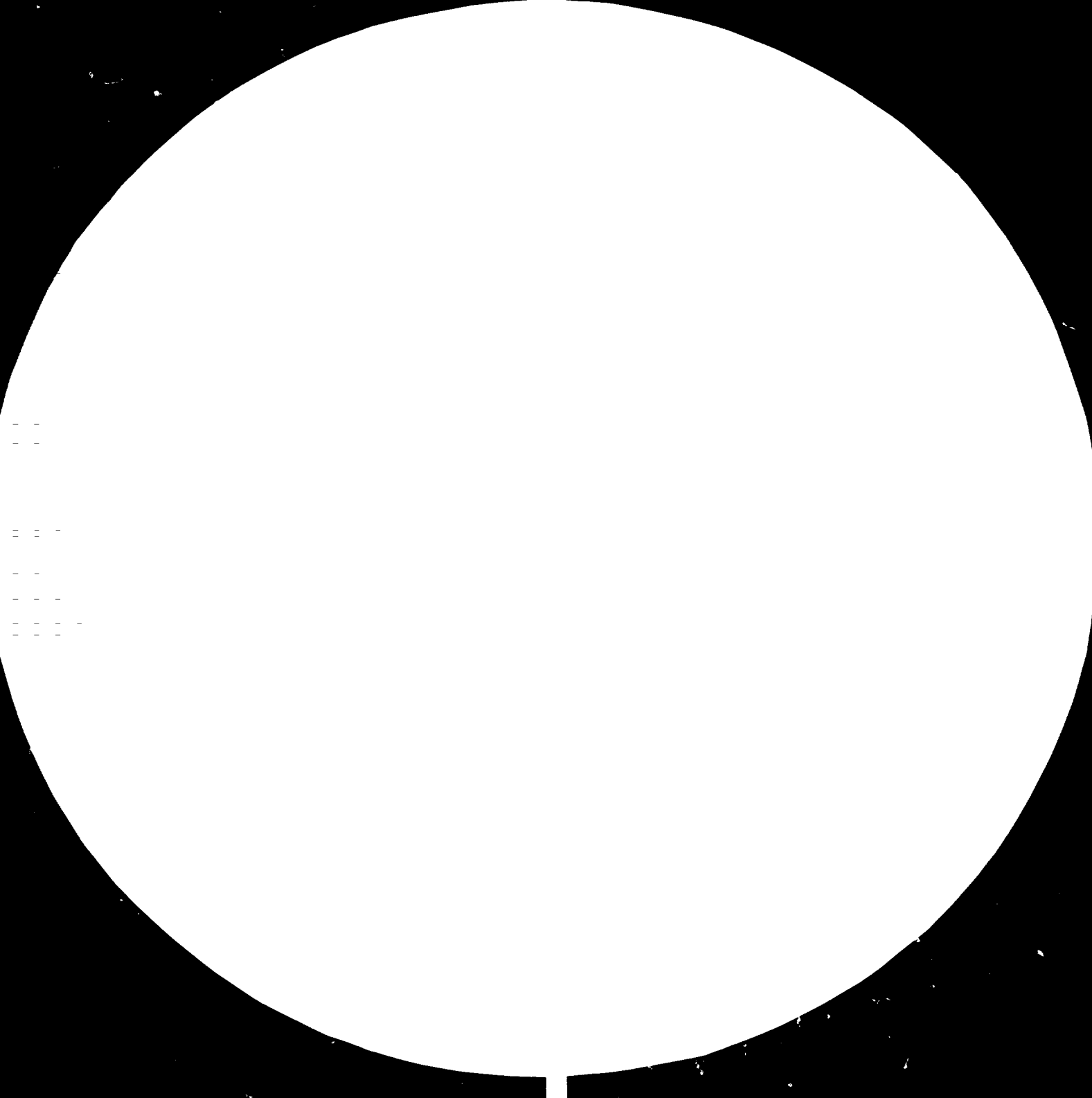
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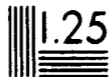




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REVIEW OF THE VEGETABLE OILS AND FATS INDUSTRIES SECTOR OF THE
PACIFIC REGION^{1/}

DP/RAS/79/031

COUNTRY REPORT ON NIUE

Prepared for the Government of Niue by the United Nations
Industrial Development Organization in co-operation with
the International Trade Centre UNCTAD/GATT.

