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**FAO/UNIDO REVIEW PROGRAMMING MISSION
TCP/RAS/0056
SOUTH PACIFIC REGION**

UNIDO DRAFT REPORT

by

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*3 copies off: Mr. NAKANO
PPD/AREA/AP*

August/October 1990

ABSTRACT

The UNIDO South Pacific Programme Report concerns the agro-industries of the Cook Islands, Fiji, Western Samoa, Solomons, Tonga and Vanuatu. These six countries face common constraints due to their small size, limited resources, archipelagic nature and distance from markets. Yet they have considerable potential for industrial growth based on downstream processing and added value products for niche markets in Australia, New Zealand, Japan, the U.S.A. and the E.E.C.

The mission found local industry to be poised for expansion and well blessed with competent entrepreneurs and businessmen ready to undertake substantial investments. Governments also were keen to support local industry and to make comprehensive infrastructure investments to assist national producers and processors.

A total of over \$300 million in private sector developments are ready to be undertaken and the businessmen concerned are eager to have their projects come under the umbrella of the proposed UNIDO and FAO programmes. Government infrastructure plans total over \$200 million. To support this large programme, some \$4.0 million of technical assistance is proposed for feasibility studies, training, policy work, technical advice and liaison activities with foreign private sector and financing organisations.

The industrial investments identified cover the fields of fruit and root crop processing, fish freezing and canning, downstream processing of coconut, timber, cocoa, coffee, kava and vanilla, animal feed mills, abattoirs, meat canneries, leather tanneries, shellcrafts, packaging industries, workshops and cold stores.

One of the Governments has already requested UNIDO assistance for a substantial agro-industry investment programme, and others are expected to follow. It is anticipated for each UNIDO will prepare a programme document in 3 volumes dealing with Investment, Technical Assistance and Policy. UNIDO will then approach donors for support on behalf of the Governments. Programmes can proceed on the basis of initial support with further funding coming from additional pledges during the course of the programme.

FAO/UNIDO REVIEW PROGRAMMING MISSION

SOUTH PACIFIC REGION

DRAFT UNIDO REPORT

**David B. Thomson
Agro-Industries Consultant**

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August / October 1990

REGIONAL REPORT

UNIDO/FAO SOUTH PACIFIC PROGRAMME MISSION AUG - OCT 1990

A. BACKGROUND

The mission studied six South Pacific countries, namely the Solomons, Vanuatu, Western Samoa, the Cook Islands, Tonga and Fiji. Two of the FAO consultants continued on to Micronesia and Kiribati, but these states were not in the original group selected for the mission.

The six island states in the study, with the exception of the Cooks are all fully independent countries. Their peoples are largely Polynesian and Melanesian with additional migrants from Asia chiefly, particularly in Fiji. Their economies are fairly similar with coconut, tropical fruits, fish, root crops and timber being the major agricultural crops.

The countries face a number of common problems and constraints due to their location, size and relative isolation. The total population of the six is less than 1.5 million persons. Land area is only 65,000 square kilometres. The people are distributed throughout some 250 islands. In some of the countries the islands may be as much as 1,000 miles apart. What they have in plenty is ocean or sea area. Together the six states claim jurisdiction over marine areas (Exclusive Economic Zones or EEZ.) of over six million square kilometres.

Economically the countries rely on agricultural produce, tourism, and some small scale manufacture to survive. Until the turn of the century they were all largely self sufficient in their requirements but this is no longer possible and to maintain their living standards they must all import heavily. Major imports are petroleum, electronics, machinery and other manufactured goods. Some food stuffs and food inputs are also imported. The main exports are copra, fish, fruits, timber, root crops and some manufactured clothing. Traditional export markets are New Zealand, Australia and the U.S.A. It is becoming increasingly difficult to export fresh produce to those countries and the current move towards processing of agro-produce is long overdue.

Data on each of the six states is summarised in the table below:

Country	Population	Inhabited Islands	Areas in square kilometres	
			Land area	Sea area(EEZ)
Cook Islands	18,000	15	240	1,830,000
Fiji	716,000	100	18,274	1,290,000
Western Samoa	170,000	4	2,935	355,820
Solomons	267,000	50	28,000	1,340,000
Tonga	100,000	36	700	700,000
Vanuatu	142,000	40	14,763	680,000

B. DEVELOPMENT TRENDS

Previously the development policy of all the Pacific countries was one of reliance on export of fresh produce and tourism for foreign exchange and engaging in processing or manufacture only with the limited goal of import substitution in mind. This is now generally accepted throughout the Pacific to have been a fundamental mistake.

Few processing companies which target the domestic market only are able to survive. Too often the local market is viewed as the easy option and this results in a laxity of standards in quality and efficiency that effectively prevents the company from ever expanding into the export markets. The companies that have succeeded in the export market have found that in the process their goods have become even more acceptable on the local market. Those which have failed to penetrate export markets have found their products unable to compete with better quality imports. Too often then their reaction, instead of upgrading their quality or efficiency is to appeal to Government for import duty protection from foreign goods.

While it has been realised that processed goods must be of adequate quality to compete on world markets, it has also become apparent that export of fresh produce will become even more difficult due to stringent quality and quarantine restrictions imposed by New Zealand, Australia and the U.S.A. This underscores the importance of investment in downstream processing of agricultural commodities.

The relatively small volume of production of particular items by the small Pacific states means that they could never compete directly with large agricultural producers like the S.E. Asian countries. It is therefore imperative that they seek "niche" markets for their products. This the progressive island processors have been able to do with remarkable success, even in cases where their products are priced higher than average.

The traditional mainstay of the Pacific island economies, namely copra, has ceased to be an economic crop owing to falls in world prices for both copra and coconut oil. Prices are now so low, Governments often have to subsidise production otherwise growers consider it not worth the labour of harvesting and cutting, not to mention the costs of inter-island shipping. The only option now is to engage in downstream processing and to produce higher added value products. It is important that the countries do this as coconut will continue to hold a key position in the islands as a crop of social as well as economic importance.

Practically all of the countries visited are now engaged in programmes or strategies to promote the private sector. Some government involvement in industry has been a feature in past years, particularly in key commodities such as copra, timber fish or farm crops. None of the Governments now view this as desirable and there is in consequence a healthy attitude to the

private sector.

Economic and industrial planning is receiving serious attention in each of the countries as they now recognise the importance and value of long term, coherent policies and strategies. There is therefore a window of opportunity for UNIDO to assist governments with these exercises and in the course to become more deeply and effectively involved in the industrial development of the region.

C. POTENTIAL

The small size of the Pacific islands puts distinct limits to their potential in terms of volume of production. Their total yield of agricultural produce will never compare with the huge harvest of the large countries of Asia and S. E. Asia.

There is nevertheless a potential for increased production of most of the region's crops. The key to the increase is two-fold - markets, and transport. If the markets can be developed which will enable economic prices to be paid to farmers then they will produce. At present huge amounts of coconut and tropical fruits go to waste because prices are too low to justify the labour of harvesting, or markets are non-existent as far as the remoter island are concerned. But markets and prices are only half the story if increased production is to be facilitated. There must be transport, particularly inter-island transport, of a frequency and at a price that is acceptable to the producers.

Given those twin requirements there is a potential in the Pacific islands for a substantial increase over current agricultural production.

Fisheries, as well as agriculture, has a potential for increase in the Pacific. The sub sectors with promise are deep sea fisheries (chiefly tuna) and mariculture or farming of fish and shellfish. There is little prospect of increase in reef fish production as that resource is already heavily exploited except on the offshore deeper reefs. The main tuna fishing countries of the six are the Solomons and Fiji, both of which have substantial tuna canneries. Now Western Samoa, Vanuatu and the Cook Islands are considering development of their own tuna fisheries.

Fish farming also has prospects, particularly for shellfish (prawns and lobster, oyster and mussel) and for finfish such as redfish, tilapia and mullet. These are all high value species which command a ready market. Work is continuing on farming of giant clam and growing of seaweed but these two products have yet to prove their worth commercially. One of the more ambitious prospects is ocean ranching of large fish for sashimi and gourmet markets. This can be done on deep water sheltered bays and there is a proposal for such a venture in Vanuatu.

Livestock farming could be expanded in many parts of the region. Cattle flourish in Vanuatu, and pigs are reared in most of the

islands. There is also some chicken farming particularly in Solomons and Fiji. The key element for all of these animals is feed. If local feed mills can be developed to produce meal cake and pellet at competitive prices, then the livestock industries can flourish. These industries have potential for downstream processing, - corned beef, lard, tallow, leather, bone and blood meal may all be produced. Vanuatu is upgrading its slaughterhouses to meet EEC standards so beef could be exported.

In the processing sector the greatest potential at present lies in fruit processing. Markets exist for a great variety of quality products: juices, purees, dried fruits, banana powder, jams, preserves, ice lollipop fillers, fruit yoghurts, concentrates, extracts, etc. The key in this case is quality and a certain minimum volume to keep markets happy.

Root crop processing also has potential, dried, powdered, as snack food chips and as convenience foods, peeled, washed and vacuum packed. Starch may be extracted from cassava and alcohol obtained from several such crops.

Downstream processing of coconut is essential if that industry is to survive and that could include oils, margarines, soaps, coconut cream, coconut chips, vinegar, juice, handicrafts, charcoal and ropes or matting.

Expansion of forestry production is scarcely possible and would be unwise, but there is considerable potential for added value work to produce quality timbers and to manufacture furniture or wood products.

Processing of cash crops is a growing area of interest. This includes coffee, cocoa, vanilla, ginger and spices. Some of the processing units are very small scale but of high standard and able to supply both local needs and some export "niche" markets.

To support the processing industries there is an opportunity for local and regional packaging industries to manufacture the cartons, plastics and cans required. These could be small scale and placed strategically to meet demand. Where local volume does not justify establishment of a packaging plant, a regional factory might supply the need at a competitive price.

Marine engineering industries could be expanded to support and maintain the growing inter-island and fisheries fleets. Some small boatyards are already in production, and in Fiji some steel shipbuilding is beginning to develop.

Storage transport and cold storage service industries could be expanded considerably and will have to be expanded to support current increased production plans. Energy and water systems service industries will also need to expand.

All told, the region, despite its small land size and the isolation of some of its islands, does have considerable

potential for increasing agro-industry output and exports by tens of millions of dollars in most of the states.

D. CONSTRAINTS

The region's main constraints which have already been alluded to relate to its limited production, its relative isolation, its lack of manpower, its limited industrial base and infrastructure, and the archipelagic nature of the countries. The prevalence of cyclones or hurricane force winds and the fragile nature of the island ecosystems may also be considered as constraints. The above constraints apply to all of the countries on the study.

Limited production creates marketing problems particularly with regard to export products. None of the Pacific crops can compare in volume with the produce of the Asian and S. E. Asian countries. The only exceptions may be sugar in Fiji, and copra which is produced throughout the region but in hundreds of small scattered islands. The relatively small production volumes mean that processors or exporters must target limited "niche" markets and avoid competing in major export markets.

The relative isolation of the islands adds a shipping cost to imports and exports and places a handicap on all of the countries vis a vis foreign trade. It also results in less awareness of market potentials in distant countries.

Lack of manpower and especially skilled manpower is a result of the small populations and of the prosperity of trained persons to seek more lucrative work in Australia, New Zealand or the U.S.A. There are now more Cook Islanders and Samoans living abroad than there are at home.

The limited industrial base in all the countries (except perhaps Fiji) is a constraint to all industrial progress due to shortage of machine shops, engineers, spare parts, service facilities and supporting manufacturers who might supply inputs like packaging, cans, pallets, cartons, detergents and hardware.

Infrastructure limitations cover a wide range of facilities including roads, power and water supplies, piers, storage centres and communication facilities.

As all of the countries have many scattered islands (except perhaps Western Samoa) they have difficulty in providing adequate inter-island shipping services at a cost within the means of small producers and a frequency to suit harvesting and markets. This seriously depresses production.

All of the countries suffer damage from cyclone winds every few years and some may be hit several times in one year. These winds destroy crops, especially banana, but also pawpaw, coconut and other fruit trees. And they can bring flooding in their wake, or heavy seas which damage boats and coastal villages.

The relatively fragile nature of the Pacific island ecosystems means that the islands require careful protection to prevent soil erosion or introduction of unknown pests or damage to the coral reefs. Much forestry work for instance is designed to protect hillsides from soil erosion and these plantations could not be harvested like normal forests.

The constraints then are largely a product of the geography, climate and population. Despite them, industrial development may still take place but it has to follow a pattern that recognises the region's limitations and vulnerabilities. The respective Governments are of course well aware of this and their industrial policies and strategies seek to take all this into account.

E OBJECTIVES

There is a similarity of purpose in the development goals of the respective countries which places them at times in competition with each other and at times in concert. While they all espouse national goals, most of them pay lip service at least to regional co-operation. The sensitive balance between national benefits, and concessions to neighbours is a difficult but vital aspect in the struggle to develop meaningful and beneficial cooperation in trade and industry among the island states.

As the national goals of each country are detailed in the country reports, and as these in any case are quite similar to each other, this section will deal with development goals and objectives which may call for a degree of regional agreement and cooperation.

A considerable amount of cooperation already takes place through organisations like the South Pacific Commission and the Fisheries Forum. The United Nations regional programmes for the South Pacific also help to strengthen links and joint activities between the countries. In the areas of trade and industry, regional cooperation could result in significant savings and advantages for all concerned. But of necessity it involves some quid pro quo or contribution by the participants if it is to work effectively. This is not always easy to obtain.

Forestry goals may permit useful regional cooperation. The resource or the production cannot be expanded so all countries are looking for added value for timber products. One way to achieve this would be to have a regional importing office in Australia with the purpose of recovering some of the retail value of the sawn timber. Wood selling for \$600 per cubic metre f.o.b. are retailing at \$1500 or \$1800 per cubic metre. Recovery of an additional \$200 per cubic metre would make an enormous difference to the producers. The Fiji Department of Forestry has agreed to look seriously at this idea. In order to boost production of quality wood furniture it has been suggested that regional manufacturers be given first option on purchase of hardwoods to be exported from other Pacific islands countries. There is also a proposal to have a regional school of wood

technology and design which would be self supporting and managed by representatives of the wood industries.

All Governments are concerned at the cost of imported packaging for processed foods. Fiji is the one country which has made progress in local manufacture of cans, cartons, plastic containers and wrappers. Other countries need small scale packaging producers and/or access to regionally produced packaging at reasonable cost. The Solomons requires a can making plant for its tuna and fruit industries. Vanuatu would be willing to purchase cans for its needs from the Solomons. Tonga requires lower cost wooden pallets which Fiji or Samoa could supply.

Vanuatu, Solomons and Fiji produce trochus shell button blanks. Cook Islands wishes to set up a similar factory. Most of the button blank producers are willing to sell their produce to a regional finished button factory if one could be established. Vanuatu businessmen are willing to invest in such. The key to such a venture is access to a sufficient volume of button blanks to justify the capital investment in the expensive finishing machinery.

Every country in the region has a problem with supply of animal feed and hence wishes to establish an efficient economical feed plant. The constraints are lack of inputs - low cost fillers and protein meals. Fish meal could be obtained from the tuna plant in the Solomons, Fiji and Samoa, copra meal from the copra oil plants, wheat bran from the flour mills and possibly waste cuttings from new taro and cassava processes. But however feed mills are to be supplied it will take considerable effort and ingenuity on the part of the participating countries to obtain adequate volumes of ingredients at economic prices. UNIDO and FAO should work closely on this to assist the countries reach their goal of local supplies of animal feed.

It is therefore mainly in the area of regional trade that the countries can work together to achieve common goals and national objectives. Trade of necessity involves shipping and further strengthening of regional shipping lines would support the flow of goods and materials between the countries.

G. UNIDO ASSISTANCE

The UNIDO Regional Project DP/RAS/86/075 supported by UNDP is designed to meet the technical needs of the Pacific Island Countries for the development of small industries. It relates to the national UNIDO projects SOI/88/002 in the Solomons, TON/86/002 in Tonga, VAN/88/004 in Vanuatu, plus the national project in Fiji and some minor activities in Western Samoa and the Cook Islands.

As the consultant was not able to meet with regional project

personnel during his assignment, evaluation of the project is limited to his study of documentation and his meetings with national C.T.As. All the field personnel and government officials spoken to were positive about the value of the regional project though the limitations referred to in the UNIDO Technical Assessment were confirmed. These relate to the difficulty of close collaboration with the private sector in each country. Such work is better undertaken by the national projects.

It is the Consultant's assessment that the regional project has performed best when it has brought entrepreneurs together to be briefed on technology or trained in management and when it has helped Government staff with project preparation and policy development. It is least effective due to its regional character when it has sought to assist with purely national activities.

An area in which there is great scope for the regional project is that of identifying export markets and putting potential importers and local processors in touch with each other. At present many importers are looking for this kind of cooperation and of course most processors in the region would like to be put in touch with additional importers. This activity could logically fall within the second of the project's three objectives i.e. to identify technically and financially feasible opportunities for small and medium-scale development.

The consultant supports the new concept for the regional UNIDO project as outlined in the Technical Assessment (although he would put less emphasis on training new entrepreneurs and more on helping existing ones of proven ability) but would add his comments and recommendations in the Policy section of this report, which advocate linking technical assistance to investment and working much more closely with foreign and local private sectors.

H. PROGRAMME AND PROJECT PROPOSALS

The agro-industry strategy of the South Pacific countries may be summed up as one of:

- getting away from mere import substitution and moving towards higher value products for both export and local markets.
- maximising utilisation of the main local products with further downstream processing wherever possible : coconut, fish, timber, fruit, sugar, root crops, shells, etc.
- expanding work in cash crops, especially added value work, coffee, cocoa, vanilla, ginger, spices, nut, etc.

In order to provide substantial support to the national agro-industry development plans, UNIDO proposes the following national programmes and the co-ordinating regional umbrella programme.

Cook Islands	Integrated Industrial Development Programme
Fiji	Industrial Expansion Programme
Western Samoa	Investment and Industrial Development Programme

Solomons Agro-Industries Development Programme
Tonga Development of Agro-Industries Programme
Vanuatu Industrial Planning and Investment Promotion
 Programme

Regional South Pacific Agro-Industry Cooperation and Co-
 ordination Programme

The national and regional programmes are based on genuine investment plans by the private sector which they wish to have incorporated in the proposed UNIDO and FAO programmes of assistance. The Governments have also indicated their readiness to make parallel supporting infrastructure investments

	(in million dollars U.S.)			
	Private Investment	Infrastructure Investment	Technical Assistance (initial estimates)	Upfront TA moneys needed
Cook Islands	60.0	50.0	0.7	0.2
Fiji	85.0	45.0	0.9	0.21
Samoa	40.0	30.0	0.4	0.08
Solomons	90.0	80.0	0.5	0.065
Tonga	10.0	10.0	0.3	0.055
Vanuatu	(?)	(?)	0.4	0.03
Regional	15.0	-	0.9	0.07
	-----	-----	-----	-----
Totals to date	300.0	215.0	4.1	0.71

Six regional projects are proposed. These are to meet needs which are common to the six participating countries, or which require a degree of inter-regional cooperation. To tackle the problems on a purely national basis would involve duplication of effort and may result in limited impact as a degree of cooperation could greatly reduce costs or facilitate increased industrial activity.

The six regional project proposals are:

1. Inter-Island Shipping Study and Analysis

All the P.I.C.s recognise the constraint caused by inadequate or expensive inter-island shipping services. An improvement in this area could greatly increase the supply of agro-produce from the islands, which in turn would improve the viability of processing and export enterprises. Improvements may come from better management and/or introduction of more versatile and economic craft, or establishment of island collection centres with proper storage and loading facilities.

It is proposed that UNIDI study the problem, possibly in association with IMO or some maritime organisation to produce a

cost effective solution for each country. This may lead to further investment in cargo vessels or infrastructure and to training for local technical and managerial personnel and possibly some rationalisation or expansion of existing services. The study might cost around \$130,000

2. Animal Feed Mill Development

The livestock industries of the South Pacific all urgently require improved and less expensive local supplies of animal feed. Most attempts to date are hampered by difficulties in obtaining adequate supplies of input materials at reasonable prices. Some sources of copra meal, wheat bran, waste root crops etc. do exist and could be expanded. Fish meal is available from the tuna plants and may be produced in smaller quantities from some new fishery ventures.

UNIDO and FAO should work together to identify and develop sources of material for each country and formulae for feed mixes from the various materials for cattle, pigs, poultry and fish farms. This may involve some inter-region trade in inputs which should be less costly than materials currently purchased from Australia and New Zealand. Estimated cost of project, \$95,000 .

3. Food Packaging Industries

The food processing industries all face a major constraint in the cost and supply of appropriate packaging. In some cases, packaging costs amount to 40% of the price of the finished article. A reduction in packaging costs would improve the viability of processing ventures and would make some internationally competitive. The packaging industries themselves would add to the industrial base of each country, providing both employment and added value as well as a reduction in import costs.