Based on the work of J. R. Santhiapillai and G. P. Yeats.

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RECOMMENDATION

1. Production of copra would be of the order of 50t if Niue continues to produce coconut cream at the present rate of 100 tonnes/annum. It would be ideal if the Pacific region countries would agree to allow Niue to convert all the coconuts produced to coconut cream and export it to N.Z. while the balance market to be shared by the other countries. This only means a production of about 150 tonnes/annum but would be a wonderful example of regional cooperation.

This is considered important as no other industry appears to be viable at present.

INTRODUCTION

1. Project Background and Justification

The first consultation meeting on the Vegetable Oil and Fats Industry was held in Madrid from 12 to 16 December 1977.

This meeting convened by UNIDO in pursuance of the Lima Declaration and Plan of Action and General Assembly Resolution 3362, is part of its efforts to promote co-operation in raising the overall level of industrial production in developing countries. The meeting made a series of follow-up recommendations relating, inter-alia, to global policy for increased international and technical co-operation between the developed and the developing countries and among the developing short-term and long-term.

UNIDO decided to carry out, through expert services, evaluation studies of the potential of the vegetable oil industries sector in a selected number of developing countries. This evaluation country study was to assess and evaluate the existing situation in the countries to be covered with regard to the availability and utilisation of oil-bearing materials (including the raw material potential), the domestic market situation (present demand) in vegetable oils and protein cake/meals and the present status of the vegetable oil industry. In fulfilment of the above decision, a UNIDO consultant on edible oils made a study of Western Samoa from November 20 to December 4, 1978.

Since the Pacific region is agronomically suitable for production of oil producing species, coconuts and oil palm, such raw materials offer one of few available possibilities for integrated agro-industrial development; vegetable oils and fats, detergents, cosmetics, protein cake/meals, livestock feed and further spinoffs and linkages with the agricultural sector.

It was agreed during the UNDP/ESCAP/SPC/SPE Inter-Country Programming Meeting held in Suva in February 1979, that this type of study should be made into a Regional Pacific Project.

SPEC would like to see the exercise accord recognition to the concept that effective regional co-operation could be a positive means of reducing costs and rationalising development in the Pacific.

2. Objectives

Development objectives: The long term objectives of this regional project is the promotion of regional self-sufficiency in production, processing and related agro-industrial development of vegetable oils and fats.

The study is to assess and evaluate the existing situation with regard to the availability and utilisation of oil bearing raw material potential, the domestic market situation demands for a vegetable oil industry, protein/cake and the status of the vegetable oil industry at present in operation with a view to its further technical technological, and alternative development. It should provide specific long range recommendations towards improving the export of vegetable oils and fats, and provide marketing strategies in relation to present export patterns.

Immediate objectives: The immediate objectives is to recommend methods that can be applied for improving local production and distribution and to provide a marketing diagnosis which will stimulate better export strategy which can be implemented in the immediate future.

Whenever applicable, the study should also consider evaluating oils and fats from animal sources and the possibility of developing viable productions and import substitutions.

3. Project

In fulfilment of the above, two consultants

a) Joe R. Santhiapillai - Team Leader and Vegetable oil Industry Specialist from UNIDO b) George Yeats¹ - Marketing Analyst from ITC, visited Fiji, Kiribati, Tonga, Western Samoa, Niue, TTPI, Papua New Guinea, Solomon Islands, Cook Islands, Nauru, Vanuatu and Tuvalu and prepared twelve country reports with tables, annexes and assessments made and based thereon. In addition the experts produced a summary of the regional study. The project was for a duration of six months.

4. Acknowledgements

Our sincere thanks are due to all the people we had met during our visits to the different countries. If not for their considerable help and co-operation this project would not have been a success. A list of those people principally involved in discussions is given at the end of the report.

During the project we were based at SPEC, Suva and our special thanks are due to the Director, Deputy Director, Administration Officer and Mr. John Franklin, Trade and Marketing Officer and all at SPEC for their invaluable help and co-operation. Our thanks are also due to Mr. Dello Strologo, SIDFA and all at the UNDP office in Suva for their help in innumerable ways.

NIUE

| | |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Population (1979 Est.) | 3800 |
| G.D.P. per capita (1974) | NZ\$227 |
| Land Area | 100 sq.mls.(260 sq.k.m.) |
| Sea Area | 390,000 sq.km. |
| Geography: | Consists of one isolated and upraised coral atoll-the largest and highest in the world. |
| Agriculture Production: | Coconut is one of the main agriculture crops. Other export crops are Passionfruit PawPaw and Lime. |
| Total Production of Oil and Fats Equiv. 1979: | 90 M.T. |
| Total Exports of Oils and Fats Equiv. 1979: | 90 M.T. |
| Total imports of Oils and Fats Equiv. 1979: | 36 tons |
| Import Dependency 1979: | 100% |
| Per capita consumption of Oil and Fats (food used) 1979: | 5.5 kgms/annum |
| Per capita consumption of soaps and detergents | 6.6. kgms/annum |

Note: All figures exclude fresh nuts and invisible fats consumption.

COCONUT INDUSTRY

Coconut is one the main agricultural crops in Niue and represents one of the mainstays of both the subsistence and cash economies of the country. It represents about 25% of the export income. The other main export crops are Passion-fruit (56% , Lime (9%) and Pawpaw (4%).

In end 1980 a small Coconut Cream factory was installed by a private investor, and all the production is exported to N.Z. Hence in 1981 the copra production will most probably drop as part of the nuts will be used up in this Industry.

COPRA PRODUCTION

From a high of 950t copra produced in 1952, production has dropped to about 132t in 1979. In addition the coconut cream factory will take some 100 tons of copra equivalent in 1981. The high wage rate is a major factor in this decline in production. Low copra prices are said to discourage farmers from making as much copra as they could - apparently many nuts are wasted. But other factors are the massive migration from the island (about two thirds of Niueans live outside of Niue), hurricanes and droughts, and lack, in the past, of a concerted replanting and new planting drive on coconuts. The industry is at a stage now where it is very unlikely it has a future other than for local fresh consumption, for supply of the coconut cream factory, and possibly to supply fresh nuts for export.

COCONUT CREAM PRODUCTION

The privately-owned coconut cream factory on Niue commenced production in September 1980. The best month's production so far has been 700 cases, but at the time of our visit production had risen to 50 cases a day. This rate of production is equivalent to 100t of copra per annum hence if this rate of production is maintained the copra available for exports will be reduced drastically to about 40 tons/annum.

The factory is buying fresh nuts at about three times the equivalent paid for copra. This is ideal and perhaps the only coconut industry possible on Niue as the wage rate at NZ\$1.05 is about three times that paid in the rest of Polynesia.

The method of scraping the coconuts on mechanical scrapers is much better than the way the kernel is taken in Western Samoa. This not only makes easier and cleaner handling but also means that the shells are in complete halves (while in Samoa the shells are in small pieces) and more suitable for making charcoal.

In any event the factory needs improvement in the following

- a) The hygiene aspects of the factory left a lot to be desired, and could have serious consequences for the plant should a bacterial outbreak occur. It must be remembered that the hygiene standards for an export industry must be based on the requirements of the importing country. It is essential that the government intervene in this matter and ensure that conditions are improved.

- b) The factory is still somewhat new and could improve its labour efficiency. Currently this is only 75% of that in larger plants elsewhere. There was seen to be considerable waste in the factory with liquid splashing and dripping out of buckets and grated fresh coconut scattered about.
- c) The shells produced could be used for making charcoal for export:

CONSUMPTION OF FATS AND OILS AND FUTURE MARKET TRENDS

Niue produces about 90t of vegetable oil (in oil equivalent terms) and imports a further 40t (in oil equivalents) of oils and fats as butter, dripping, animal and vegetable oils and in soap. The production is entirely coconut products. Exports in oil equivalent terms are about 90t in the form of copra and coconut cream. The subtraction of exports from the combination of production and imports gives a Niuean human consumption of oils and fats (in oil equivalents) as about 36 tons. Use is divided into food use of about 21 tons (5.5 kg per head per annum) and non-food (soap) of about 15 tons (5.0 kg).