The kind of packaging required includes plastic tubs, glass bottles, cans, cartons, plastic and tin foil bags, labels, printed wrappers and even wooden pallets. There is also a need for local firms to pack commodities like rice, sugar and flour into consumer sized packets.

It is proposed that UNIDO address the problem on a regional basis, identify small scale manufacturing possibilities and also some regional trade in packaging items if possible. The project should liaise with national feasibility studies such as that in Solomons for a can manufacturing plant, and in Fiji for inter-island trade in timber products (re pallets). A number of companies already involved in packaging have indicated their willingness to cooperate with the proposed project. Cost around \$120,000.

4. Shell Button Factory

Trochus shell button blank factories are now in operation in Vanuatu, Solomons and Fiji. A further plant is planned in the Cook Islands. The total volume of button blanks from the South Pacific is now sufficient to support a single factory to produce finished buttons. Some businessmen have expressed interest in investing in such a plant. But it would require the agreement and cooperation of the various button blank producers in the region. The technology is available and manufacturers of the machinery have offered to provide training. The global market for finished shell buttons far exceeds the supply.

It is proposed that UNIDO work with the shell industries of the region to help towards the establishment of a regional plant that would enable further added value to shell products. Project cost \$35,000.

5. Timber Industries Cooperation

Each of the countries in the region wishes to maximise added value from the limited timber resources. Fiji which has the largest resource is willing to take the lead in any UNIDO/FAO programme. The proposals have three elements:

i A regional training school of wood technology and design to provide skilled entrants to the furniture industries. This school to be self-financing ultimately and initially to be supported jointly by the Fiji furniture manufacturers, the Fiji Government, and UNIDO.

ii A timber pricing and quality coordination programme with possibly an importing office in Australia to re-coup some of the excessive profit being made by importers and retailers.

iii An inter-regional timber trade promotion programme to strengthen added value work in enterprises such as the furniture workshops

The total programme might cost \$320,000 not counting any capital assistance to the school.

6. Training in Operation, Maintenance and Repair of Plant and Equipment

Manpower skills development is a major priority with all of the Governments. The acute shortage of skilled engineers, mechanics and technicians results in many plants and machineries being out of service or at low efficiency for prolonged periods. FAO fisheries and agriculture consultants have also recognised the urgent need for such training. It is proposed that a regional training programme be initiated to improve technical skills in local agro-industry enterprises. Estimated cost \$200,000

Total estimated cost of regional technical assistance proposals
\$900,000

The most urgent of the projects is the Inter-Island Shipping study, followed by the Food Packaging Industries support. Next in priority would be the Animal Feed Mills development and the Timber Industries Co-operation.

ADDITION TO THOMSON UNIDO SOUTH PACIFIC REPORT

REGIONAL PROGRAMME

REGIONAL PROJECTS

INTER-ISLAND SHIPPING

ANIMAL FEED MILLS

FOOD PACKAGING INDUSTRIES

SHELL BOTTOM FACTORY

TIMBER INDUSTRIES CO-OPERATION

TRAINING IN MAINTENANCE OF EQUIPMENT

MOBILISING OF FINANCIAL RESOURCES

LINKS WITH FUNDING AGENCIES & SOURCES

COMMITMENTS MADE BY GOVERNMENTS AND PRIVATE SECTOR

COST BREAKDOWN OF NATIONAL T.A. PROPOSALS

COOK ISLANDS

FIJI

WESTERN SAMOA

SOLOMONS

TONGA

VANUATU

All to be added at end of Regional Section of Report (page 14).

REGIONAL PROGRAMME

SOUTH PACIFIC AGRO-INDUSTRY CO OPERATION AND COORDINATION PROGRAMME

An umbrella regional programme with the following tasks :

i. To liaise with the national programmes and to provide a regional cooperation mechanism in areas which may benefit from inter-regional cooperation.

ii. To monitor and supervise the work of the regional projects and to keep each country fully informed on the activities and plans of the regional projects.

iii. To act as a regional office for investment enquiries, to put relevant foreign and local private sector businessmen in touch with each other, and to encourage inter-regional trade.

iv. To provide logistic support to the regional projects and to keep UNIDO hq informed on their progress.

Staffing and location: The logical base for the regional programme office would be Suva, Fiji, and the ideal person to oversee it would be the existing UNIDO country officer. He would require the support of at least one additional J.P.O. or A.P.O. plus secretarial services and a travel/communications budget.

Not counting the salary of the existing UNIDO country officer, and assuming he could undertake the additional responsibilities, then the cost of the programme office over a 3 year period would be around \$ 300,000.

REGIONAL PROJECTS

1. INTER-ISLAND SHIPPING STUDY AND ANALYSIS.

Joint UNIDO / IMO project.

The project would provide the services of one international shipping management expert, specialising in small scale inter-island shipping, and six national shipping experts.

The expert would spend up to one month in each of the six target countries where he would be assisted by the relevant national expert. The national experts would be briefed in advance in Fiji on the data and information required for each national study, and would be called again to Fiji for final discussions before the main report is completed.

The draft report would be delivered to UNIDO and IMO hq. and to the Marine or Transport Department of each country for their comments and observation.

The report would provide clear recommendations for the rationalisation of inter-island shipping service including their management, the type of vessels, and the shore facilities and coordination mechanisms with producers. A thorough financial and economic analysis would guide each country on the future development of their national shipping fleets to achieve the twin targets of economy and efficiency within the constraints and requirements of the service.

Cost :	Senior consultant 7 m/months	\$ 77,000
	National consultants 6 x 3 m/months	27,000
	Travel, communications, admin. & hq support	26,000

	Total	\$ 130,000

2. ANIMAL FEED MILL DEVELOPMENT

Joint UNIDO/FAO project

The cost and availability of animal feed is a major constraint to the development of livestock industry in the Pacific Island countries. Some feed mills exist buty they are presently importing most of their raw materials.

It may be possible to obtain the bulk of the required raw materials within country or at least within the region. But this would entail considerable effort and coordination, plus the development of new feed fomulae for cattle, pigs and poultry based on available raw materials.

The project will investigate the possibilities of establishing, improving or expanding national feed mills on the basis of available raw materials and will recommend feed formulae for each.

Two international experts will be recruited. The chief one will be a feed mill economist and he will be supported by a feed formula specialist. Six national consultants will be recruited to obtain the local data.

Cost :	Feed mill economist consultant 4 m/m	\$	44,000
	Animal feed formula consultant 2 m/m		18,000
	National consultants 6 x 2 m/m		18,000
	Travel and communications		15,000
	Total	\$	95,000

FOOD PACKAGING INDUSTRIES

The cost of imported food packaging is preventing many processors in the South Pacific from becoming internationally competitive. In some cases the prices paid are 2 to 3 times the average global cost due to shipping charges and import dues. Finished products may have as much as 40 per cent of their price taken up by the cost of packaging.

Of the six countries, only Fiji has made real progress with local packaging manufacture. This included cans, plastic bottles, plastic and paper bags, cartons and tin foil. But even there is a need for improved packaging and for a glass bottle factory. Some inter-island trade in packaging materials may also be possible with Fiji acting as the main source.

The project will investigate the precise packaging needs of each country and will suggest economical ways of producing or obtaining the requirements.

A food industries packaging expert will lead the study which will be supported by national experts in each country, and two in Fiji. Special attention will be paid to can production in the Solomons, glass bottle manufacture in Fiji, plastic juice tubs in Tonga, and vacuum rack for washed peeled larr and other products in several states.

Cost :	Preliminary work by UNIDO hq on package production costs	\$	4,000
	Food industries packaging expert 5 m/m		55,000
	National consultants 7 x 2 m/m		28,000
	Travel and communications		24,000
	Costing and analysis hq support		9,000

	Total	\$	120,000

4.

SHELL BUTTON FACTORY

This project is to assess the feasibility of a regional shell button factory, and an additional button blank factory in the Cook Islands. The regional button factory may be located in Vanuatu or Fiji.

At present, shell button blank factories are in operation in Vanuatu, the Solomons and Fiji. The Cook Islands which have exported their trochus shells to date are now interested to establish their own button blank factory in Rarotonga. The volume of button blanks now being produced in the region would justify the establishment of a finished button factory.

Several businessmen have expressed interest in a finished button plant, chiefly in Vanuatu and Fiji. Such a plant requires sophisticated machinery to produce the quality finished buttons required by the global fashion trade. Machines can be purchased from Japan, Korea, Italy and other industrial countries.

The project consultant will gather information from manufacturers and from button purchasers. He (or she) will visit the factories in Vanuatu, Solomons and Fiji and the potential plant in the Cooks, and will interview local businessmen. On the basis of the report and feasibility, a regional factory may be established which will add considerably to the added value of shell products from the South Pacific.

Cost :	Shell button industry consultant	
	2.5 m/m	\$ 20,000
	Travel, communications and sundries	7,000

	Total	\$ 35,000

TIMBER INDUSTRIES COOPERATION

The project is to help countries in the region to gain maximum added value from their timber industries. It will focus on three main areas: training, trading and export.

The training element is to improve and expand the skilled manpower available within the region, in wood technology and design. It will focus on establishment of a self-financing school which will be supported chiefly by the timber and furniture industries. UNIDO will provide the services of expert trainers plus textbooks, training materials and some tools and equipment. It is hoped that the Fiji Government (and possibly the timber industry) will provide land and a building.

The trading element is to promote inter-regional trade in timber so that countries wishing to export raw timber give first option to others in the region which may have furniture factories to utilise the wood.

The export element is designed to recoup some of the excess profits currently being made by importers (or lost by the exporter due to poor quality control). It will have three sub-elements:

- i. promotion of quality control in better saw milling and improved kiln-drying.
- ii. price coordination to maintain a common front towards importers.
- iii. possible establishment of a regional import office in Australia.

Together these three sub-elements could increase the income from exported timber by some 50 or even 100 per cent in some cases, thus substantially boosting the industry.

Cost :	Timber industry consultant 3 x 3	
	m. months	\$ 99,000
	Wood technology and design trainer	
	1.5 m. months	66,000
	Textbooks, training aids, machinery	125,000
	Travel, communications, overheads	30,000

	Total	\$ 320,000

6. TRAINING IN OPERATION, MAINTENANCE AND REPAIR OF PLANT AND EQUIPMENT

The shortage of skilled manpower in the Pacific island states is affecting the use of agro-industry machinery in that down-time due to lack of repairs and maintenance is seriously hampering the industry in many places.

This project is to provide an interim measure of support while Governments and industry proceed with their own manpower development programmes. It must therefore be seen as supportive of and not in place of, national efforts to expand the skilled workforce.

A national maintenance engineer will be selected and recruited from each of the six countries. The selection will be undertaken jointly by UNIDC and Government in close consultation with industry. The six selected will be sent on an intensive regional course on the maintenance and repair of agro-industry machinery. Following the course the engineers will return to their countries where they will provide on the spot training and assistance to local agro industry enterprises. The main training consultant will later visit each to vet and advise on their individual programmes.

Cost :	Agro-machinery training engineer	
	1.5 + 1.5 m.months	\$ 33,000
	Regional training assistants	
	2 x 2 m.months	8,000
	National maintenance engineers	
	6 x 24 m.months	120,000
	Training course facilities & materials	26,000
	Travel, communications & overheads	13,000

	Total	\$ 200,000

MOBILISING OF FINANCIAL RESOURCES FOR INVESTMENT REQUIREMENTS

The mission identified a readiness to invest in agro-industry enterprises in the region amounting to over \$ 300 million on the part of the private sector. This could rise easily to over \$ 400 million as the mission could visit only some of the interested private sector businessmen. Governments also indicated a willingness to support the industry by infrastructure investments amounting to \$ 200 million or more.

These funds will come from several sources including local commercial banks, national development banks and international financiers. Some Governments may also apply to the World Bank or Asian Development Bank for infrastructural loans but most seemed to prefer to approach other sources first owing to the time and the missions involved in any World Bank or ADB loan.

UNIDO should not have to become involved in the investment finance except if requested, to approach bilateral sources of concessional loans for particular social or environmental elements of Government investment.

What is important for UNIDO, and for the Government of the six countries, is that the Organization be aware of all the industrial and public investments taking place so it can then inform potential bilateral donors that the programme is going ahead and that supporting technical assistance contributions are well justified.

In several cases, industry will require to complete feasibility studies to satisfy lending banks. To help them in this, and as part of its T.A. support, UNIDO should co-finance feasibility studies for the larger enterprises and fully finance such studies for the smaller emerging local agro-industry enterprises. The cost of these studies are estimated in the country section of the report.

LINKS WITH MULTILATERAL AND BILATERAL FUNDING SOURCES.

It is proposed that a joint programme document be prepared by FAO and UNIDO, entitled
"Agriculture and Agro-Industry Development
Programme for the South Pacific Region"

This programme document should have at least three main sections, namely Investment, Technical Assistance and Policy. The T.A. projects will be divided between UNIDO and FAO as appropriate.

Once the programme document has been agreed to by the Governments concerned, then copies can be presented to UNDP and the potential bilateral donors, on behalf of the Governments concerned.

While the programme document will not contain detailed project documents, it will have project ideas and frameworks, costed out and with essential basic information. An updated attachment sheet will inform the donors of the progress both Government and industry is making with the large investment commitments, and of the up-front assistance being provided by UNIDO, FAO and UNDP.

Each donor if interested, may then select a portion of the technical assistance programme for funding, depending on their priorities and interests. As the programme may stretch over a 3,4 or even 5 year period, only a part of the total funding needs to be available early on, but pledges for funding of downstream projects may be made.

This approach provides the donors with the opportunity to share in a large programme. It also provides them with a considerable degree of choice. In addition they have the reassurance that investment commitments have been made and their contributions will form part of a long term integrated programme of agro-industry development.

COMMITMENTS ALREADY MADE BY GOVERNMENTS AND
PRIVATE SECTOR RELEVANT TO THE PROGRAMME

COOK ISLANDS : The Prime Ministers' office has already approached UNIDO officially with its programme request and has commenced negotiations with international financiers on a large package of the investment required for both infrastructure and private sector requirements. The borrowings could amount to over \$ 50 million.

FIJI : One enterprise has already borrowed \$ 65 million to expand its processing factory and five others are currently negotiating for a total of \$ 19 million of additional investment. All these companies wish to be included in the proposed UNIDO programme of assistance. The Timber Industry and Furniture Manufacturers association has officially requested its T.A. project which it urgently wishes to start as soon as possible. The Forestry and Industry Departments are aware of the requests which they approve of in principle. The Government is awaiting receipt of the UNIDO report before making its official request.

WESTERN SAMOA : One major industry company has purchased the feed mill and is presently negotiating to establish a \$ 10 million tuna loin plant. It urgently requests UNIDO help with 1st feasibility studies. This is the SMACK, F.P. Corporation. Percival Foods also requests assistance in its feasibility work on a \$ 2 - 5 million expansion of its fruit processing export business. The Government is keen to support these ventures and others in timber, coconut and handicrafts, and is awaiting receipt of the official report.

SOLOMONS : Together with the UNIDO CTA, the Government has developed a comprehensive programme of industrial development which is fully supported by the private sector. Both Government and industry are awaiting the report with interest and will respond promptly.

TONGA : Two enterprises still under a degree of Government control are to be fully privatised eventually. The first Passion Foods Ltd. is already semi-privatised but the other, the copra oil mill will have to be restructured first. This the Government is prepared to do by investing in some downstream processing to produce margarine, soap, vinegar and other products. These two enterprises are to be given priority attention under the programme. Other private sector businesses wishing to receive UNIDO assistance and prepared to make investments if feasible include those producing desiccated coconut, vanilla, dried banana, root crops, snack foods and fish. Another major project is rationalisation of the feed mill. There is also a need for small scale production of packaging equipment. The UNIDO CTA is working closely with Government on this and Tonga experts to respond to the UNIDO report with a formal request without delay.

VANUATU : Vanuatu is the preferred site for the proposed regional shell button factory to produce finished buttons from button blanks. The country also wishes to upgrade its abattoirs and begin processing of leather and other animal by-products. As the Government is currently working on the next 5 year plan, investment proposals are somewhat in abeyance. There is therefore no concrete proposal for agro-industry investment in Vanuatu in this document. A fishery investment proposal by a New Zealand group has been given a cautious reception despite support by local fishermen. However the door may be open for UNIDO support to the next 5 year development plan and to the tropical forests action plan.

**COOK ISLANDS IN TECHNICAL ASSISTANCE
PROPOSALS FOR THE SIX COUNTRIES**

1. COOK ISLANDS

(a) UP-FRONT ASSISTANCE

BANANA PROCESSING INDUSTRY

STUDY TOUR TO PHILIPPINES/NEW ZEALAND	12,000
DESIGN & COSTING OF BANANA PROCESSING PLANT	10,000
SHELL BUTON FACTORY, STUDY TRAVEL & COSTING	8,000
STARCH EXTRACTION FROM CASSAVA (UNIDO/ITDG/ TOOLS STUDY)	10,000

1* SUB TOTAL	\$ 40,000

**(b) Preparation of Integrated Industrial
Development Programme**

2* cost as detailed in part H of Cook
Islands rept. \$ 240,000

participation if feasibility studies

Kia Orana juice plant	22,000
Readfish fish farm Aitutaki & OTC plant	37,000
Coconut Cream Factory	11,000

Sub-Total	\$ 310,000

**(c) Full Technical Assistance Programme
linked to agro-industry investments**

Feasibility studies	\$ 300,000
Technical Assistance and Training	400,000

Sub-Total	\$ 700,000

1* and 2* may both be needed up-front

2. F I J I

(a) Up-Front Assistance

Furniture Industries study tour and technology/desing school planning	\$	90,000
Feasibility studies		
T & B.S. timber industries		20,000
Tawanga fishery comples		23,000
IKA Corporation expansion		22,000
Fiji Coffee enterprise		22,000
Sugar Industry expansion		33,000
Sub-Total	\$	210,000

(b) Full Technical Assistance Programme
linked to agro-industries investments.

Furniture Industries Technology and Design	\$	190,000
Quality Control and improvement of timber		140,000
Fishery Ports Infrastructure development		223,000
Packaging industries and bottle manufacture	\$	150,000
Feasibility studies		
Ginger processing		22,000
Lobster farming		12,000
Marine Engineering		44,000
Meat & Vegetable Proceezing		14,000
Cocoa industry		12,000
Cold stores & Storage		33,000
Others		60,000
Sub-total	\$	900,000

3.

WESTERN SAMOA

(a) Up-Front Assistance

Feasibility study, integrated
feed mill and tuna loin plant \$ 80,000

**(b) Full technical Assistance for agro-
industries Investment and Industrial
Development Programme**

Restructuring Copra Oil Plant 75,000

Animal Feed mill upgrading 60,000 -

Timber Industries Support 50,000

Food Processing Industries 35,000

Fishery Industry Assistance 50,000

Tourist Artifacts from Agro-by products 33,000

Feasibility studies for the above 97,000

Sub-Total \$ 400,000

4. SOLOMONS

(a) Up-Front Assistance

Industry and Provincial Govt. study tour
to inspect Negros EDMS system for integrated
small scale agro-industry \$ 40,000

Additional support to current UNIDO
activities 25,000

Sub-total \$ 65,000

(b) Full Technical Assistance Programme
for Solomon Agro-Industries Development
Programme.

Feasibility studies and technical assistance.

Tuna industries Moro and Tulagi	45,000
Can manufacture plant	22,000
Timber and furniture enterprises	33,000
Ngali nut project	22,000
Animal feed mill & cCopra mill	40,000
Pineapple Plant Mailata	33,000
Crocodile skin & seaweed processing	22,000
Marine and agricultural workshops	33,000
Island shipping facilities	45,000
Cargo fleet expansion	33,000
Repair yards, slipways, workshops	50,000
Others	100,000
	500,000

5. T O N G A

(a) Up-Front Assistance

Golden Passions Fruit Processing Plant
six element action plan as detailed in
the report, Tonga section H \$ 55,000

(b) Full Technical Assistance Support for
the Development of Agro-Industries
Programme.

Feasibility studies and special technical assistance
for the following enterprise projects.

Copra oil mill	92,000
Dessicated Coconut factory	25,000
Vanilla processing	22,000
Packaging manufacture and industry	23,000
Root crops processing and snack foods	23,000
Fish and shellfish industries	20,000
Coffee processing	10,000
Banana and fruit processing	30,000
Rural island processing industry centres	35,000
Other enterprises	50,000

Sub-total \$ 300,000

6. VANUATU

(a) Up-Front Assistance

Immediate assistance to development of next 5 year plan, utilizing UNIDO industrial/economic analysis methods, MEPS, ETC.

Initial visit and drafting of programme of work. \$ 30,000

(b) Full Technical Assistance support in Programme of Industrial Planning and Investment Promotion.

Programme expert 15 m months	125,000
Headquarters support	60,000
Local experts 30 m months	60,000
Travel and overheads	50,000
Communications and data processing	45,000
Pre-Feasibility Studies	60,000

Sub-Total	\$ 400,000

THE COOK ISLANDS

A. BACKGROUND

Stretching about a thousand miles north to south the 15 islands that make up the Cook Islands encompass a sea area of 2.0 million square kilometres. The population of around 18,000 persons has declined somewhat or stagnated in recent years due to net emigration. There are now about 20,000 Cook Islanders in New Zealand but they continue to have strong family and emotional links with the islands and many now return there for retirement.

Approximately half of the population lives in Rarotonga. Most of the remainder live in the adjacent southern islands of Aitutaki, Mangaia, Atiu, Mauke and Mitiaro. The northern islands are more remote and sparsely populated with most of the people there in Pukapuka, Penrhyn, Rakahanga and Manihiki.

The main national income sources are tourism and agriculture. While tourism continues to do well, agriculture has suffered from some fluctuations in production in terms of commodities and volumes, and exports have declined in terms of certain items and stagnated overall in total value. This is due to a number of factors including problems with shipping and with processing or quality control.

Exports by Value, 1978-88 (CKI\$ thousands)

Commodity	1978	1980	1982	1984	1986	1987	1988
Fruit and Vegetables	408	920	1883	1895	1830	1707	2427
Copra	188	504	433	1013	206	65	--
Pearl Shells	--	317	165	633	715	1149	543
Processed produce	1297	1051	200	18	119	1	31
Clothing and footwear	698	1292	2011	2804	2782	8228	2931
Handicrafts	18	21	29	3	37	--	35
Other Commodities	1	85	465	148	319	889	661
Total Exports	2610	4190	5186	6514	6008	12039	6628

The Cook Islands produces a lot of cultured pearl, particularly the black pearl peculiar to the area. The pearl trade has grown enormously in recent years and is becoming a major national source of income. Most of the pearls are grown on the island of Manihiki. Generally speaking the whole economy has been growing steadily over the years and the country has low unemployment and relatively high standard of living. This fact however obscures current problems with pockets of low income communities largely dependent on subsistence livelihood and must be viewed against the alarmingly high emigration rates of recent years. Also the whole agro-industry sector has reached a critical stage from which to survive in the future it must become competitive on world markets and to do that must upgrade and produce quality products efficiently.

B. DEVELOPMENT TRENDS

One of the unfortunate aspects of the favourable climate and fertile soil in the Cooks relates to the number and variety of crops which can be produced on the islands. These include coconut, banana, pawpaw, pineapple, breadfruit, orange, lemon, coffee, tomato, lettuce, green beans, taro, cassava, maize, sweet potato, cabbage and carrot. Marketing and shipping problems, occasional hurricanes and increasingly stringent export requirements have combined to result in a number of changes in production. Small farmers tend to grow what may command a surer market at present than risk cultivating single crops in large quantities for fear of large financial loss when markets suddenly fall or become inaccessible.

The country has gone into agro-processing in a small way, but not to the degree which is necessary to secure a long term foothold in world markets. The main export market is New Zealand but there Cook Islands produce must compete with products from all over the Pacific and Australasia. It is becoming increasingly clear that a major upgrading and expansion of agro-processing is necessary if the country is to have a substantial export industry. This must be backed by continuity of supply of fresh produce.

There was a period when the Government supported the establishment of state enterprises and promoted active government involvement in industry. This is now seen to have been a mistake

and the present government is having to redress the situation. One clear example of the disadvantage of state involvement is the Kia Orana orange juice plant once a profitable exporting company which now needs to be completely revamped, fully privatised and put under professional management. some state enterprise is still promoted but only as a pilot vehicle to get an industry launched and with the intention at the outset to privatise as soon as possible.

C. POTENTIAL

Of all the South Pacific countries, the Cook Islands may have the best possibility for production of quality food products for both export and home or tourist consumption. It has a very productive soil, a well trained and competent agriculture staff (albeit small) and access to excellent markets and professional/commercial assistance through its New Zealand contacts.

There are excellent possibilities for banana, orange, coffee, pawpaw, lettuce, tomato, taro and similar crops. Coconut processing may be improved. The local small scale pig industry can grow. Offshore fishing and fish farming offer excellent prospects. Trochus shell button blanks may be produced and the quality local handcrafted products could be expanded.

For all of these items the market already exists and appropriate processing technologies are on hand. what is required is the capital and organisation. The Cooks have suffered repeatedly in the past from failure to retool or expand and organise production. As a result markets have been lost through insufficient volume even though it was demonstrated that acceptable world class products could be delivered.

To take a few specific examples: banana exports could realise a million dollars each a year from dried banana, banana powder and banana puree. and that projection considers only the maximum produce of one island. Orange juice, properly homogenised and professionally marketed would also realise several millions in export earnings. Cultured redfish from a single fish farm on one island might amount to as much as \$10.0 million in annual value.

The one thing the Cook Islands does not suffer from is a lack of export potential.

Main Crops by Area, 1988

Crop	Area (ha)	Percentage of Total Area
Coconut	763	32.1
Cassava	305	12.9
Taro	234	9.9
Banana/Plantain	178	7.5
Citrus-orange	164	6.9
Tarua	128	5.4
Mango	101	4.3
Kumara	96	4.0
Pawpaw	72	3.0
Pineapple	56	2.4
Breadfruit	42	1.8
Chestnut	31	1.3
Puraka	28	1.1
Avocado	24	1.0
Watermelon	18	0.8
Tomato	18	0.7
Coffee	17	0.8
Bean-export	9	0.4
Cabbage	6	0.3
Vanilla	4	0.1
Capsicum	3	0.1
Chilli	3	0.1
Other root crops	19	0.8
Other tree crops	36	1.5
Other vegetable crops	20	0.8
Coconuts & Other Crops	2375	100.0

D. CONSTRAINTS

The first and major constraint for all agro-industry development is capital. Too many businesses have failed to take off due to under-capitalisation. The Government has tried through the Development Bank to redress this need but due to overall limitations and perhaps a degree of over-cautiousness, has not been able to get adequate amounts of capital into local industry in a timely fashion or at really attractive rates.

A second constraint is inter-island shipping and international shipping. Fresh produce depends greatly on frequent and reasonable priced transport. In recent years the inter-island system has broken down and international shipping services have not been co-ordinated. Some vessels brought quickly into service have proved to be less than ideal for the job in terms of seaworthiness and economy of operation. The whole situation is due a complete examination and reorganisation with ultimately perhaps a government financed shipping line operating under professional management.

A third constraint is the lack of strong links and upstream organisation in the agro-industries. If new processing enterprises are to succeed, they must be assured of continuity of supply and large volumes if required. On the other hand if farmers are to plant regularly and on a larger scale, then they need to be sure their product will be purchased. This may be a responsibility of the proposed new Resource Management Secretariat which will help to secure the actions and cooperation of the various ministries and the private sector.

A fourth major constraint as in all small Pacific island countries is availability of manpower. As the population is small it is imperative that a high degree of skill and competence be invested in both technical and managerial personnel. This should be a major long term goal of the country. In the short term it may be necessary to bring in foreign professionals for key tasks in processing technology and export business management, but perhaps even for these positions the government could look first to the expatriate Cook Islands community in New Zealand which now numbers over 20,000 persons.

There are a number of other constraints including current costs of certain inputs like packaging (cans), feeds, seeds, machinery and spare parts, and they will be addressed in appropriate parts of the suggested programme.

E. OBJECTIVES

Based on all discussions to date with Government officials in several ministries, and on the mission briefing by the Minister of Agriculture, an integrated development programme is being proposed with the following five (5) major objectives which fall within the urgent priorities of the present government:

- (a) To shift emphasis from exporting raw produce to processed goods, and especially quality products.
- (b) To strengthen the indigenous private sector in both technical and managerial efficiency and to make development capital available in adequate amounts and on attractive terms.
- (c) To increase the value of exports and to reduce imports where possible.
- (d) To spread the benefits of small scale industry throughout the islands and especially to small producers.
- (e) To integrate agro-industry with the needs of the tourism sector and to develop it in ways which ensure the preservation and enhancement of the environment.

These objectives while challenging are attainable and could form the basis of a comprehensive integrated programme which would have the essential impact to enable achievement of the goals. This would be possible by constructing the programme around three chief elements: investment, technical assistance and policy. To do so, will involve thorough analysis of needs and of current policies, but much of this work is already underway. The new Resource Management Secretariat may spearhead and coordinate the work with UNIDO providing appropriate professional and technical assistance.

F. PAST UNIDO ASSISTANCE

UNIDO has had a fair involvement in the past with the Cook Islands. The technical assistance projects have generally been small and as a result of little or localised impact. Seven completed projects are:

- DP/CKI/80/002 - Product designer, handicrafts and jewellery
- SI/CKI/78/803 - Evaluation study for the setting-up of suitable decentralized small or medium capacity coconut processing plants
- DP/CKI/85/002 - Pineapple production
- SI/CKI/85/801 - Improving the set-up of the pineapple drying factory
- SI/CKI/79/802 - Evaluation of availability of non-conventional sources of energy
- SI/CKI/84/801 - Assistance in cottage-type salt production
- SI/CKI/78/802 - Small-scale processing for pineapple - feasibility study

A proposal currently approved and seeking funding is:

- US/CKI/90/070 - Assessment on the establishment of an integrated banana processing facility \$29,000

Two proposals recently identified for consideration under the regional project concern smoked fish processing and trochus shell meat processing.

The pending proposal has been overtaken by events and may be redundant by the time it is funded and started. The other two proposals are doubtful at best and even if successful, they repeat the past weakness of most UNIDO T.A. projects. This is that they

hope to encourage or facilitate investment and industry after their execution but this in fact rarely ever happens.

The reason for the failure of most T.A. projects to result in industrial developments is that they have no definite links to either investment or markets. Without those, any development is going to be very difficult and uncertain. With them there is a far greater probability that the T.A. investment whether in training, studies or equipment, will be properly utilized and prove worthwhile. This issue is discussed more fully in the general recommendations on future UNIDO programmes.

For the Cook Islands as for the whole regional programme, no further technical assistance is proposed that is not linked directly or indirectly to a genuine investment or investment programme. To do otherwise would only add to the frustration of both government and private sector, and to continue to litter the development world with the innumerable tombstones of tiny, well meaning but ineffective aid efforts.

H. PROGRAMME AND PROJECT PROPOSALS

A large, comprehensive, integrated and long term programme is proposed for the Cook Islands. The seriousness of Government, the readiness of local producers and businessmen and the considerable interest of foreign importers combine to justify such an ambitious programme at this time. The markets are already in existence, crying out for the products, the production or production potential is available in the country, and the government is committed to a major development effort.

The Programme would have at least nine elements or tasks. These would be to:

1. Get enterprises on a clear commercial footing and reduce government role to provision of infrastructure, extension services and monitoring of activities.
2. Target quality products for export and domestic markets, including "health standard" foods from banana, orange, coconut and other fruits and crops.

3. Provide and upgrade infrastructure and services such as inter-island shipping, food processing centres, roads, water and electricity.
4. Promote and encourage foreign private sector cooperation in areas like export marketing and quality control.
5. Improve the networking of produce from small farmers and island communities. (Possibly develop a scheme like the EDMS Negros system).
6. Secure low cost finance and concessional funding for both Government infrastructure and private sector. Make capital available to local industry. Avoid under-capitalisation and crippling rates or delays.
7. Develop more extensive plantations in areas which may strike bigger volume export demands such as banana, coffee, taro, orange, pawpaw or coconut. Look seriously at large scale fish farming and hydroponics.
8. Embark on a long term manpower training programme targetting middle and high level technical and managerial skills in processing, marketing, quality control, shipping and engineering services.
9. Meet tourist industry needs more from quality home-grown and home-processed products than imports. Protect, preserve and enhance the environment and cultural heritage in all development efforts.

UNIDO assistance for the above programme would be provided in five main ways. Each of these would involve considerable effort and cooperation from both UNIDO and the Government. UNIDO would:

- (i) Put together an initial comprehensive programme document including a large supporting technical assistance programme for which it would seek funding from a variety of bilateral sources.
- (ii) Together with the Cook Islands and the local private sector, undertake pre-feasibility and feasibility or

costing studies, and also identify markets and possible foreign private sector partners.

- (iii) Locate sources of low-cost and concessional finance for the investment programme and extend professional assistance as required for the efficient management of the development funds.
- (iv) Help Government develop policies and strategies to promote industry and to create and maintain a favourable climate for investment.
- (v) Assist the Cook Islands from Regional Technical Assistance Programmes in areas where common needs exist such as inter-island shipping, feed mills, inter-Pacific trade. Promote regional cooperation in trade and industry along with other UN and bilateral aid agencies and regional South Pacific organisations.

The cost of the urgent initial work would be met, it is proposed, from UNIDO special funds and from UNDP. It is hoped that as the programme gets fully underway, bilateral pledges to the technical assistance programme would come on stream and take up the burden of much of the cost.

UNIDO is well placed to help mobilise investment finance as well as grant aid. It would actively seek contributions of concessional money to supplement the major Government borrowings and thus bring down the total financial cost of the investment programme.

Policy and strategy analysis and recommendations would form an essential and important part of the UNIDO assistance. Issues like import duties, tariffs and fuel subsidies would be fully explored to determine their total effect on industry on producers and on the national economy.

The following schedule is suggested as a realistic estimate of the time and manpower costs of the initial phases of the Programme:

Month	Activity	Cost
1	Consultants report examined by UNIDO, UNDP and Government. Initial Comments and Recommendations.	
2	Government requests UNIDO and UNDP to go ahead with the programme with its suggested amendments.	
3	UNIDO commences work on a programme document in consultation with the Cook Islands and makes an initial general economic analysis. The document is prepared in three volumes dealing with investment, technical assistance and policy, plus the related analysis	2 m.months field 2 m.months in h.q. plus h.q. and Govt staff assistance one Govt officer travel to UNIDO hq.
4	The first pre-feasibility studies take place. As much work has already been done by Government and industry. Much of this will be completion work or finalisation of costings and market assessments.	3 months in field for 2 experts and 2 Govt officers plus extensive travel for both and local entrepreneurs to visit markets and inspect equipment.

- 1-4 While all the above is possibly
 taking place the Government some travel
 will explore finance money and
 possibilities from the 1 or 2 weeks
 international private expert
 banking sector and will advice.
 seek to get a package that
 is structured to the best
 advantage of the country.
 Once this is secured UNIDO
 will seek supplementary
 concessional funds from
 various sources.
- 5 An agreed programme document travel funds
 is signed with some initial for UNIDO
 UNDP and UNIDO support and a and UNDP
 Government commitment to personnel.
 borrow the bulk of the invest-
 ment finance from an appro-
 priate source.
- 6-9 The various technical 3 m months
 assistance project documents in field
 are finalised and some full and 3 in hq
 feasibility studies commence.
 Note that a formula for
 financing feasibility studies
 will be the worked out between
 the Government and UNIDO.
 These costs will be kept to a
 minimum by maximising inputs
 from local officers and local
 entrepreneurs plus the
 cooperating foreign private
 sector.
- 6-9 At the same time as the above, Mgt.
 the Government establishes the training
 Resource Management Secretariat inputs
 and equips it equipped and staffed. UNIDO
 UNIDO provides some management contract
 training and the Government \$40,000

addresses the task of how to deliver investment capital loans to industry from the Programme fund.

9-12	Further development of the programme mechanisms and training of staff.	\$20,000
12-60	Programme fully under way.	see below.

It is not possible at this stage to put a figure on either the investment or technical assistance costs. That would be assessed by UNIDO when preparing the Programme Document. However, based on information and suggestions to date the cost of the investments may amount to \$50 or \$100 million U.S. The initial technical assistance might amount to \$350,000. The full technical assistance programme over a five-year period might cost over \$1.0 million.

Some of the proposed private sector investment projects with a rough estimate of costs are:

<u>Aitutaki Banana Processing</u>	\$ 150,000
<u>Aitutaki Coconut Cream</u>	100,000
<u>Aitutaki Coffee and etc.</u>	45,000
<u>Refrigeration Workshop</u>	180,000
<u>Rarotonga Orange Juice Plant</u>	500,000
<u>Rarotonga Feed Mill</u>	250,000
<u>Redfish Fish Farm</u>	1,750,000
<u>Wood Products Enterprise</u>	60,000
<u>Trochus Shell Button Blanks</u>	40,000
<u>Marine and Engineering Workshops</u>	470,000
<u>Pawpaw Juice and Puree</u>	35,000
<u>Oyster Farm</u>	300,000
<u>Offshore, Outside Reef Fisheries (x10)</u>	250,000
<u>Abattoir Development</u>	150,000
<u>Packaging and Support Industries</u>	300,000
<u>Hydroponics Projects</u>	600,000
<u>Shell Jewellery Workshop</u>	180,000
<u>Taro/Breadfruit Chips</u>	25,000
<u>Fish Processing Centre</u>	35,000
<u>Rural Crafts Workshops</u>	190,000

<u>Sausage and Cured Meats</u>	70,000
<u>Deep Sea Albacore Fishery</u>	2,500,000
<u>Livestock Farm</u>	9,000,000
<u>Market Gardens and Chill Stores</u>	300,000
<u>Other Outer-island Projects</u>	7,000,000

(Some enterprises might later be expanded or duplicated on other islands.)

Related Government infrastructure development costs are extremely difficult to cost at this stage but the following might be an indication:

<u>Food Processing Centre at Aitutaki</u>	\$ 230,000
<u>Similar Centres in Other Islands</u>	920,000
<u>Provision and Upgrading of Water Supplies</u>	1,500,000
<u>Provision of Electrical Power</u>	800,000
<u>Solar and Ocean Thermal Energy Proposals</u>	6,500,000
<u>Roads Improvements</u>	3,000,000
<u>Inter Island Shipping</u>	6,000,000
<u>Piers, Jetties, Bridges, Communications</u>	2,400,000

The above estimates have no real value except as a very rough gauge of what might be needed. It is obvious however that to support a programme of the magnitude envisaged a Government investment in infrastructure of \$20 million or more may be required. How much would be in excess of planned capital expenditures would of course be determined once detailed proposals have been prepared.

FOOTNOTES:

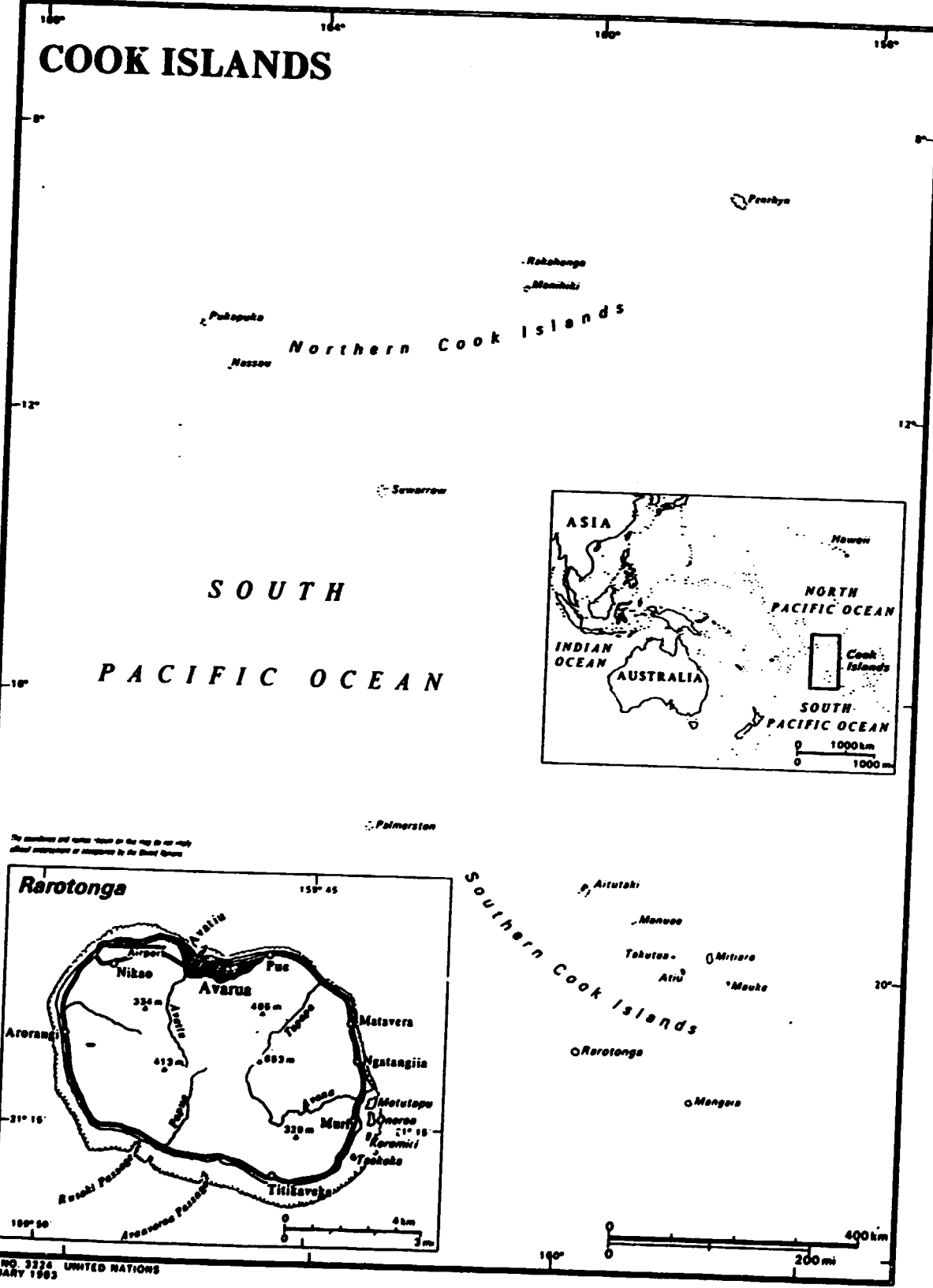
As the banana processing industry in Aitutaki is about to be established, some urgent help is requested to determine not the feasibility which is already clear, but the choice of equipment. Travel money is requested for the manager and one industry officer to visit banana drying plants in the Philippines and to inspect equipment there and in New Zealand. This will probably make unnecessary the pending feasibility project which might be better amended into assistance to design a food processing building and facility to house the three banana processing lines plus a coconut cream, coffee drying and pawpaw processing plant.