In this figure we have not included consumption of fresh nuts as food by humans and animals. This is because there are no reliable data on this available. A range of 175 nuts/head per annum to 365 is often quoted for the Pacific islands. One estimate of consumption, obtained in Niue was 250. If this were taken the oil equivalent of this would be 120t, making it easily the largest source of oil consumed in Niue.

This is a somewhat wasteful method of consumption in that usually the nut is split in half, the "water" wasted, the "meat" is grated and the "cream" extracted, with the residual "meat" being discarded or fed to livestock. However this is part of the culinary tradition of the South Pacific, and importantly, involves no cash outlay. As prices of all foodstuffs rise, it is likely that the bulk of the population (villages owning coconut groves) will consume more coconuts to substitute for foods which have to be bought.

Niuean consumption of fats and oils is quite high for developing countries, and comparable with other countries in Polynesia and, based on experience elsewhere, it is likely that as incomes rise, the consumption of fats and oils will rise at an even faster consumption of fresh coconuts, as mentioned above, but also as edible fats. Given a preference this latter would most likely be dripping, however margarine would also be acceptable, and can be made using a major component of coconut oil. This could be supplied from Fiji thereby aiding regional development.

MARKETING COPRA

There is little need to comment on copra marketing in Niue. It is currently all sold to New Zealand. Should it become possible to sell to Fiji to assist them in improving the efficiency of their mills, then this should be considered in the interest of regional co-operation. The Economic Development Board, which is responsible for marketing the copra, operates a stabilization fund.

MARKETING COCONUT CREAM

The current capacity of the coconut cream factory is about 1000 cases per month. This is the requirement of the agent in New Zealand who takes all Niuean production. The New Zealand market seems fully supplied at present, but may be capable of expansion. This should be closely investigated, and if so, we consider the Niuean case a strong one in discussion with its South Pacific neighbours to plead for an increased share in the market because it is one of the few aspects of the coconut industry which could be economically viable on Niue. This is strongly recommended as no other industry like soap manufacture would be viable as the market is small. Hence those products could be imported from the Pacific islands. This is further discussed below in the chapter on regional co-operation.

SHIPPING

The New Zealand Shipping Corporation provides the main link for Niuean general cargo with the outer world. This service is through the Cook Islands to New Zealand and is monthly.

Another service is operated by the Silk and Boyd Company based in the Cook Islands, and links Niue with the Cook Islands, Western Samoa, American Samoa and occasionally Suva. It is also a monthly service, and because of its links with other South Pacific island countries is especially valuable for the purpose of fostering regional co-operation.

The vessel "Tokerau II" also occasionally came from the Cook Islands, but has been wrecked and is unlikely to be repaired. The company owning Tokerau II may purchase another vessel to put on this run. Shipping is adequate at present, although naturally directed towards New Zealand from which 80% of imports were obtained and which was the market for 98% of Niuean exports in 1979. South Pacific island countries accounted for 14% of imports (mostly fuel from Fiji) and took 2% of exports in 1979.

The New Zealand Shipping Corporation link was established in 1974, and subsidises freight rates to Niue. This is an important part of New Zealand aid to Niue and was estimated to be NZ\$70 per cu.m or tonne of cargo in 1977/78 and NZ\$93 the following year. Were this subsidy not present, it would doubtless be cheaper to import selected items from other island countries e.g. sugar from Fiji, soap from Western Samoa or Tonga.

REGIONAL CO-OPERATION

This report considers the most important issue for Niue concerning regional co-operation in fats and oils is that of the coconut cream industry. This is also manufactured in Fiji and Western Samoa and is under consideration in one other country of the region. If all plans were to come to fruition, production would increase by 300% in a few years. While it is difficult to gauge the market, it is based largely on South Pacific Islanders and Asians in Australia and New Zealand plus a limited appeal to others. It is unlikely that this market can cope with such a huge expansion in production in the time envisaged. It may be able to do so over a larger period with successful marketing promotion to achieve something near the high level of consumption which dessicated coconut has in Australia and New Zealand. However it could prove disastrous were these expansions to take place as currently envisaged. It is recommended that current and potential producers in the region meet with the aim of assessing the Pacific and overseas market, then decide on an allocation to each country based on the present size of the market. This should be followed by a campaign aimed at the Australian consumer (New Zealand is currently preparing for such a campaign). Future growth in the market should be allocated to producers in accordance with that growth. In this way expansion of the market will be accompanied by orderly expansion of productive capacity. This agreement should be reviewed from time to time depending on country performance and market growth.