A second item urgently requiring attention is the establishment of a button blank factory to process trochus shell which at present is exported whole. Again travel money is requested to send an entrepreneur to the factories in Solomons and Vanuatu to determine the most suitable plant layout and possibly recruit one or more technicians to train workers. Equipment costs and details from Japan and Italy need to be updated and UNIDO might assist with that.

The third urgent area is for locating sources of small scale equipment to extract starch from cassava. This has been requested by the Director of Agriculture. UNIDO might contact ITDG London or TOOL the Netherlands or some such group to obtain the appropriate information.

The total cost of the urgent requests is about \$9,000. some assistance is being sought from the Philippine Government and UNIDO Honiara and Port Vila to guide the investigations in each place.

COOK ISLANDS



The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

Table S2
Major Sources of Development Assistance by Type

	1986 (all figures in US dollars)	1987	% of Change
CAPITAL ASSISTANCE:			
Bilateral			
Australia		355,288	
Federal Republic		36,160	
France		9,783,501	
Netherlands		57,700	
New Zealand	6,116,241	6,851,326	12.02
USA		153,000	
Subtotal:	6,116,241	17,236,975	181.82
UN System			
UNICEF	500	1,000	100.00
Subtotal:	500	1,000	100.00
HUMANITARIAN AID AND RELIEF:			
Bilateral			
Australia		70,087	
Federal Republic		28,249	
Netherlands		65,000	
USA		44,000	
Subtotal:		207,336	
UN System			
FAO		37,000	
UNDP		270,000	
Subtotal:		307,000	
TECHNICAL ASSISTANCE IN SUPPORT OF CAPITAL ASSISTANCE:			
Bilateral			
Australia		8,232	
Subtotal:		8,232	
TECHNICAL ASSISTANCE INDEPENDENT OF CAPITAL ASSISTANCE:			
Bilateral			
Australia		326,209	
France		126,734	
New Zealand	1,218,716	2,055,923	68.70
USA	209,200	87,900	-57.98
Subtotal:	1,427,916	2,596,766	81.86
UN System			
ESCAP		4,080	
FAO		5,000	
UNDP	306,661	288,804	-5.82
UNFPA		12,000	
UNV	71,147	89,773	26.18
Subtotal:	377,808	399,657	5.78
OTHER CAPITAL FLOWS			
		-nil-	
TOTAL:	7,922,465	20,756,966	162.00

Data derived from UNDP's Development Co-operation Report for 1986 and database of development assistance information.

Project Profile No. 27

PROJECT TITLE: Strengthening Resource Management

SECTOR: Public Administration

DURATION: Three years

PROJECT SITE: Rarotonga, Cook Islands

GOVERNMENT IMPLEMENTING AGENCY: Prime Minister's Department

PROJECT OBJECTIVES: Creation of the basic Advisory infrastructure necessary to encourage and achieve the higher levels of expenditure performance and Civil Service productivity required by the Government's intention to gradually transform the system of economic management in the Cook Islands.

ESTIMATED TOTAL COST: US\$2.1 million

BRIEF DESCRIPTION:

This project will undertake institution building initiatives designed to increase the efficiency of investment and to assist in the redirection of public sector spending. Specifically: (a) establishment of a Resource Management Secretariat; (b) increasing the institutional capacity of Government to service the investment needs of both the public and private sectors; (c) the design and delivery of executive development training, to executives in Departments whose improved performance is vital for the future; (d) installation of mechanisms and procedures to permit greater control of the number of employees in the Public sector; (e) provision of timely, accurate, and reliable data on public sector productivity and expenditure performance; and, (f) phased extension of the benefits of these innovations to selected Line Departments and Outer Island Governments.

DONORS ALREADY INVOLVED: UNDP

F I J I

A BACKGROUND

Of the six Pacific Island countries in the study, Fiji is the largest in terms of population and has the most well developed industrial base. The country is composed of two large islands, Viti Levu and Vanua Levu, some 354 lesser islands and about 260 small islets. The population of nearly three quarter million live on the two large islands chiefly although about 100 islands are actually inhabited. The two large islands comprise 87 per cent of the total land area of over 18 thousand square kilometres.

Fiji's economy is chiefly agricultural with sugar being the major crop. fish and Copra are also important. The country produces gold, and has a flourishing process and manufacture industry sector. Tourism is a major foreign exchange earner and brings in gross earnings equal to about 60 per cent of export earnings.

Fiji is a multi-racial, multi-language, multi-faith country with a mix of peoples and cultures that has created a unique and dynamic society. Of the six countries in this survey, Fiji has the largest domestic market which, together with its tourist market can sustain some national industries of reasonable size. It is also the best served with direct air and sea links to Australia, New Zealand, East Asia and the Americas.

The political and constitutional crisis of the past 3 years obscures the fact that by 1986-87 the economy was in bad shape and needed serious attention. This the interim governments have sought to address with a programme of deregulation and promotion of the private sector. The strategy appears to be working and a major national industrial expansion is due to take place. This makes the current UNIDO programme most timely.

B DEVELOPMENT TRENDS

Recent trends in the economy and industry of Fiji have been dominated

Sugar is to increase in production from a current level of 400,000 tons to 500,000 and possibly 600,000 tons. Coconut oil from copra might be expanded but this will require considerable replanting to replace aged trees. It may also require better prices to motivate both planting and harvesting.

Two cash crops which are expected to increase in volume and value in the near future are cocoa and ginger. The Government is giving priority to cultivation and processing of these two. Coffee, though a smaller crop, is currently meeting local and tourist needs, along with imported brands. Processed chillies are exported and that trade might also increase.

Tropical fruit production is being hampered by problems of production, quality and standard control. Government efforts to promote rice, poultry and dairy production have brought these items close to the self-sufficiency mark in volume. Maize, root crops and beef cattle production also benefit from extension and research-based support.

Fisheries, chiefly for tuna, are a major resource area. Exports of fish total close on \$50 million and this is 12 per cent of all Fiji exports in value. Only a small portion of the national tuna catch is taken by local vessels. The national fleet is growing now however after a period of stagnation, and there is no reason why Fiji could not harvest all of its fish with local company vessels.

Timber forests are a valuable resource with some 5,000 ^h hectares being logged annually. It is not proposed to increase this but rather to improve the quality of timber products, both ^a sawn, kiln-dried timber and furniture or wood products. There is also a need to conduct timber exporting in a more businesslike fashion and it is reckoned that such efforts could increase export prices by up to 50 per cent in the present situation.

While priority will be given to industries utilizing local resources, it must be recognized that much of Fiji's processing industry successfully exports products from imported raw materials. The canned mackerel industry is one example of this. It utilizes fish from Chile, Mexico and USA, plus tin sheeting from Korea and sells the resulting product in Fiji and the surrounding Pacific states. This industry is also expanding.

Along with the expansion of the fish and processing industries there are opportunities for supporting industries like shipyards, marine workshops, refrigeration workshops, ice plants, cold stores, transport servicing stations and small scale manufacture of mechanical and engineering components.

D CONSTRAINTS

A major constraint to industrial development in Fiji for many years was the restricting effect of government regulation. This resulted in formidable bureaucratic obstacles and frustrating delays for any business activities, particularly those breaking new ground, or involved in import/export. The present interim government is pursuing vigorously a policy of deregulation and support of the private sector in an effort to free the economy from the former straitjacket of unnecessary controls and interference.

Access to adequate amounts of investment capital is another national constraint for industry. Money is available from the commercial and development banks at moderate rates of interest but the needs of the growing industries are so large that substantial external sources will have to be tapped in addition to local sources.

Credit availability to the rural and small scale sector is a concern of government at present. A number of ideas are being considered including the establishment of a "Grameen" style bank for rural peasants. There is also a need to provide cooperatives with adequate credit. Some \$2.0 to \$7.0 million is needed to fund cooperative borrowing in the country.

Skilled manpower is in short supply in Fiji and this is currently one of the most serious constraints. During the political crisis of 1987 hundreds of highly qualified persons emigrated to Australia and other countries to find more lucrative employment. This has left Fiji with a serious manpower shortage at the senior level which will take considerable efforts in education and training to overcome. The University of the South Pacific located in Fiji has four schools and 2000 students.

At the technical level the country has a number of specialist schools

and colleges including the Fiji School of Medicine and the Fiji college of Agriculture. There is also the Fiji Institute of Technology and the Fiji National Training Council. Although numbers of full time, short term and part time or distance learning students are impressive, this should not be allowed to obscure serious weaknesses in the system. In some cases qualified instructors are so scarce that previous year students are teaching next year classes - a short term measure that is highly unsatisfactory. There is also too large a gap between industrial skills requirements and the weak theoretical offering of some of the courses.

As in most other countries in the study, inter-island shipping services are inadequate and many small producers have great difficulty getting their crops to market in time or at reasonable cost. It is not clear whether the existing fleet of transport vessels are unsuited to collection of smaller amounts of cargo from numerous locations, or whether there is a management problem. It may be that a series of small island collection centres may have to be established to rationalize the system and to facilitate easier and more frequent collection of cargo. Whatever the solution^o, the problem will have to be studied thoroughly and addressed adequately to eliminate the constraint.

The shipping problem may extend to the international trade. Some local companies import almost all of their requirements and export much of their produce. As a result they are paying substantial fees to international shipping lines - in some individual company cases, over \$1.0 million a year. This could be alleviated considerably with substantial retention benefits for Fiji if national ships or specially chartered vessels could be used.

Lack of adequate storage facilities in the Small islands and on the main two islands hinders production and sale of agro-produce. Both conventional stores and cold stores are needed.

An almost total lack of piers and landing facilities for fishing vessels is a serious constraint to a vital and expanding national industry. Use of cargo port or passenger port facilities is both expensive and unsatisfactory for the port authorities and the fishing vessel owners. A completely separate series of fish^aery piers and service centres is required for the growing deep sea fishing fleet which will double or even quadruple in size over the next few years.

The other major constraint which merits attention is that of utilities and communications. The Government is well aware of this and has proposed a substantial expansion of capital works and services to improve water and energy supplies, roads, wharves and airports.

E OBJECTIVES

Government objectives and plans for the agro-industry sectors are best summarised in the following extract of project plans and proposals. Details of individual project ideas are attached in the appendix.

The plans call for \$352 million in development expenditure, of which some \$266 million will have to be found from external sources. The proposed UNIDO programme of industrial expansion may help to mobilise funds to support these plans.

Of the sectors of interest to UNIDO and to the proposed programme, the following should be mentioned:

Sector	Planned Project Cost
Agriculture	\$ 45.1 million
Forestry	\$ 30.2 million
Fisheries	\$ 10.8 million
Manufacturing	\$ 11.55 million
Transport and Communications	\$151.55 million
Water supplies and drainage	\$ 19.20 million
Energy	\$ 32.35 million
Human Resource Development	\$ 7.8 million

The Government is still working on details of its development plans. The drafts available indicate that main areas of attention will be agriculture, forestry, fisheries and cooperatives. Priority will be given to sugar, cocoa, ginger, coconut, fish and fruits. The government wishes to mobilise all sections of the community in support of economic expansion, in particular, Fijian participation in commerce and industry. This is detailed in a nine point plan within the new economic strategy.

SUMMARY LIST OF ROUND TABLE MEETING PROJECTS

<u>Sector/Project</u>	<u>Total Cost</u> <u>\$ million</u>	<u>RTM External</u> <u>Assistance</u> <u>Required</u>
<u>Economic Sectors</u>		
<u>Agriculture</u>		
1. Outer Islands Agricultural Development	24.70	24.70
2. Northern Division Agricultural Development	7.50	7.50
3. Ba Watershed Management	10.40	10.40
4. Sugar Industry Expansion Feasibility Study	2.00	2.00
5. Fresh Produce Export Industry Development	0.50	0.50
	-----	-----
Sub-Total Agriculture	45.10	45.10
<u>Fisheries</u>		
6. Ika Corporation Fishing Vessels	10.80	10.80
	-----	-----
Sub Total Fisheries	10.80	10.80
<u>Forestry</u>		
7. Hardwood Reforestation	25.00	25.00
8. Forest Inventory & Monitoring	1.20	1.20
9. Forestry Sector Export Market Development and Training	4.00	4.00
	-----	-----
Sub Total Forestry	30.20	30.20
<u>Mineral Resources</u>		
10. Promotion of Mining Development & Geo-science Database	2.50	2.36
11. Upgrading of Drilling Capability	0.60	0.56
	-----	-----
Sub Total Mineral Resource	3.10	2.92
<u>Tourism</u>		
12. Manpower Development and Training for the Tourism Industry	12.05	12.05
	-----	-----
Sub Total Tourism	12.05	12.05

Manufacturing & Commerce

13. Kalabu Tax Free Zone Development	3.00	1.30
14. Equipment for the Garment Training School	0.55	0.55
15. Industrial Skills Training Study	0.27	0.27
16. National Analytical & Standards Laboratory	7.50	7.50
Sub Total Manufacturing & Commerce	<u>11.32</u>	<u>9.62</u>
<u>Total Economic Sector</u>	112.57	110.69

Infrastructure & UtilitiesTransport & Communications

17. National Transport Sector Plan	1.00	1.00
18. Replacement of two Single Lane Bridge on Queens Road	1.75	1.25
19. Cofinancing for Second Road Upgrading Project	118.00	35.00
20. Small Island Jetties	1.50	1.50
21. Improvements to Savusavu Airport	0.75	0.75
22. Upgrading of Outer Island Airports	1.20	1.20
23. Aircraft Maintenance Centre	10.00	10.00
24. Runway Improvements at Nadi Airport	14.00	14.00
25. Rural & Remote Area Telecommunications	3.35	3.35
Sub Total Transport & Communications	<u>151.55</u>	<u>68.05</u>

Water Resources, Supply and Sewerage

26. Assessment and Development of Water Resources on Small Islands	2.50	1.80
27. Rural Water Supplies Supply of Solar Pumps	1.50	1.50
28. Regional Water Supply, Navua-Deuba Area	3.00	3.00
29. Extension of Potable Water Supplies into Rural Areas	7.00	7.00
30. Appropriate Sewerage Reticulation - Suva	5.20	5.20
Sub Total Water Resources, Supply and Sewerage	<u>19.20</u>	<u>18.50</u>

Energy

31. Somosomo Hydropower Project (Taveuni)	2.00	2.00
32. Vaturu Hydropower Development (Viti Levu)	30.35	30.35
	<hr/>	<hr/>
Sub Total Energy	32.35	32.35

Physical Planning, Conservation
and Environment

33. Development of National Parks and Reserves and Heritage Conservation	10.00	10.00
	<hr/>	<hr/>
Sub Total Physical Planning, Conservation & Environment	10.00	10.00

Total Infrastructure and Utilities 213.10 128.90

Social and Community Development

34. Health Sector Development Programme	11.30	11.30
35. Upgrading of Government Primary School	1.70	1.70
36. Social Welfare Development Programme	0.85	0.85
37. Youth Training Camps and Rural Youth	3.12	3.12
38. Development of a National Food and Nutrition Surveillance System	0.45	0.45
39. Socio-economic Statistics on Women	0.50	0.50
40. Fiji Broadcasting Commission English Language Service Upgrading	1.20	1.00

Total Social and Community
Development 19.12 18.92

Human Resource Development

41. Institutional Strengthening of the Fiji Institute of Technology	- 7.80	7.80
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Total Human Resource Development 7.80 7.80

GRAND TOTAL ALL SECTORS 352.59 266.31

Sectoral Distribution of Projects
Submitted for RTM Consideration

<u>Sector</u>	<u>Number of Projects</u>	<u>Total Cost</u> (\$ million)	<u>RTM Assistance Sought</u> (\$ million)
<u>Economic Sectors</u>			
Agriculture	5	45.10	45.10
Fisheries	1	10.80	10.80
Forestry	3	30.20	30.20
Mineral Resources	2	3.10	2.92
Tourism	1	12.05	12.05
Manufacturing & Commerce	4	11.32	9.62
	16	39% 112.57	31.9% 110.69 41.6%
<u>Infrastructure & Utilities Sectors</u>			
Transport & Communications	9	151.55	68.05
Water Resources Supply & Sewerage	5	19.20	18.50
Energy	2	32.35	32.35
Physical Planning, Conservation & Environment	1	10.00	10.00
	17	42% 213.10	60.4% 128.90 48.4%
<u>Social Community Development</u>			
Health	1	11.30	11.30
Education	1	1.70	1.70
Social Welfare	1	0.85	0.85
Youth Development	1	3.12	3.12
Food & Nutrition	1	0.30	0.30
Women in Development	1	0.45	0.45
Mass Media	1	1.20	1.00
	7	17% 19.12	5.4% 18.92 7.1%
<u>Human Resource Development</u>	1	2% 7.80	2.3% 7.80 2.9%
TOTAL	41	100% 352.59	100% 266.31 100%

G UNIDO ASSISTANCE

Fiji has enjoyed the support of a full and active programme of UNIDO assistance for many years. The programme has covered a wide range of activities covering entrepreneur development, technical training, business organisation and management, industrial programming and investment.

During the mission's period of assignment in the South Pacific, the UNIDO officer in Suva was on home leave so it was not possible to meet with him. This was unfortunate but could not be avoided. However the consultant received encouraging and positive reports of his work and of the national and regional programmes. In Suva itself there was only the newly arrived UNIDO JPO and the outgoing secretary to the UNIDO officer so it was not possible to obtain a detailed brief on the UNIDO Fiji projects.

It would therefore be premature to comment on the programme and its usefulness. The consultant would however make the general observation which applies to all countries in the region and to UNIDO field projects in general. That is that however good individual projects may be, and however relevant the inputs, if the efforts are not linked to investment and to basic development goals and priorities, then their long term impact will be marginal.

Perhaps the current situation and the present stage of development plans in Fiji are a window of opportunity for UNIDO to become substantially involved with government and industry in a long term programme of industrial expansion and policy development. This would be possible if UNIDO could introduce Fiji to external sources of commercial finance and could mobilise substantial amounts of bilateral aid support. Without the investment finance, such a programme would be largely meaningless. This idea is developed further in the UNIDO programme proposal.

H RECOMMENDED PROGRAMMES AND PROJECTS

The UNIDO FAO regional programming mission has coincided in Fiji with major government efforts to liberalise and deregulate the economy and with a growing interest in the local private sector for substantial investments to expand and upgrade national industries. The situation and expressed needs justify a generous response by UNIDO which could play a key role in Fiji's industrial growth over the next decade.

Accordingly it is proposed that an Industrial Expansion Programme be set up to assist both the government and the Fiji private sector to obtain maximum benefit and economic impact from the current plans. It is not possible to say at this early stage what the investments might total. During the consultant's all too brief visit, over \$85 million worth of investment projects were brought to his attention by the private sector. Doubtless the eventual investment total will be much larger. All of the businessmen and entrepreneurs spoken to were eager to have their projects included in the proposed UNIDO programme.

Public Sector investments suggested by the Ministries of Trade and Primary Industry included substantial items such as fishing fleet facilities (piers and markets), storage buildings and cold stores for agro-produce, a timber industries technical school, a "Grameen" style rural bank and utility infrastructure (water, electricity). The inter-island shipping services require upgrading and government may become involved in provision of shipping centres for the smaller islands and isolated communities. Government investments may therefore total \$40 to \$80 million or more.

Both Government and private sector are keen to explore other sources of investment capital such as the international financial markets and to consider imaginative loan packages which may be constructed and administered in ways that reduce costs and add considerably to the advantage of the borrower.

The main sectors to be addressed by the proposed UNIDO programme of industrial expansion are:

Food processing industries

Fish capture, processing and export

Timber industries, production, downstream products and manpower training

Packaging industries for local and regional requirements

Cash crop processing and export, ginger, coffee, cocoa, spices, etc.

Traditional crops: sugar and coconut

The procedure for establishing the Industrial Expansion Programme would be as follows:

- i) Draft copy of the mission report is sent to Government for preliminary comments and reaction.
- ii) Government responds with initial comments and observations and (if favourable) requests UNIDO to prepare a Programme document in close consultation with Fiji government and industry.
- iii) UNIDO undertakes the task of preparing a programme document for Fiji, titled Industrial Expansion Programme which has 3 main sections, namely investment, technical assistance and policy.

- iv) The draft document is reviewed separately by UNIDO and by the government, and is finalised to the satisfaction of both.
- v) The programme document is signed by both parties.
- vi) the Government of Fiji and the private sector, committed to the investments detailed in the programme document are introduced to international banking and financial houses with a view to obtaining the development capital which cannot be financed from local sources. Such investment packages to be on terms and in structure advantages to the country and its industry.
- vii) With the investment commitment made by the country, UNIDO can confidently approach donors for support to fund the technical assistance component and for some concessional moneys to finance socio-economic aspects of the programme such as low cost credit to small rural producers.
- viii) UNIDO with its wide private sector contact and country offices identifies possible sources of foreign private sector cooperation on terms that would not be exploitive or unfair to Fiji in the long term.
- ix) Individual projects are finalized as required by the programme schedule and as funding is made available from donors. These projects are also linked to investments by the companies or industries concerned.
- x) The programme is now fully under way.

During the consultant's brief setay in Fiji, over twelve private sector firms expressed serious interest in a UNIDO programme of industrial expansion and asked that their current investment plans be considered for support of some kind. The following list is therefore a limited and preliminary one which will no doubt be expanded if and when a formal programme document is to be formulated.

Meat and vegetable processing. A major Fijian company in this area wishes to expand its operations and to invest in further production lines.

Ginger exporters/processors. A leading company dealing with ginger and other commodities is keen to upgrade operations.

Coffee production and processing. A local company producing high quality coffee products wishes to expand substantially.

Fish processing. A leading fish cannery is interested in a \$10.0 million expansion of its operations which include can manufacture.

Sea foods. A quality sea foods company is to expand and upgrade its export oriented activities.

Timber production. Quality sawmilling, kiln drying and production of value added timber exports is planned by a local firm.

Furniture manufacture. A successful local furniture manufacturer and exporter is keen to make a \$6.0 million investment given UNIDO assistance.

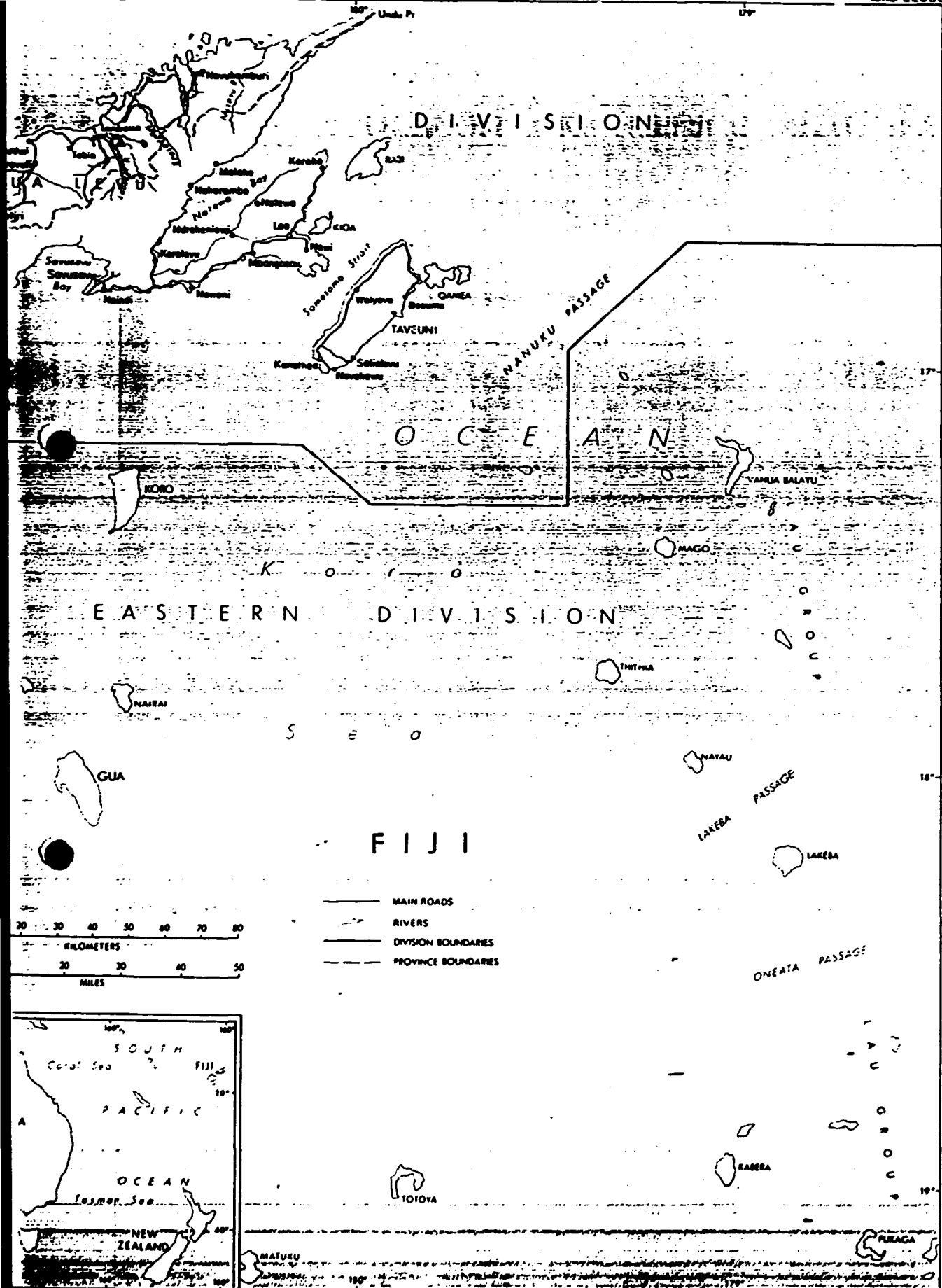
Packaging manufacture. Several producers of processed foods packaging are prepared to expand to meet local and regional needs.

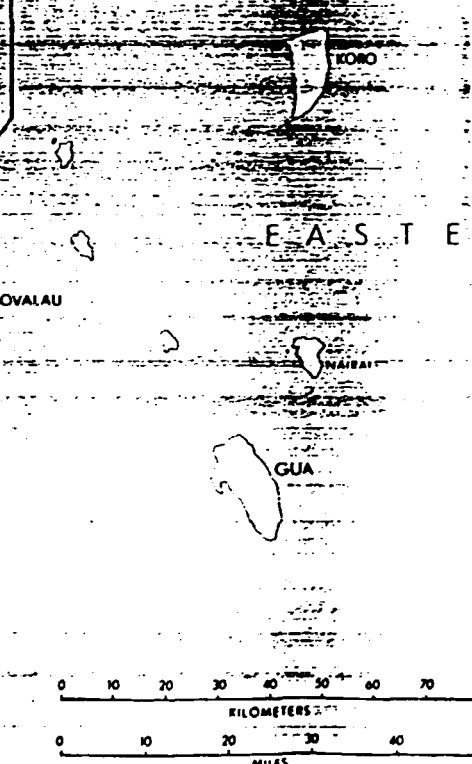
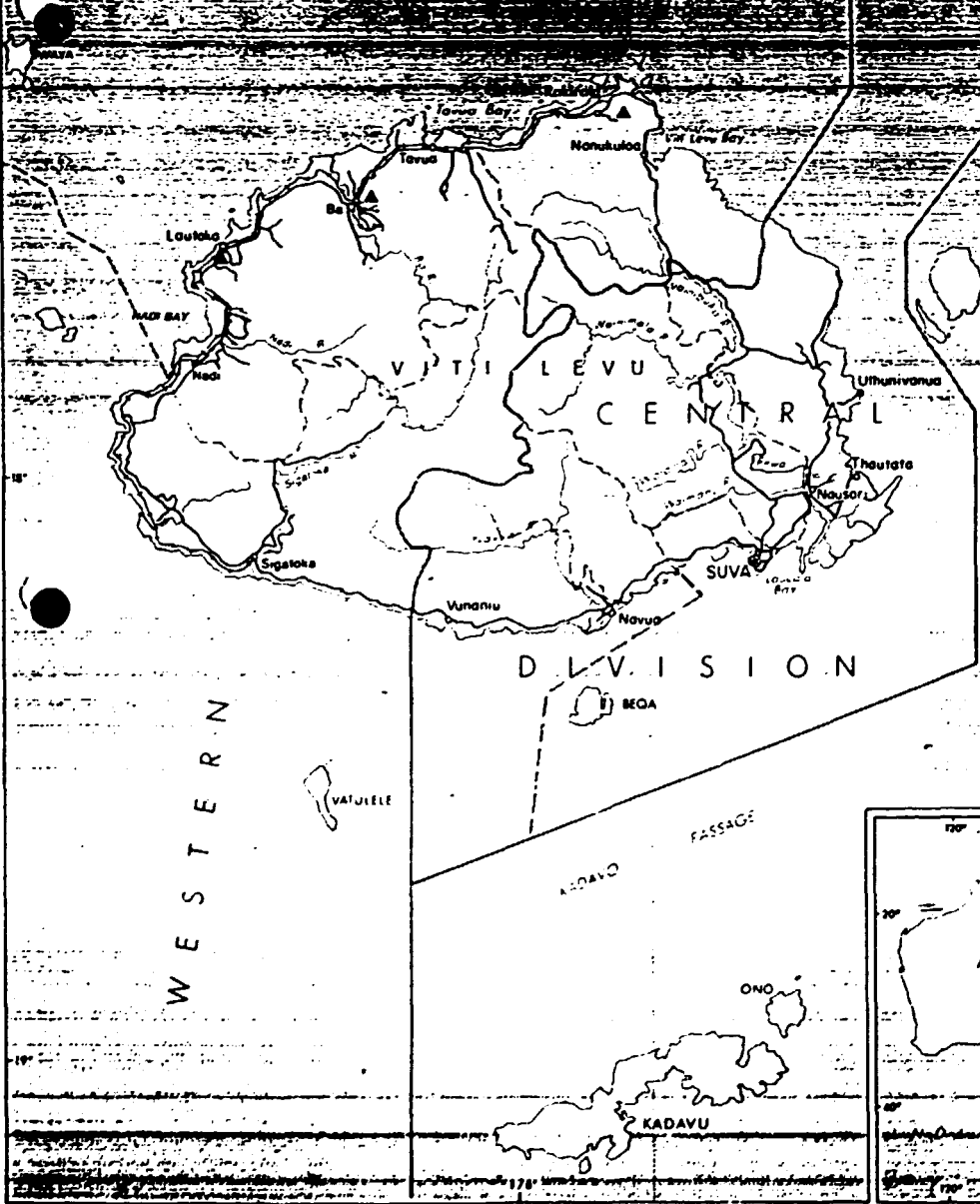
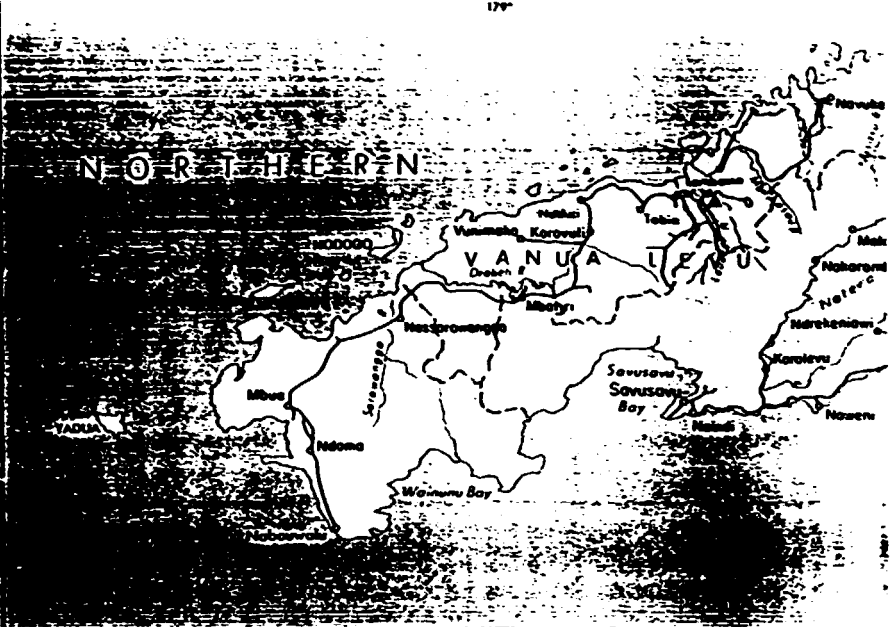
Vessel construction. A local company will upgrade its facilities to construct deep sea fishing vessels and small cargo boats.

Fishery service industries. A group of companies is combining to provide unloading, storage, repair, bunkering and maintenance services for fishing fleets.

Hydraulics for transport and processing. Expansion of hydraulics engineering services for marine and land transport and machinery is being planned.

Shellfish farming and export. A major investment in the fish farm industry is to take place and UNIDO/FAO technical assistance is requested.





WESTERN SAMOA

A. BACKGROUND

Western Samoa is the larger and western portion of the 300 mile long Samoa archipelago. It has 2,841 square kilometres of land in its two large islands, Upolu and Savaii, and several smaller islands. The population of 161,000 is growing slowly due to migration, although 50 percent of the population is aged 15 years or younger. Western Samoa has been a fully independent state with a parliamentary system of government since 1962

The country has an agriculturally dependent economy. Exports are 90 percent dependent on the primary products of coconut oil, coconut cream, cocoa, taro, copra and timber. Industrial development is at a low level and though the value added potential is enormous, export manufacturing and processing industries are small and of limited capacity.

Natural resources include forests, fisheries, coconut, root crops and tropical fruits. Government involvement in timber sawmills and in crop processing has not been successful and a programme of privatisation is under way. Samoa like most Pacific island states is hit by cyclones from time to time, and one earlier this year caused considerable devastation. The country however is a plentiful food producer and the population has always been well nourished.

Four major aid programmes to promote export trade and industrial development which Western Samoan investors may benefit from are:

SPARTECA: South Pacific Regional Trade and Economic Cooperation Agreement. This agreement with New Zealand and

Australia was negotiated by the South Pacific Forum in 1980. It allows duty free, unrestricted or concessional access for a wide range of products. Some supplementary aid and technical assistance is also provided.

PIIDS: Pacific Islands Industrial Development Scheme. The New Zealand Government funds this programme to provide grant aid for studies, training, working capital or equipment to industrial projects in which New Zealand investors have at least 20 percent equity. There is also an Australian scheme presently under review, to help Samoan partners with equity capital for joint ventures with Australian investors.

CDI: Centre for Development of Industry. This is an EEC home convention facility to assist with studies, promotion and expertise, industrial projects and joint ventures eligible for access to EEC markets.

ESP: Generalised System of Preferences. This is a Programme of preferential treatment by way of reduced or duty free tariff rates granted by developed economies to eligible products from developing countries. Western Samoa is a beneficiary under the scheme in most developed markets including that of the U.S.A.

B. DEVELOPMENT TRENDS

In a region where the small size and remoteness of the island countries limits the potential for industry, Western Samoa is one of the lesser "industrialised" countries. Its manufacturing and processing enterprises are small and too many of them in the past have been content with a low level of value added.

The dependence on un-processed or semi-processed crops for the export market resulted in a considerable drop in income between 1985 and 1990 when world prices for copra and cocoa fell and when quarantine restrictions on fruit fly and other pests closed the New Zealand and Australian markets to fruit from Western Samoa. The biggest drop in earnings has been for coconut oil, over 8.6 million tala a year (1989 on the 1985 figure). The most important export crops from the agro sector were in 1989:

Coconut Oil	7.0 million tala
Taro	5.8
Coconut Cream	5.1
Copra	3.2
Cocoa	2.1
Copra Meal	0.6

The main export customer has been New Zealand though in recent years West Germany has increased significantly its imports from Western Samoa. The total export trade was valued at 36.2 million tala in 1985 and 29.2 million tala in 1987.

Major export customers by percentage of the trade.

	1989	1985
New Zealand	34.5%	29.7%
West Germany	23.2	8.3
American Samoa	9.5	6.0
U.S.A.	9.0	17.5
Australia	8.7	31.5
Netherlands	3.6	1.6
Fiji	3.3	0.2
United Kingdom	1.1	0.5
Japan	0.4	1.5

* Included resale of an aircraft.

There are now about 190 separate industrial enterprises in Western Samoa in the areas of light manufacturing, food/beverage processing, clothing, footwear, wood processing and transport. Together they employ about 4,200 persons.

Industrial policy and planning was formerly the responsibility of the Department of Economic Development. The Department has now been renamed - Trade, Commerce and Industry, and the planning functions appear to have been transferred to Treasury. The Country has been working on a three-year rather than a five-year development plan. The current one ends this year and there is no new plan on the drawing board due to the transfer of functions.

The Governments current efforts at privatisation are timely as several government run enterprises were getting deeply into debt. The Government is also trying to reduce its role in WSTEC the large plantation corporation. Credit is available to agro industry from the Development Bank at reasonable rates of interest but the bank has had great difficulties with small holders who have no collateral and little enthusiasm for loan repayment. On the other hand, local processing industry entrepreneurs are nearly unanimous in expressing their frustration at the Development Bank

for its slow procedures and negative or ultra-cautious attitudes.

Government policy in the agro-industry sector is to move emphasis away from the traditional main crops such as coconut, cocoa and coffee towards taro, kava, banana, tropical fruits and nuts, and to livestock and if possible, fish. It has a very liberal attitude to foreign ownership of local industry and offers various financial inducements to investors.

C. POTENTIAL

Probably the area of most potential growth in the agro-industry sector is the food processing industry. coconut cream exports have been rising rapidly and there is a variety of additional coconut products that might be marketed abroad. These include coconut juice drink, coconut flakes, coconut margarine, coconut vinegar and coconut cream liqueur.

Snack foods made from breadfruit and taro chips have enormous export potential as have fruit juices in various forms. The export of fruit in processed juice form is particularly important in view of the difficulties in exporting fresh fruit to Australia and New Zealand.

Samoa's beef cattle industry could be developed much more and among other things this would require the services of an efficient animal feed mill. The current one has just been privatised and is to be reorganised. Some local meat canning takes place and this could be expanded.

The copra oil mill needs upgrading and ^aan injection of capital but given that could perform much better and produce a higher value product and by-products.

Timber exports are at a low ebb and the whole timber industry merits a new lease of life which could come about with some sensible privatisation and imaginative development of added value products like furniture, building components and tourist market articles. The possibilities for cottage craft industry aimed at the tourist market is very large.

Fisheries, surprisingly un-developed are a large potential source of export income. The main resource is tuna which is not exploited by Western Samoans, partly because of the presence of the large tuna fleet and cannery in neighbouring American Samoa, at

Pago Pago. Local reef fish resources are modest but could supply the tourist market with all its exotic needs. A giant clam farming programme has commenced locally but is still in its infancy. A good sports fishery could be developed offshore and would add further to the tourism potential.

One major fisheries opportunity may hinge on application of U.S. minimum wage levels to the tuna plant in Pago Pago. If this goes ahead it might put the cannery in a marginal financial position or at least make it lose its competitive edge. One option then for the owners (Heinz Corporation Starkist) would be to move the processing or a part of it to Western Samoa where wages are lower. Western Samoa might then produce tuna loins ready for canning and this could amount to a sizeable enterprise for the country.

D. CONSTRAINTS

A major constraint in Western Samoa is skilled manpower. both technical and managerial personnel are in very short supply. Because wages are low, the few who become qualified and competent, leave to seek more lucrative work elsewhere. There are large Samoan populations in the U.S.A. and New Zealand. The few local firms which have trained their staff well and are able to keep them are all paying higher than average wages.

A second major constraint is the increasingly stringent controls by Australia and New Zealand on the import of raw produce, to control biological pests. This constraint may prove to be a blessing in disguise since it could force Western Samoa to develop processed fruit products acceptable to those and other markets, and thus gain added value from the fruit or crops.

A third constraint which most countries in the region also face is the prevalence of cyclones.

The poor development of infrastructure - roads, water supplies, electricity, transport and shipping is a constraint to production increases, industrial growth and tourism. The Government is making considerable efforts to tackle the problem and is achieving good results in certain areas like with the national airline and water supplies, but much remains to be done, especially with roads and both local and international port facilities.