To Niueans this is especially important as it is one of a very few industries on the island. Given the limited opportunities for development on the island, we consider Niue can make this a strong point in a case for substantial share of the coconut cream market in any such regional talks on the issue. It would be an additional help if Niue were to offer to increase imports from the island countries such as soap and to export copra to Fiji where the mills are currently much underutilized. Niue is fortunate in having a shipping service in the area which caters for trade with neighbouring island countries. Greater utilization of this shipping service, based in the Cook Islands, would further aid South Pacific development. However the cost would have to be fully calculated. It is hoped that on this issue the New Zealand government stand would be that it would be pleased for Niue to be economically more independent and would encourage this type of development of regional co-operation.

IMPORTS OF SELECTED ITEMS - 1979

| <u>ITEM</u> | <u>QUANTITY</u> | <u>TONNES</u> | <u>VALUE</u> | <u>NZ\$</u> |
|------------------|-----------------|---------------|--------------|-------------|
| Butter | 15.8 | | 14532 | |
| Drippings | 3.4 | | 5373 | |
| Animal & Veg.Oil | 4.0 | Est. | 4433 | |
| Soap | 25 | Est. | 33,521 | |

TRADE WITH PACIFIC ISLAND COUNTRIES -1979 - NZ\$Imports

| | |
|---------------|---------------------------------|
| Tonga | 200 |
| Fiji | 288,601 |
| Western Samoa | <u>23,540</u> |
| | 312,341 - 14% of Total imports. |

Exports

| | |
|--------------|----------------------------|
| Fiji | • 3130 |
| Cook Islands | <u>4121</u> |
| | 7251 - 2% of Total exports |

BALANCE OF TRADE - NZ\$

| <u>YEAR</u> | <u>IMPORTS</u> | <u>EXPORTS</u> | <u>BALANCE OF TRADE</u> |
|-------------|----------------|----------------|-------------------------|
| 1976 | 1,752,109 | 152,690 | - 1,599,419 |
| 1977 | 2,109,418 | 255,048 | - 1,854,370 |
| 1978 | 2,311,176 | 239,706 | - 2,071,470 |
| 1979 | 2,087,097 | 373,206 | - 1,713,891 |

COPRA EXPORTS

| <u>YEAR</u> | <u>TONNES</u> | <u>VALUE NZ\$</u> | <u>% OF TOTAL EXPORTS</u> |
|-------------|---------------|-------------------|---------------------------|
| 1976 | 114 | 23,457 | 15.4 |
| 1977 | 208 | 79,413 | 31.1 |
| 1978 | 112 | 37,677 | 15.7 |
| 1979 | 133 | 78,337 | 21.0 |

TOTAL EXPORTS - 1979 NZ\$

| | |
|-----------------------|---------------|
| Plaitedware | 27,493 |
| Passionfruit Products | 193,483 |
| Pawpaw Products | 12,931 |
| Lime Products | 32,097 |
| Honey & Beeswax | 13,759 |
| Copra | 78,337 |
| Others | <u>15,106</u> |
| | 373,206 |

INTERNATIONAL PRICE OF SELECTED OILS
AND OIL SEEDS, 1969 - 1981 (US \$/M.T.)