Finance for industrial development appears to be a genuine constraint for most local entrepreneurs despite protestations to the contrary by the Development Bank. To overcome the present bottleneck, a package of foreign exchange finance for an array of small industries, arranged through the commercial banks may be the quickest and most efficient solution. This is quite possible to arrange as Polynesian Airlines recently discovered when seeking the

finance its substantial expansion.

Some agro industry sectors like timber sawmilling still remain largely in Government hands. These sectors may continue to languish until appropriate privatisation takes place.

Lack of knowledge and skills in marketing is apparent in most local industry and is not surprising in view of the isolated nature of the country. Most businessmen are aware of this constraint and are eager to obtain help and training if possible from agencies like UNIDO.

E. OBJECTIVES

There are six main areas where a reasonable measure of industrial development is clearly possible even with the constraints and limitations faced by Western Samoa. Given the present generally depressed nature of industry and exports even modest efforts and improvements should result in an upturn in the country's industrial fortunes.

Government policy relative to industry will no doubt be restated shortly in view of present reorganisation and formation of the next three (3) year plan. It is expected to be a continuation of the present policy towards privatisation, improved processing of local produce, import substitution and exports, and a more favourable climate for investment.

- (1) Copra oil Plant. This government owned factory has been performing a useful function in providing a local market for copra at above world market prices, and in producing oil for export. However, lack of technical skills and investment plus the heavy burden of a high price for raw material has hindered the enterprise which may eventually be privatised. The production of higher quality oil and various by-products could put the plant on a better economic footing. At present prices export of raw copra is scarcely worth the farmers while to cut and deliver the material. Improved local processing would appear to be the route to follow.
- (2) Animal Feedmill. The government owned mill has been producing feed for pigs, poultry and other animals largely with imported materials which would appear to be somewhat self-defeating. The mill has just been privatised and the new local owners wish to reorganise production around locally available materials. This project should be supported with appropriate feasibility studies and marketing advice.

(3) Timber Industries. The country is losing over a million dollars a year potential export income from quality ^asawn timber and timber products. There is a pressing need to have this sector re-organised on sound professional lines. UNIDO has already identified the need and has two pipeline assistance projects, one to help establish a kiln drying plant and one to assist the furniture industry. A useful and interesting proposal by a local entrepreneur is to utilise sawmill wastes to produce building panels and to make quality lockwood components from coconut logs.

(4) Food Industries. This is the fastest growing sub-sector and is based mainly on coconut, rootcrops and fruit. There appears to be a huge foreign market for processed fruit juices, snack foods and coconut cream products. This is especially important in view of the difficulty in exporting fresh produce. UNIDO ^{was to} ~~is~~ ^{be} providing some technical assistance to coconut cream factories. A wide range of technical and manager help is required as well as investment capital.

(5) Fish Industries. There are a number of small and growing enterprises to form exotic species like giant clam, to export gillets of reef fish and to meet the growing tourist demand for fish food. The major resource though is tuna and any enterprise based on it would have to depend on the future plans and situation of the Pago Pago plant. Possibly the most logical alternative would be for Western Samoa to produce cooked loins which could be delivered ready for canning to the Pago cannery. UNIDO could play a useful role in assisting and advising the Western Samoa partners.

(6) Tourist Artifacts. The growing tourist trade needs a great variety of handicrafts, carvings, artifacts and specialty foods. Much of these could form the basis of a rural cottage industry. Professional guidance is needed to develop the artwork and identify marketable items. The government is looking for this kind of help. The food industry should also be involved. Local wines and liqueurs could be improved and attractively marketed to the most

discerning tourists.

Together with the above objectives there should be an integrated plan to develop infrastructure. Roads are in special need of attention. Ferries and water transport facilities should be expanded. Water and electricity networks need also to be expanded and maintained to international standard. Direct air connections to Tokyo and Honolulu would be a great stimulus to exports and tourism.

G. UNIDO ASSISTANCE

To date UNIDO assistance has been extremely limited in Western Samoa. There was help to the coir industry some years back and this year saw the completion of help to the furniture industry under UC/SAM/88/A. Assistance to a coconut cream factory under DP/RAS/86/075 has not materialized and help to provide a lumber kiln drying plant 51/SAM/88/A is delayed pending privatisation of Samoan wood products. Assistance was requested by a Samoan rattan furniture maker and was agreed too but has not been availed of as UNIDO required the small businessman not only to identify the consultant and provide accommodation but also to pay for his services and ensure accommodation was at an international hotel.

H. RECOMMENDED PROGRAMME AND PROJECTS

It is recommended that UNIDO establish a programme of investment and industrial development for the agro-industry sector, with three main elements, namely policy, technical assistance and investment.

The Programme would focus on the six major areas already detailed but would analyse the viability of various processes and products, identify the links and spin-off benefits between each and assist with thorough research into the various export markets. From the results of these studies it would provide advice to Government on the appropriate policy measures to boost industry and most favourable development strategies to follow.

Technical assistance would focus on the urgent needs for skilled manpower at technical and managerial level. Help would also be given to entrepreneurs to prepare their various feasibility studies. Finance for technical assistance would be sought from various bilateral sources and not from the IPF which is small and has more demands on it than can possibly be met.

Investment finance would be sought externally in a single integrated package to save costs. This is strongly requested by the private sector as the Développement Bank has only limited resources and can take up to three (3) years to approve a loan. It also has a tendency to provide less money than was requested leaving companies under-capitalised and thus unable to perform efficiently.

Where joint venture partners are needed UNIDO would help to identify potential companies and in this regard would cooperate with New Zealand and Australian programmes which can subsidize such ventures. Additional foreign private sector cooperation for production or marketing expertise would also be sought on some kind of reciprocal basis.

The goal of the whole programme would be effective integrated industry based on local resources and gaining maximum added value from their processing. Up to \$50 million of investment projects may be possible on presently identified needs and these would boost export earnings by up to a similar amount each year.

Table S2
Major Sources of Development Assistance to Samoa by Type

	1986 (all figures in US dollars)	1987	% of Change
CAPITAL ASSISTANCE:			
Bilateral			
Austria	2,795,804	2,660,379	-4.84
Fed. Rep. of Germany		38,757	
France		420,875	
Japan	7,418,403	4,566,221	-38.45
Netherlands		43,600	-
New Zealand	681,932	766,806	+12.45
Peoples' Rep. of China	168,500	120,000	-28.78
USA		126,200	
Subtotal:	11,064,639	8,742,838	-14.91
Other Multilateral			
EEC	10,835,500	4,036,531	-62.75
Subtotal:	10,835,500	4,036,531	-62.75
UN System			
IDA		1,440,000	
UNCDF		661,349	
UNESCO		5,000	
UNICEF		19,500	
Subtotal:		2,125,849	
HUMANITARIAN AID AND RELIEF:			
Bilateral			
Australia		380,765	
New Zealand		269,737	
Subtotal:		650,502	
TECHNICAL ASSISTANCE IN SUPPORT OF CAPITAL ASSISTANCE:			
Bilateral			
Australia		452,251	
Japan		692,762	
USA		15,000	
Subtotal:		1,160,013	

Data derived from UNDP's Development Co-operation Report for 1986 and database of development assistance information.

Table S2 (Cont.)
Major Sources of Development Assistance to Samoa by Type

	1986 (all figures in US dollars)	1987	% of Change
Other Multilateral			
Asian Development Bank		150,000	
Subtotal:		150,000	
UN System			
UNDP		75,914	
Subtotal:		75,914	
TECHNICAL ASSISTANCE INDEPENDENT OF CAPITAL ASSISTANCE			
Bilateral			
Australia	1,714,893	2,754,174	+60.60
Fed. Rep. of Germany		1,542,373	
France	135,710	260,943	+92.28
Indonesia		9,245	
Japan		2,205,456	
New Zealand	2,285,558	2,654,118	+16.13
Peoples' Rep. of China	73,000	26,954	-63.08
Thailand	6,089	9,619	+57.97
USA	1,872,900	1,380,100	-26.31
Subtotal:	6,088,150	10,842,982	+78.10
UN System			
ESCAP		3,925	
FAO		34,000	
ILO		1,730	
UNDP	672,854	1,171,692	+74.14
UNEP		7,000	
UNESCO		131,800	
UNFPA	79,260	30,952	-60.95
UNV	89,312	164,203	83.85
UPU	4,572	8,100	+77.17
Subtotal:	845,998	1,553,402	+83.62
OTHER CAPITAL FLOWS			
		-N/A-	
TOTAL:	US\$ 28,834,287	29,338,031	+1.75%

SOLOMONS - AGRO INDUSTRY

A. BACKGROUND

The Solomon Islands together comprise a land area of 28,000 sq km. The 10 to 20 main islands are rugged and mountainous consisting of metamorphic rocks and coral atolls overlaid with layers of mineral deposits. Arable land is limited except on Guadalcanal yet agriculture is the main activity for most of the population of 300,000.

English and Pidgin are the main languages of the country which is divided into seven Provinces. Agro industry activities are steadily growing despite the small population and limited resource base. The main exports are fish, timber, copra and palm oil. The country possesses extensive bauxite resources and some gold and silver are collected by hand panning methods.

Gross National Product per Head was estimated in 1986 at US\$500. Education takes nearly 30 per cent of the Government budget yet illiteracy rates remain high. Of all eligible children only 75 per cent enter Primary School and only 60 per cent complete primary school education. Health services are good and the current birth rate is around 3.5 per cent a year.

B. DEVELOPMENT TRENDS

The country has been moving steadily towards developing industry and infrastructure to process agriculture, fishery and forestry products. The present Government industrial policy focuses both on import substitution and export of surplus commodities, preferably in a processed form. Moves are underway to create a more liberal climate for the private sector, to attract investors, and to focus attention and support on sub-sectors or areas of potential industrial growth.

The Government wishes to assist industrial and manufacturing entities which significantly contribute to the value added activities of the domestic economy. The focus is on commercial enterprises which use local raw materials throughout the country.

Since the fall in copra prices and the growth of the fishery sector, fish (tuna) have become the most important export earner. There are two major fishing companies in the Solomons, one based at Noro and one at Tulagi. The Noro company Solomon Taiyo Ltd. has a cannery capable of producing 20,000 tons of canned tuna a year. Half its current production of 25 - 30,000 tons is canned and half exported whole or smoked. About 1,000 tons is sold locally. The Tulagi based company National Fisheries Development Ltd. now owned by B.C. Packers of Canada, is producing around 10,000 tons of fish which are all exported whole frozen. There is a growing trade in quality reef fish, a shell button factory has been established and there is potential for small enterprises processing giant clams, shark fin, prawns, crocodile skin, turtle shell and seaweed.

Forestry exports are of substantial importance and the Government plans to reduce the export of whole logs till by 1993 only sawn timber will be permitted to be exported. This will stimulate sawmill development. Small scale furniture and rattan enterprises are being encouraged.

Export of raw copra is becoming a marginal business and both government and private sector are looking at the possibilities for added value processing. These include coconut oil, animal feed, coconut cream and their by-products.

Oil palm plantations export substantial amounts of palm oil and are now looking at the possibilities of processing palm kernels which at present are exported whole. Cocoa producers are also looking at secondary processing.

There is growing interest in small scale processing and packaging industries for a great variety of fruits, nuts, and root crops, and at new and growing industries like bee keeping, fruit juices, biscuit making and coffee production.

The Government is seeking to become self-sufficient in chicken and livestock and as seeking to develop both animal husbandry and feed production.

Support industry development has been slow but efforts are continuing to establish workshops, boatyards, transport and packaging enterprises. Human resource development has also been slow but is progressing in some sectors. Banking and technical support services are weak but are being reviewed and overhauled or strengthened.

C. POTENTIAL

Most of the leaders of business and Government in the Solomons are more conscious of the limitations and constraints they face rather than the potential. It is difficult not to remain acutely aware of the archipelago's problems in communication and transport, its distance from major markets, its limited resource base and small, modestly educated population. The relatively small volume of certain major export commodities, and the shipping costs to major importers has led the Solomons to look for niches in the trade which they can fill by virtue of quality or meeting special requirements, rather than price.

Nevertheless the country does have valuable resources and could develop a flourishing economy by judicious exploitation and efficient management. These resources extend from large major items like fish and timber, down to small unique products like ngali nut and giant clams. The human resource is also good but needs training and development.

The major fishery resource, tuna, is the largest in the west Pacific, next to that of Papua New Guinea. It is currently estimated at 75,000 tons but could be more. As the world tuna market is growing faster than production, this resource can only increase in value. Reef fish are a small but important resource, and the Solomon Islands are ideally suited for the culture of many species including giant clam, prawns, pearl oyster, seaweed and crocodile. There is also a large sports fishery potential for the tourist industry.

Forestry resources are extensive but have not been properly assessed. Current logging activities will give way to plantation or subsistence agriculture rather than reforestation. It is vital therefore that the maximum value added be obtained from the tropical hardwoods in the form of good quality sawn timber or high quality furniture.

There is potential and urgent need for an animal feed mill to utilize the raw materials available from copra, palm kernel, rice and cassava processing, plus fish meal from the tuna factories to produce both cake and pellets for feeding livestock, chickens and prawns, and also for export. This will involve both additional investment and considerable cooperation between the private sector and government.

Fruit and fruit juice canning may offer prospects for food processors as might the production of coconut cream, ngali nuts, soft drinks, dried fruits and chips. However, detailed feasibility studies would need to be undertaken as their commercial viability is by no means certain and single factors like energy costs, transport, market requirements and machinery costs could be critical.

There would appear to be room and opportunity for development of supporting industries like can manufacture, boatbuilding, carton and sacking manufacture, cold storage and service workshops. In

some cases the establishment of a local supply of cans or packaging may have a significant impact on the viability of a processing plant.

The financial sector and service industries like management and education or training should not be overlooked. They will have to be developed substantially if industrial growth of any consequence is to take place in the Solomons. They have therefore a considerable potential and are of critical importance.

D. CONSTRAINTS

There are a number of clear constraints which would have to be addressed if industrial development is to take place. The Government's Programme of Action 1989-1993 focuses on these but in many cases the programme has yet to be translated into actions or projects since a considerable amount of groundwork has to be undertaken.

Ports and sea transport are indispensable to an island country. The Solomons has two international ports, Honiara and Noro, and has plans for a third in Malaita. Wharves and landing place provisions for inter-island trade are quite inadequate. Practically all industry sectors interviewed cited harbour facilities and shipping services as a major constraint to their operations. This is reflected in the Government Programme of Action which provides for wharf or harbour work in every province.

Investment finance for Government, large industry and small producers is in short supply and difficult to obtain. The country is in a difficult liquidity situation and the present deficit is around SI\$35 million. The investment requirements for roads, ports and shipping alone are well over \$100 million U.S. The private sector needs are even larger, taken as a whole, nationwide and including artisanal industry. The Government recognizes the problem, and is forming an Industrial Development Corporation and constructing legislation to attract and encourage investors.

Senior Government officials are looking at 'people's banks' and similar institutions abroad for guidance on how to provide effective and relevant rural financial services.

Skilled manpower at technical and managerial levels is scarce due to the small population and the relatively small proportions of the work force which have availed themselves of higher education or technical training. Existing programmes which are good, will have to be strengthened and extended to produce more trained manpower and womanpower.

Land availability is a problem for both industry and infrastructure. This is not because land is scarce but because of the complex nature of traditional ownership and conflicting claims on property. Various measures are being taken to clarify the situation and simplify procedures but the problem will continue for some time and will hinder the development of ports and the establishment of factories.

Infrastructure, particularly water and electricity supplies, housing and amenities, is cited as a serious constraint by enterprises in the provinces. This in turn can discourage workers from urban areas from taking employment in a distant plant.

Support services are a serious constraint to artisanal industries who rely on supplies of essential inputs and technical advice from extension services and agriculture or fishery centres. Progress is being made in this field but the task is enormous and it will take many years to complete.

E. OBJECTIVES

Reasonable objectives for agro-industry development must take into account the limitations and constraints described above. The Government is wisely concentrating attention on those sub-sectors which show more immediate promise. This is important in view of the economic situation which does not permit the Government the

luxury of dabbling in uncertain or very long term investments.

There are certain key industries which can be expanded, or improved in the short term and which could have a very significant impact on the national economy. They have been referred to above and are listed in the Governments Programme of Action. Fisheries, Forestry, Copra and Palm Oil are the main ones, but Cocoa, Pineapple, Palm Kernel, Ngali Nut, Coffee, Honey and Livestock are others.

It is reasonable and logical that Fisheries expand tuna production and processing, that Forestry exports only processed or sawn timber and that coconut processing be developed so that more valuable products be marketed. All this is in the national plan.

Smaller industries with export potential and import substitution could together make an important contribution to the economy. These include furniture making, boatbuilding, biscuit manufacture, honey production, ornamental shells, fruit juices, seaweed and crocodile skin. Livestock, especially chicken could be expanded towards self-sufficiency but there is a pre-requisite of a local feed mill.

Can making could be an important support industry as could packaging and transport, especially marine transport. But the latter has to be developed hand in hand with the increase and expansion of ports, harbours, piers, wharves and landing places. Indeed, significant production increases will be pointless if port facilities and shipping are not expanded to cater for them.

In pursuing all of the above objectives, care must be taken to keep individual enterprises at an optimum size in view of modest resources. It will be prudent also to analyse carefully the viability of each and their total impact on the economy so that the Government can prioritize accordingly.

G. UNIDO ASSISTANCE

UNIDO has had a useful and continuing programme of assistance in the Solomon Islands both in its own right and in cooperation with other aid agencies and donors. The current major project Promotion and Development of Small and Medium Scale Industries has generated and supported a number of beneficial activities including:

- Construction wooden vessels 1986
- Trochus shell specialist 1988
- Agricultural Land tools development 1987
- Rattan furniture improvement 1987
- Assessment of coconut processing industry 1988
- Assistance in investment code 1988
- Assistance with physical planning activities 1989
- Assistance to small scale garment factory 1989/1990
- Small scale workshops programme 1990

At a time when the Government is reviewing carefully all foreign aid and in particular the use of foreign expertise in technical assistance programmes, UNIDO has been able to convince both government and industry of the value of its projects and as a result has a high approval rate for proposals submitted. This is due in no small measure to the diligence, competence and courtesy of the C.T.A. and to the support and cooperation of his colleagues in the Ministry of Trade and Commerce and related Departments. Some \$660,000 US or 23 percent of the UNDP country programme 1987-91 was earmarked for industrial projects.

Proposals currently in the pipeline for UNIDO execution include several to assist in the processing and marketing of cash crops and in the production and marketing of fish and shell products. UNIDO in addition is preparing proposals for boatbuilding and workshop development and for further training of businessmen and managers. The Organization is also working closely with Government credit schemes to establish small businesses.

H. RECOMMENDED PROGRAMME AND PROJECTS

In view of the extensive and well advanced national plans for the agro-industry sector and of the importance of the sector for food production, for employment and for export earnings, it is proposed that a UNIDO investment programme with supporting technical assistance be established for the Solomon Islands.

The Investment Programme would target the agro-industry sector and would have the following elements which might be executed concurrently.

1. Survey and Analysis.

The programme would make an integrated assessment of the sector together with Government, to determine priorities and clarify potentials. The MEPS programme of analysis of production systems might be applied to determine the best strategies for the benefit of the national economy.

2. Financing.

With the general cost estimates from the initial survey the programme would determine overall funding requirements and would identify sources for all finance needed, private sector, Government, Banking and grant aid. This could be arranged in an integrated fashion to reduce costs and to simplify delivery.

3. Private Sector Cooperation.

Some foreign private sector cooperation will be essential for certain industries, whether for manufacturing, processing or export marketing. UNIDO would engage in a global search for interested companies prepared to invest or to cooperate in ways which will benefit the Solomon Islands and contribute to the growth of its industrial sector.

4. Feasibility Studies.

The Programme will conduct COMFAR feasibility studies for major new industries or investments and for groups of small processors supplying a large factory or a single export market. These studies may also recommend some supporting technical assistance.

5. Rural/Small Scale Sector.

An essential part of the programme would be multi-disciplinary integrated support to the rural or small scale sector in the various islands to coordinate the numerous activities, to network production and to provide technical support to the numerous small operators.

6. Banking and Credit.

An important part of the Government plan of action is the establishment of a People's Bank and an Industrial Development Corporation. The Programme would assist these developments and help develop mechanisms and procedures for delivery of essential credit to small producers and rural enterprises.

7. Policy.

The Government is seeking to update policy and legislation to stimulate the private sector and to clarify and simplify land ownership or lease procedures. The present far-reaching review will affect development in Agriculture, Forestry and Fisheries industry sectors. UNIDO may assist the Government in this task as it relates to the whole investment programme.

The following industrial enterprises, existing and proposed, may come under the umbrella of the investment programme.