| Year | Oils | | | | | Oilseeds | |
|-------------|-------------------------------------------|---------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|---------------------------------------------|------------------------------------------|----------------------------------------------|
| | Coco Oil Phil/Indo. Cif. Rott. 2 | Soybean Oil Dutch fob ex- ¹ mill | Palm Oil Malaysian SX Cif. Europe | Palm Kernel Oil, Dutch fob ex- mill ³ | Sunflower oil, f.a. ex-Tank Europe | Copra Phil/Indo Cif N.W. Europe | Soybean U.S. n 2 Yell Cif. Rott. |
| 1969 | 347 | 197 | 173 | 296 | 313 | 202 | 107 |
| 1970 | 379 | 286 | 260 | 367 | 330 | 222 | 121 |
| 1971 | 353 | 304 | 262 | 336 | 374 | 190 | 132 |
| 1972 | 254 | 241 | 217 | 319 | 326 | 142 | 144 |
| 1973 | 513 | 436 | 376 | 509 | 481 | 346 | 290 |
| 1974 | 998 | 832 | 672 | 1,040 | 977 | 670 | 277 |
| 1975 | 394 | 563 | 433 | 409 | 359 | 250 | 220 |
| 1976 | 418 | 438 | 405 | 433 | 381 | 270 | 231 |
| 1977 | 578 | 575 | 530 | 620 | 639 | 403 | 280 |
| 1978 | 683 | 607 | 600 | 764 | 655 | 471 | 262 |
| 1979 | 984 | 662 | 654 | 1,064 | 762 | 670 | 298 |
| 1980 | 674 | 593 | 584 | 760 | 633 | 450 | 296 |
| <u>1981</u> | | | | | | | |
| Jan. | 614 | 545 | 625 | 679 | 690 | 433 | 323 |
| Feb. | 603 | 516 | 640 | 621 | 650 | 411 | 306 |
| Mar. | 574 | 535 | 620 | 605 | 570 | 393 | 305 |
| Apr. | 552 | 531 | 598 | 582 | 652 | 387 | 316 |

- 1) Prior to December 1970 = fob. ex-tank Rott.
 2) Prior to January 1973 = Sri Lanka oil. bulk. CIF Europe Ports
 3) Prior to January 1972 = West African, CIF Europe Ports

Source: Cocomunity

WORLD TRADE - MAJOR IMPORTING COUNTRIESSHIPMENTS OF COPRA INTO THE FOLLOWING COUNTRIES

(Metric Tons)

| | <u>1975</u> | <u>1976</u> | <u>1977</u> | <u>1978</u> | <u>1979</u> |
|-------------------|----------------|------------------|----------------|----------------|----------------|
| Belgium/Luxemburg | 20,247 | 18,000 | 15,000 | 13,200 | 5,200 |
| Denmark | 21,274 | 42,931 | 20,095 | 22,400 | 18,300 |
| France | 63,879 | 71,582 | 61,000 | 52,100 | 55,700 |
| Netherlands | 166,891 | 148,500 | 74,000 | 78,700 | 57,700 |
| Norway | 11,400 | 15,000 | 13,000 | 10,000 | 15,000 |
| Portugal | 11,100 | 17,000 | 25,900 | 24,300 | 18,200 |
| Sweden | 38,505 | 38,600 | 41,600 | 37,000 | 13,000 |
| United Kingdom | 28,988 | 21,545 | 25,598 | 19,100 | 22,074 |
| West Germany | 413,142 | 525,183 | 351,400 | 211,000 | 53,900 |
| U.S.S.R. | 29,000 | 9,800 | 19,900 | 9,800 | 14,500 |
| Singapore | 27,100 | 43,700 | 40,800 | 73,300 | 36,100 |
| Japan | <u>80,800</u> | <u>110,256</u> | <u>97,785</u> | <u>90,400</u> | <u>55,759</u> |
| TOTAL: | <u>920,792</u> | <u>1,562,197</u> | <u>780,078</u> | <u>641,300</u> | <u>365,933</u> |

Source: 1979 Annual Review Frank Fehr & Company Limited

Note: Main drop in imports is in Netherlands and West Germany. Total drop from 1975 to 1979 is 554,859 mt. Philippines drop in exports in the same period was about 650,000 mt.

PERSONS INTERVIEWED:

1. Morris H. Tafatu - Director of Agriculture
2. Sio Siohane - Actg. General Manager Niue Food
Productucts Factory

3. Mr. Peli Sialemlisa, Protocal Officer, Central Office.
4. Mr. Robin Burril, A/Secretary to Government.
5. Manageress, Coconut Cream Factory
6. The Hon Minister of Economic Development.