Expansion of tuna fleet and cannery STL Noro
Establishment of tuna cannery NFD Tulagi
Establishment of can-making plant
Sawmills to process export timber
Furniture making enterprises
Feedmill to produce animal feed and pellets
Copra oil and meal plant SIPL Guadalcanal
Pineapple fruit and juice canning plant Malaita
Further processing of palmoil and coconut Levers
Ngali nut processing, packaging and export
Palm kernel nut processing, SIPL
Beekeeping/honey enterprises
Production chocolate liquor from cocoa bean
Coconut cream processing and packaging
Trochus shell button factories
Chicken hatchery and distribution
Processing and export of giant clams
Prawn and finfish culture and export
Crocodile skin and seaweed processing
Cold stores for rural produce
Dried fruit and banana chip processing
Rattan furniture making
Boatbuilding yards
Marine and agricultural workshops
Coffee roasting and blending
Coconut biscuit manufacture
Juices and soft drinks manufacture
Turtle shell and shark fin processing
Butterfly farms, exotic plants
Reef fish freezing and export
Fishing fleet development
Cargo fleet expansion
Repair yards, slipways, workshops

Estimated Total Capital Investment required US\$120 million approximately.

Related National Infrastructure Required:

Expansion of Honiara port and facilities

Improvements to Noro port facilities

Third national port Malaita

Small harbours, wharves, jetties, buoys

Roads and bridges

Hydro-electric power schemes

Rural electrification

Water supplies and drainage

Housing in rural development areas

Technical training and extension centres

Rural people's banks

Investment Development Corporation

Fishery and Agricultural Centres

Copra collection stations

Marine department fleet expansion

Estimated Total Government Investment US\$140 million
approximately.

Technical Assistance to support the investment programme would come in a number of forms and be financed from a variety of sources, bilateral, multilateral and Non-Government Organizations (NGOs) as is discussed in the Technical Assistance section of the report. As some of the Technical Assistance support would be in kind rather than cash (e.g. personnel and/or commodities). It would be better to have a central Technical Assistance project acting as an umbrella for numerous sub-project inputs. This would reduce expensive duplication and husband scarce resources for concerted use in the field, especially in the provincial islands. The main Technical Assistance project would also have the

flexibility to bring in national and regional short-term expertise when needed. While the individual projects remain to be worked out in detail, the main areas of technical assistance would be:

Industrial Development Planning and Management

Finance and credit delivery for small scale industry

Processing industries technology and quality control

Small scale enterprise and business management

Boatbuilding, repair yards and marine workshops

Agro-crop processing and animal feed

Networking and Marketing production of small producers

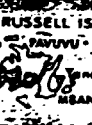
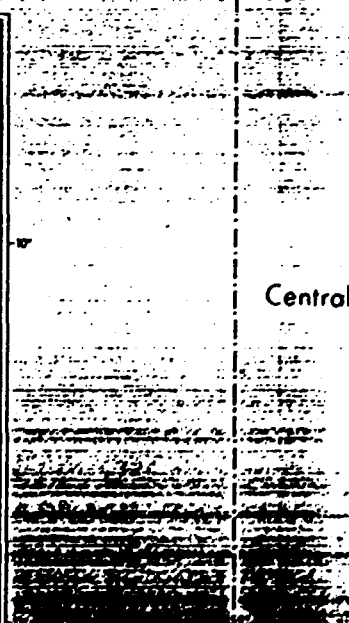
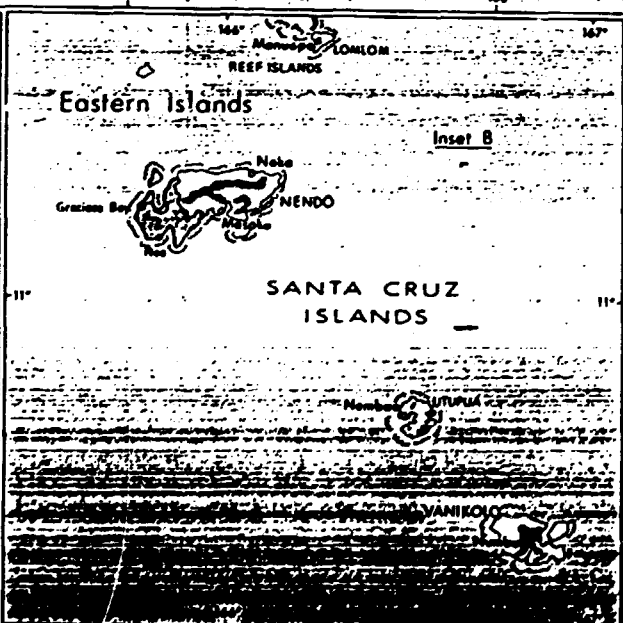
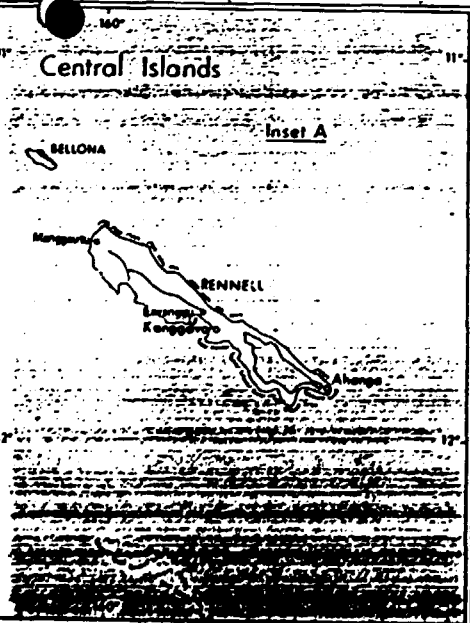
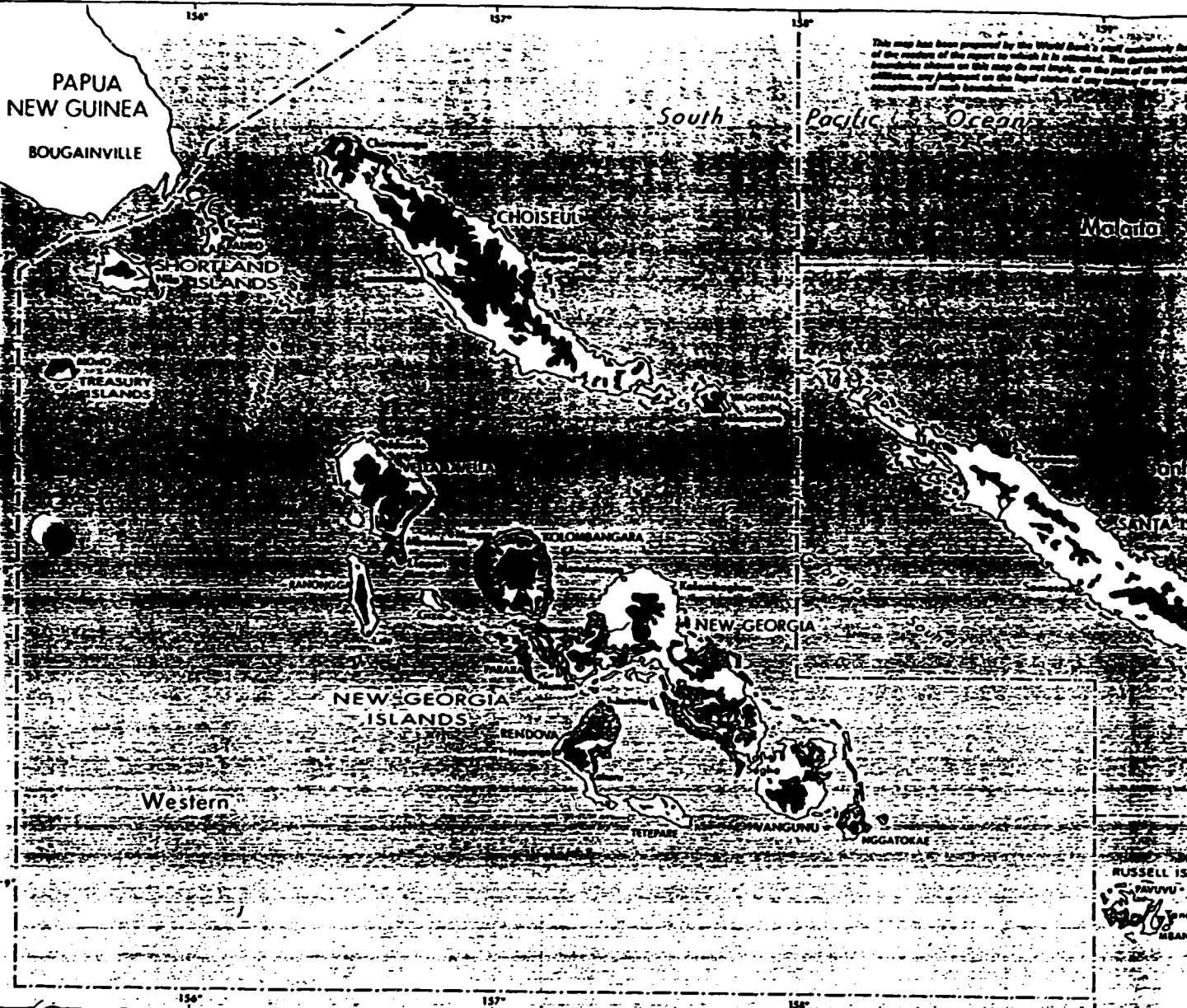
Marine products processing and export

Inter-island shipping maintenance and development

Legal, Institutional and Policy Development

Industrial Economic Monitoring and Analysis

These projects would be within and not outside of Government structures and activities and would entail maximum participation of national and regional expertise and would keep high cost foreign professional expertise to an essential minimum.



Central

THE KINGDOM OF TONGA

A BACKGROUND

There are 171 islands in the Tonga group and 36 of them are inhabited. Their land area is 699km² and they encompass a sea area of 700,000km². The population numbers around 100,000 persons most of whom are located on the main island of Tongatapu.

The main income earning activities are agriculture (coconut, banana, vanilla, fruits etc), tourism and manufacture of clothing including woollen garments of good quality. Government revenues come chiefly from import duties and taxation plus postal and transport services. In the current year they are expected to total T\$45 million.

Recurrent expenditure is expected to total T\$47 million. Development expenditures proposed was T\$72 million composed 50 per cent of Tonga Funds and 50 per cent of Offshore Funds.

Imports, chiefly, food items, greatly exceed exports. Although the land is very fertile and a wide variety of crops can be grown, dependence on sales of fresh produce has hit growers land as export markets impose more and more stringent quality control and quarantine restrictions. Semi-processed products like coconut oil are also suffering from falls in market prices for such commodities.

The distance of outer islands like the Vava'u group from Tongatapu, and the limitations of inter-island transport have hindered development on those islands and depressed sales of their produce.

Tonga's industrial base is fairly well developed nevertheless. Nuku'alofa has an industrial estate and a number of flourishing small industries. Agricultural production is well supported with a strong research facility and some extension services.

The kingdom of Tonga is eligible for aid and co-operation under the Home agreement, STABEX and the Commonwealth Secretariat, Bilateral aid comes from New Zealand, Japan, Australia, France, Canada and others. The UNDP programme exceeds \$10 million in value and help is also received from the EEC, the Asian Development Bank, the World Bank and IFAD.

ANNUAL TRADE REPORT

For the Year 1989

TABLE 3: VALUE (T\$) OF IMPORTS BY SECTION OF SITC-R AND INSTITUTIONAL

SITC - R Section and Commodity Group	<u>SECTOR</u>			Total
	Private	Government	-Quasi-Gov't	
0 Food and Live Animals	16,413,361	21,201	78,992	16,513,554
1 Beverages and Tobacco	2,933,436	11,488	298,643	3,243,567
2 Crude Materials Inedible	2,219,834	294,784	356,840	2,871,458
3 Fuels and Lubricants	7,055,996	34,332	320,454	7,410,782
4 Oils and Fats	163,137	-	2,554	165,691
5 Chemicals	3,115,086	1,010,811	180,403	4,306,300
6 Manufactured Goods by Materials	8,376,697	3,740,117	1,193,855	13,310,669
7 Machinery and Transport Equipment	8,661,422	2,455,625	2,551,442	13,668,489
8 Miscellaneous Manu- factured Article	5,429,262	688,797	402,350	6,520,409
9 Commodities not Elsewhere Specified	222,844	100,431	-	323,275
<u>T O T A L</u>	<u>54,591,075</u>	<u>8,357,586</u>	<u>5,385,533</u>	<u>68,334,194</u>

TABLE 4: VALUE (T\$) OF EXPORTS BY SECTION OF SITC-R AND INSTITUTIONAL SECTOR

SITC-R Section and Commodity Group	Private	Government	Quasi-Gov't	Total
0 Food and Live Animals	5,608,597	700,838	953,976	7,263,411
1 Beverages and Tobacco	262			262
2 Crude Materials, Inedible	54,436		13,697	68,133
3 Fuels and Lubricants	-	-	-	-
4 Oils and Fats			849,627	849,627
5 Chemicals	-	-	-	-
6 Manufactured Goods by Materials	956,369	-	-	956,369
7 Machinery and Transport Equip.	306,094	-	-	306,094
8 Miscellaneous Manufactured Articles	2,915,229	-	330	2,015,559
9 Commodities Not Elsewhere Specified	58,142	-	-	58,142
TOTAL	<u>8,999,129</u>	<u>700,838</u>	<u>1,817,630</u>	<u>11,517,597</u>

B DEVELOPMENT TRENDS

Tonga is reported to have the fastest rate of industrial development of the Pacific Island States. It has a competent staff in both industry and agriculture who approach their work with seriousness and commitment. The two main U.N. projects, UNIDO'S TON/86/002 and FAO'S TCP/TON/0051 are both excellent and timely and are led by genuine experts with a concern for national development.

The country has done well with its small manufacturing enterprises, particularly those dealing with clothing and boats. A good-quality local brewery has been established and a number of food processing ventures are in operation. There are good port facilities in Nuku'alofa and a modern airport with direct connection to New Zealand, Fiji and Western Samoa.

Like most of its neighbours in the South Pacific, Tonga has suffered from the fall in prices for copra and coconut oil, and from the strict quarantine restrictions on fruit imports to New Zealand. It also has difficulty serving its outer islands adequately with sea and air transport and this retards development there.

Copra and banana have been major production and export items in the past, but there is a general trend now towards diversification. Vanilla, passion fruit, coffee, squash, pumpkin and custard apple are among the emerging new crops of significance. The Government and local industry are exploring ways of processing such commodities on a small scale basis.

Although Tonga is now reckoned to have the fastest rate of industrial development in this part of the Pacific, much remains to be done to achieve to full potential. Infrastructure is limited to Tongatapu and though a start has been made in Vava'u, there is little real industry, in the distant islands. A considerable degree of import substitution remains to be achieved as well as export possibilities to be realised. Tonga has invested well in manpower training and has a good care of skilled and educated personnel. The Government is continuing to make human resources development a priority activity and this bodes well for the future.

C POTENTIAL

Tonga's agricultural potential has never been fully realised because lack of markets or low market prices discourage growers from both planting and harvesting. Past experience has made farmers cautious and more inclined to rely on a variety of small crops than risk planting large areas with a single crop which may meet with a poor market. In assessing potentials therefore, it is imperative that we bear in mind that they depend on the emergence of large and secure markets which would be a goal of the UNIDO project. Without good market prospects, the potentials indicated are meaningless as farmers will simply not risk the investment in labour and money to increase their production of particular commodities.

Coconut remains one of the largest and surprisingly untapped resources in the country. Of some 70,000 acres of coconut trees in Tonga, perhaps only ten per cent are harvested for copra. This is due to the low prices currently offered. In its present state the Commodities Board Mill ought to pay \$150 per ton to break even. It pays growers \$200 and has difficulty obtaining supplies at that price. In order to pay growers more, much higher value products need to be extracted, but given a higher price, production might be increased by 10,000 tons from existing plantations.

Banana is another crop with enormous potential and which could be planted and bear fruit within a fairly short time span. Export sales are greatly depressed by stringent quarantine and quality control requirements. A processing facility might get around these difficulties and thus provide growers with a stable market for much of their production.

Root crops - taro, cassava, yams, sweet potato and others can be grown in plenty and could find a ready market abroad if import requirements could be met or overcome in some way. The market for these in New Zealand amounts to many millions of dollars a year.

Other crops with potential are vanilla, pineapple, coffee, kava, pumpkin, watermelon, passion fruit, guava, custard apple, peanuts, mulberry and pandanus. These crops are dealt with in detail in the FAO part of the report. The list does not include other

possible new crops which are being tested at the MAF research station, like coffee, yam beans and black pepper.

Together these crops could support a large number of small scale processing plants both in Tongatapu and the outer islands. The plants would in several cases be multi-purpose, switching from one product to another as supplies varied with harvesting seasons.

The market prospects for these products are good in New Zealand and also in Australia, Hawaii and Japan despite competition from much larger producers. The nature of the processed foods market is such that a quality products can almost always find a richer to supply even if in volume terms it cannot be compared with major world suppliers.

To support these processing plants there is a need for and an opportunity for plants to produce the specialised packing required. At present the cost of imported packaging is a severe handicap on local industry and the problem must be overcome.

D CONSTRAINTS

There are three major constraints facing processing enterprises in the Kingdom of Tonga. These are capital, knowledge of markets and technologies, and supplies of raw materials. Manpower though limited is not a major constraint but there is a recognised need for further training and upgrading of skills.

Practically all private sector and state enterprise managers interviewed mentioned the need for investment and working capital to finance the upgrading and expansion of their plants. Tonga like many of its neighbours has relied for too long on export of fresh produce as the main overseas market for its agriculture. Processing firms have tended to focus on the domestic market which is easier to supply in terms of quality and volume. As a result they have never been really equipped to meet the higher demands of foreign markets. In contrast, the garment industry has had no option but the export and tourist markets as it imports most of its raw materials, and it has performed well while the food processing sector has languished. So there is a need for investment capital to equip

processors to meet the challenge of the market. Locally available funds are limited and the Government would like to explore with UNIDO other sources of investment money.

Processors and entrepreneurs in Tonga are surprisingly ignorant of the foreign market potential and requirements. This appears to be because of very limited contacts with potential importers. UNIDO could help greatly in this area by bringing foreign and local private sector together to discuss face to face products, markets, prices and technologies. The experience of other Pacific States like the Cooks and Western Samoa indicates that the foreign private sector is very ready and willing to cooperate in such exercises. The consultant spoke with the High Commissioners of both New Zealand and Australia who readily agreed to cooperate with any such programme.

Tongan processors face the same supply difficulties as those in the other small island states in the Pacific. Land resources are limited and farmers are cautious about allocating large plots of land to single crop. This is because past experience has shown that market can be very unreliable and a whole year's work or more may be lost if the crop cannot be taken to market in time and sold at an adequate price. The development of the processing sector will provide growers with a more stable market but it will take time to build up the confidence necessary to encourage the farmers to plant and tend and harvest in expectation of new and developing markets.

It is essential therefore that the programme contain a planning and coordinating element to work closely with the Ministry of Agriculture and Forestry and its Research and Extension services to ensure adequate supplies of the various crops required.

Human skills is the fourth constraint but though real, it is less serious because of the Governments commitment to training and because of the positive attitude of the people themselves. Expatriate instructors whom the consultant was able to interview were strong

in their praise of local students for their diligence, intelligence, application and interest. UNIDO should seize on this positive trait and maximise development of human resources throughout the whole programme.

There is a fifth constraint which might be mentioned and it is one that applies to all of the island states, namely communications difficulties or transport limitations which impede developments in the outer islands. It may therefore be appropriate to have an infrastructure element in the programme.

E OBJECTIVES

Government objectives have been well spelled out in draft documents on policy and strategy which show considerable understanding, seriousness and commitment on the part of the Government. As these documents are of major relevance to the proposed UNIDO programme, a copy of extracts is attached as an appendix to this report.

"EXTRACTIONS FROM DRAFT DPVI

Major Points to be Considered for Commodity Development 1990-94"
"Policy Issues to be considered in the Formulation of MAF Projects 1990 - 94"

and: "Sectorial Programmes under which all MAF Projects must fit"

The papers confirm and emphasize the Government's commitment to Agriculture and to the Agro-Industry sector both to meet local income and nutrition needs and to obtain added value and foreign exchange from export markets. Both food crops and cash crops are to be promoted, maintaining a healthy balance between important traditional crops and new varieties which offer good prospects for export and processing.

The central and important place occupied in society and the economy by coconut is not to ignored and will rather be enhanced by improved downstream and added value processing supported by a judicious programme of replanting. All possible coconut products are to be used including the timber, husk, shell, water and meat. The MAF Director and officials made special mention of their appreciation for the UNIDO workshop on coconut products, held in Apia, in this respect.

Attention is drawn to the fact that the Tonga Development Bank has been unable to fully meet the needs of small holder farmers. The Government therefore wishes to take a more aggressive approach to secure financial assistance for priority development activities.

The Government recognises that active participation of the private sector is essential for meaningful and sustained development and growth. The private sector is therefore to be promoted and the Government will divest itself of a number of activities it is presently involved in.

A major aim for the next development period is to encourage private sector investment and to increase the proportion of value added to locally produced goods through agro-industrial development. the ministries of Agriculture and Forestry and Labour, Commerce and Industry will cooperate to achieve these goals.

Government recognises the importance of human resource development to agriculture production, processing and industry. It therefore insists that priority be given to appropriate and relevant training that will have an impact on the sectors. To this end it supports institutional training, extension services and other special programmes to enhance and upgrade local skills.

With assistance from FAO, UNIDO and other aid organisations, a well developed planning approach has been established and is being implemented through a series of sectorial programmes under which all projects must fit to ensure the integrity of the wholistic programme approach. This accords very well with UNIDO'S own efforts in developing integrated programme planning and it should therefore be easy for UNIDO to complement these efforts in the processing and industry sectors.

Readers are referred to the appendix for more detailed information on Government objectives for the agro-industry sector. Mentions might also be made of some of the more relevant of the Agricultural projects such as: "Post Harvest Technology and Management Programme"

"Commercialisation and Privatisation of Agricultural Services CPAS"

"Tonga Sub-Regional Development Programme TSRD"

All of these projects are vehicles through which the proposed UNIDO Agro-Industry Development Programme could contribute to the national development goals. The institutional infrastructure is in place, the objectives are clearly stated, and the Government has expressed its firm commitment. UNIDO should therefore be able to support the efforts with confidence.

G UNIDO ASSISTANCE

UNIDO assistance to Tonga centres around DP/TON/86/002 "Small Industries Promotion and Entrepreneurial Development". This project, like the similar one in the Solomons is doing excellent work, has the confidence and respect of Government, and has a good appreciation of the vital and essential roles of investment, technology, foreign private sector co-operation and manpower development.

In the recent project period some 16 new enterprises were assisted in eleven separate manufacturing/processing areas. Seven useful training courses and seminars were organised and executed by the project in the past 12 months. Local response to the training was warm and appreciative. The project assisted and participated in a trade and investment mission to New Zealand in 1988 and in industrial shows and displays of Tonga made products.

The consultant believes that the existing project is the ideal vehicle for the UNIDO programme for Tonga detailed in the following pages. This would be the case even if funding was obtained from other sources. Indeed the project has shown considerable flexibility and inventiveness in obtaining and utilising funds and assistance from other sources to complement the project financed activities.

The Government and industry are interested in additional and more flexible sources of investment capital for local industry, both for state run enterprises which are to be privatised and for private industry. The Government appears to prefer direct financing institution to private sector arrangements if they can be put together. It would be useful if the current project could explore these possibilities with UNIDO and with both private sector financiers and international development banks.

H PROGRAMME AND PROJECT PROPOSALS

Tonga's agro-industries are languishing at present due to lack of adequate processing facilities and insufficient contact with foreign private sector importers. Tonga has the production potential to fill several niches in the foreign markets for processed food products but it needs both the technology to meet the high quality demands of those markets, and the direct contacts with the importers whose co-operation is essential to the success of the efforts. In order to equip its industry adequately Tonga also requires investment capital both for its private sector and for essential infrastructure. The needs extend throughout the whole food processing sector and into sub-sectors such as for packaging, transport, energy and support services.

In order to meet those needs effectively and to mobilise the necessary finance and co-operation, UNIDO proposed an Agro-Industry Development Programme which would bring together and co-ordinate investment funding, foreign private sector co-operation, technical assistance in processing and marketing, plus strategic policy advice and economic analysis. This would be a long term programme utilising funds from a variety of sources and working directly with the local private sector.

The programme would commence with some urgent up-front assistance to the passion fruit processing plant and contacts with importers of processed foods. A programme document would be prepared based on an economic analysis of the sector and of the various strategy options facing the industry. Investment and technical assistance needs would be costed and UNIDO would then seek funding on behalf of the Government. Potential sources of investment capital would be identified and a strategy worked out with Government and industry to determine the financial package most suitable to Tonga's needs and most acceptable in terms of cost and conditions. The full programme would then commence, in every case linking technical assistance with investment and with foreign private sector co-operation where appropriate but especially in export marketing.

List of projects and project areas in Tonga

- Coconut Mill - upgrade processing to produce higher value "downstream" products and by-products eg. margarine, soaps, vinegar, charcoal
- Dessicated Coconut - rationalise and re-equip factory to produce several lines of high value products including dessicated nut, cream, chips and powder.
- Golden Passions - improve product and packaging, identify markets with foreign private sector upgrade equipment, utilise additional fruits.
- Vanilla Processing - identify products and markets, locate appropriate technology and machinery for small scale production.
- Banana Processing - investigate possibilities of producing dried banana, banana powder and puree. Establish mini plants.
- Root Crops - Survey markets and processing/packaging investigate potential and viability of peeled, vacuum-packed products.
- Coffee - continue current Government efforts, in processing, packaging and marketing establish private plants.
- Snack Foods - assist entrepreneurs gear up to produce quality well presented products, taro chips, peanuts, etc.
- Fish - upgrade quality of export fish, fresh and frozen utilise offal for protein meal to add to animal feed.
- Shellfish - encourage mariculture and investigate markets develop low-cost attractive packaging.

- Feed Mill - upgrade existing one or establish new small scale animal feed mill plant utilising copra meal, wheat bran, fish meal other fillers.
- Packaging (1) - develop packaging manufacture, both local and regional to reduce current crippling costs of packaging.
- Packaging - set up additional local firm to pack rice, sugar, flour for local consumers.
- Other Industry - production of starch, alcohol, pawpaine, oils, etc.

The form UNIDO assistance would take for each of the developments or enterprises referred to would differ slightly with the needs of each company but would conform to the following general pattern:

- (i) identification of markets and products
- (ii) selection of processing systems and appropriate cost effective technologies.
- (iii) training and technology transfer for enterprise staff at shop floor and managerial levels.
- (iv) thorough assessment of raw material supplies and co-operation with MAF to ensure future production.
- (v) feasibility and costing work on company operations to the standard required by financing institutions.
- (vi) particular attention to quality control and plant efficiency and economy.

As far as possible the programme would avoid theoretical studies and reports which may have no impact or direct relevance to industry. To do so the programme will liaise very closely with the foreign private sector and will utilise consultants from relevant industries whenever possible.

No individual project will be embarked on until investment finance has been obtained, at least in principle and there is a clear commitment by the local entrepreneur. UNIDO will work with Tongan Government and industry personnel to realise effective and timely delivery of capital funds at attractive rates and terms.

Human resource development will be strongly emphasized throughout the programme to achieve a high degree of competence and professionalism at all levels in industry. Much of this may be done in co-operation with the foreign private sector to ensure that the training is relevant and professional.

In all efforts the goal will be the production of quality products of good value and well presented for marketing at a cost that will compete on world markets or at least find an appropriate niche.

The urgent up-front assistance is required to get the Golden Passions fruit processing plant operating on a sound commercial basis and producing a quality product acceptable on both local and foreign markets. A "NIDO feasibility study is requested and it should undertake the following tasks:

- (i) visit with the plant manager, potential fruit juice importers in New Zealand to determine market requirements and specify processing and quality control equipment and procedures.
- (ii) survey the existing plant, equipment and staff and determine precisely the improvements requirement to both plant and manpower to meet the market requirements.
- (iii) investigate with Government the total national production of fruits, present and potential, on which future processing throughputs may be safely planned.
- (iv) calculate precisely the investment capital and operating capital needs of the plant and the training/technical assistance needs of management and staff.
- (v). locate sources of finance for the venture, bringing in if possible the foreign importer as a marketing contract may form part of the security for the loan.
- (vi) while all the above is taking place, seek aggressively sources of low cost packaging and if possible establish local production of package items.

While the main focus of the study would be passion fruit plant (which also handles guava and custard apple) the project should also, during the New Zealand trip discuss with importers methods of semi-processing and packaging root crops, especially taro. There is an urgent need to overcome quarantine and quality control problems for fresh produce. For taro it may be possible to have a peeled, washed product vacuum packed in a form that would not spoil or permit any infestation and which would offer the consumer a convenience food, ready for cooking. The feasibility study should include this task in its work for the fruit juice plant.

NAME OF HIS HOMETOWN: NUKU'ALOFA, TONGA.

TONGA CHRONICLE Sept. 28, 1990

SMALL INDUSTRIES PROMOTION & ENTREPRENEURIAL DEVELOPMENT

a UNDP/UNIDO project in Tonga

can offer:

- ✓ training programmes in:
 - ☛ entrepreneurship development
 - ☛ book-keeping and accounting
 - ☛ basic information management
 - ☛ marketing management
- ✓ seminars on:
 - ☛ private sector development
 - ☛ entrepreneurship development training for women entrepreneurs
 - ☛ export procedures and documentation
 - ☛ bakery industry
 - ☛ automobile repair enterprises
 - ☛ furniture and joinery industries
 - ☛ garment industries
 - ☛ concrete block-making
- ✓ information about:
 - ☛ industries with scope
 - ☛ sources of machinery and raw materials
 - ☛ sources of finance
 - ☛ export-market visits
- ✓ assistance in
 - ☛ establishing joint-venture enterprises
 - ☛ making proposals for grants of incentives
 - ☛ making proposals for financial accommodation
 - ☛ making improvements in book-keeping

**FOR MORE DETAILS,
PLEASE CONTACT:**

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Business Advisory & Entrepreneurship
Development Unit,
Ministry of Labour, Commerce, and Industries,
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VANUATU

A. BACKGROUND

Vanuatu became independent ten years ago in 1980 following a condominium joint administration by Britain and France. The country is made up of 80 islands in a Y shape extending over a thousand kilometres. Eighty per cent of the 140,000 population are subsistence farming people and as a result of the high population growth, over 50 percent of the people are under 16 years old.

Although agriculture is the dominant sector of the economy, accounting for 80 percent of exports, tourism is also important as are financial activities from the tax haven Vanuatu offers companies and an international shipping register. As a result of the contrasting subsistence and commercial sectors, and the influence of tourism, Vanuatu's economy is marked by economic dualism and the cost of living is consequently higher than in the neighbouring, Solomon Islands.

Industry is generally small scale and diverse, but is growing. Of 1200 small scale manufacturers operating by 1989, just over 100 were foreign owned. Half of the value added is obtained from food industries and about a third from wood, paper and metal products. Most industry is located at or near the capital Port Vila on Efate island or Lugainville on Espiritu Santo island.

B. DEVELOPMENT TRENDS

There is a gradual move in the islands to replace forestry activities with small scale agriculture as timber is harvested. This is partly due to the time required to reforest areas and partly to the growing need for land as the population increases. The prevalence of cyclones also discourages tree planting.

Copra remains the single most important crop. Of the many secondary products, beef is growing in importance and timber, fish, coffee, cocoa, fruit, rootcrops and vegetables are all significant and give opportunity for small processing industries.

Like most other Pacific island states, Vanuatu has targeted both import substitution and export markets for its processed and manufactured goods. the size of the local tourist trade has encouraged the growth of polished shell and carved wood products, dairy produce and other food trade items.

Import substitution efforts have resulted in the establishment of small meat canneries, a brewery, soap factories, coffee plants and small scale boatbuilding. Export aimed activities include beef production which is just gearing up for EEC and USA approval, trochus shell button blanks, coconut and fruit products, still in their infancy, and handicrafts.

The manufacturing sector as of 1989 employed 1200 persons and had a total value added of 924.3 million Vatu. It comprised the following nine sub-sectors:

<u>Sub-Sector</u>	<u>Employment</u>		<u>Million Vatu Value Added</u>	
	<u>1988</u>	<u>1989</u>	<u>1988</u>	<u>1989</u>
Food Beverage and Tobacco	392	442	339	413
Wood and Wood Products	272	317	226	170
Textile Clothing and Leather	113	118	49	70
Fabricated Metal Products	43	69	24	36
Chemical, Rubber & Plastic Products	57	55	60	39
Paper and Paper Products	35	46	55	60
Other Handicrafts	53	62	28	54
Basic Metal	5	5	8	7
TOTALS	1032	1200	832	924

C. POTENTIAL

Vanuatu's favourable climate, fertile soil and clean seas form the basic advantages for its agricultural production and its flourishing tourist industry. The major crop is coconut or copra but coffee, cocoa, rootcrops, oranges and exotic fruits all grow well. The forest resources yield both soft and hard woods. Beef cattle flourish on local grasses, and pigs and chicken can be raised easily. Mineral resources which are not exploited include lime, pozzelana and manganese. Marine resources include shells, beche de mer, lobster, reef fish and tuna. Apart from shells and reef fish, they are barely exploited.

The Government of Vanuatu has endeavoured to create and maintain an economic and business climate as favourable to investment as the country's weather and natural resources. This is seen chiefly in the tax haven offered to companies and in other financial advantages offered such as the register for international shipping.

Copra, the major crop could increase in value in two ways. By better collection and storage, and more efficient port management the amount and quality of copra exported could be expanded considerably. And by processing quality coconut products, value added could be obtained.

Beef livestock farming could benefit enormously from the provision of a feed meal plant, the upgrading of slaughterhouse facilities to EEC and USA standard, and the development of marketable by-products such as leather, tallow, lard and pig or chicken feed supplements.

Fisheries may offer the biggest single agro-industry potential at present. Up to ten thousand tons of tuna and one thousand tons of surplus reef fish might be harvested and exported in a quality form. The gross foreign currency earnings from such activities

could exceed US\$10.0 million a year. And there would be considerable social and economic benefits for local fishermen, boatbuilders and plant workers.

Added value processing of cash crops and timber could be considerable expanded, yielding employment and both local and foreign currency earnings to the country. many small snack food and gourmet food items could find a ready market in the tourist trade. The national drink kava, could be exported in extract form. Sea shell jewellery products could be improved in quality and added value.

D. CONSTRAINTS

Against the background of considerable potential, must be placed the difficulties and constraints from which Vanuatu suffers as an island economy. Along with other Pacific island states it is disadvantaged by distance from major markets, relatively small population and relatively small volumes of production. Its mild climate is beset every seven years or so by severe cyclones which cause enormous damage to building and forests and which discourage long term tree planting. The existence of a considerable tourist trade and finance industry creates a dual economy syndrome and results in a high cost of living and relatively high wage levels.

The Government summarises the economic constraints as skills, capital, markets and mobility. There is a high expatriate presence owing to shortage of skilled persons in both government and industry. The limited workforce, limited quantities of raw materials and distance from markets combine to create conditions which favour small enterprises that focus on specific market niches or on specialty or quality products.

The prevalence and variety of aid programmes operating in the

country has at least one negative effect in that it fosters a dependency spirit or aid mentality which leads people to wait to be gifted items rather than working to establish them or finding local capital. The Government is working to change this and since 1988 has succeeded in financing its US\$40 million national budget entirely from domestic sources, chiefly import duties. Against the favourable business climate must be placed the smallness and somewhat parochialness of government which can confuse or discourage investors when different departments appear to take a different stand on common issues, or when very localised concerns or interests can effectively block major industrial developments.

Inter-island shipping, port management and storage facilities are major constraints to any increase in production. They have had a particularly damaging effect on the copra industry in the past year. Many local producers suffered heavy losses as a result. Lack of adequate local workshops to produce spare parts and components for small industry adds considerably to costs when these have to be purchased from abroad and air-freighted to Vanuatu.

E. DEVELOPMENT OBJECTIVES

The Government of Vanuatu is presently formulating its next five year development plan. Its present policy towards the development of industry which is expected to be strengthened is as follows:

- * Encourage self-propelling growth through import substitution and development of export industries.
- * Accelerate industrial sector development and broaden the range of products.
- * Exploit agro-industry potential to maximise value added and increase employment.
- * Encourage indigenous participation in the industrial sector.

- * Develop industrial infrastructure and support services.
- * Promote geographical distribution of industrial enterprises.
- * Strengthen the base and opportunity for small scale and rural producers to participate in industrial development.

Economically, government policy is focused on the manufacture or processing of goods from local raw materials and the development of indigenous enterprises based on local skills and talents. Socially, a major aim is to de-centralize manufacture service and retail activities to meet the needs of rural communities, to balance the distribution of economic benefits and to promote self-reliant initiatives.

Major industrial developments in the agro/fisheries/forestry sector which appear to be achievable and fall within government policy and priorities include:

- * establishment of a feed mill to supply the livestock industry.
- * re-establishment of a tuna industry and expansion of reef fisheries.
- * upgrading and expansion of timber sawmills and wood based industries.
- * improvement and expansion of meat and fish canneries.
- * development of copra and coconut product industries.
- * processing and preservation of root crops, fruits and nuts.
- * establishment of a regional factory for shell button finishing.
- * expansion and upgrading of boatyards, slipways and workshops.
- * continued development of furniture and handicraft products.

These various developments could take the form of any of the four main types of enterprises:

- * Resource based industries (e.g. copra or tuna processing)
- * Market niche industries (e.g. artifacts and handicrafts)
- * Import-Export industries (e.g. regional button finishing factory) and
- * Import replacement industries (e.g. local meat canning)

G. UNIDO ASSISTANCE

Since 1981 the Government has been receiving UNIDO assistance under a series of projects designed to support and encourage small and medium scale industry. These are: DP/VAN/85/002 and DP/VAN/88/004 linked with RAS/85/075 regional project.

The UNIDO projects have regularly received from 18 to 25 percent of the UNDP IPF for Vanuatu.

The purpose of the present UNIDO project is to strengthen government capability to identify, appraise and evaluate small scale industrial projects and to provide extension services and training to local entrepreneurs. The project is making modest progress and its efforts are well appreciated by Government.

Three existing project proposals which have not yet been funded or implemented are: XX/VAN/89/9XX Assistance to Agro-Based Industries (Processing of leather, coconuts, wooden toys, snack foods and animal feed); XX/VAN/89/9XX Assistance to the Wood Processing Industry; XX/VAN/89/9XX Rehabilitation of Cement Plant.

The UNIDO programme has been most effective in providing technical training to local manpower and in encouraging the development of local entrepreneurs. If there are any weaknesses in the current programme, apart from budgetary limitations, these might relate to the ad-hoc approach to industrial development and the lack of an overall programme plan and integrated strategy. UNIDO might usefully provide inputs to the formation of the next

five (5) year plan and to the Tropical Forests Action Plan which may be funded by the Asian Development Bank. UNIDO also seems to have had little impact on investment so essential to any industrial development.

H. PROGRAMME AND PROJECT PROPOSALS

The Vanuatu Government enjoys the assistance of a broad section of multi-lateral and bilateral aid programmes. These contribute substantially to the national development effort but they also place a support burden on the Government, particularly in the area of counterpart personnel and skilled manpower. It is with some difficulty that the government is coping with all the aid projects and extracting from them all the benefits which should be realised for future assistance place minimum burden on the administration. The following suggestions are of that nature and are designed to help government maximise effectiveness of its own staff and to utilise to the full, indigenous Ni-Vanuatu private sector businessmen.

The current UNIDO project, Establishment of Ni-Vanuatu small and medium scale industries, VAN/88/004/A/01/37 should continue, in updated form if necessary, as it provides useful practical assistance at the technical and administrative levels.

For the future and longer term achievement of government objectives for the agro-industry sector it is proposed that a five-element programme of industrial planning and investment promotion be established. This would incorporate economic/industrial planning and analysis, infrastructure development for agro-industry investment and cooperation. The programme would help Government assess the total impact on the national economy of various industrial strategies and investments, and in consequence the priority areas for development or investment. It would also help locate packages of investment finance and supporting technical

assistance as well as foreign private sector cooperation if appropriate. The elements are further described below:

1. Economic/Industrial Planning and Analysis.

This element should be arranged as soon as possible and in time to assist the formation of the next five year development plan. If possible it should also form one of the multi-lateral inputs into the TFAP, the tropical forests action plan. The cost would be modest and could be obtained from special funds or from a bilateral donor. It would involve three (3) months of an agro-industry analyst's time plus support personnel in UNIDO headquarters and provision for training and equipping a senior national agro-industry planner. The analyst/planners time would be extended if Tropical Forests Action Plan (TFAP) inputs were desired, or a separate forest industry analyst would be employed. The cost might be \$40,000 plus \$35,000 for Tropical Forests Action Plan (TFAP) inputs

2. Infrastructure Improvement and Investment for Agro-Industry Production.

It is obvious at present that inter-island shipping, storage and port facilities can barely cope with present levels of production due to inadequacies in facilities and management. Any increase in production would add to the inefficiencies, excessive costs and substantial losses being suffered at present. This element of the programme would address the infrastructure needs in transport and other services such as repair, maintenance and manufacturing services. It would together with Government, identify and specify requirements, locate investment finance and help to train managers and operators. The cost, about \$85,000, might be obtained from bilateral donors or special trust funds.

3. Establishment of Feedmill and Agro By-Products Factories.

Some feasibility work and considerable technical investigation has already gone into the feedmill and crop processing proposals. They are needed to improve the viability of the livestock industry and gain added-value from crop production. This part of the programme would sharpen the feasibility studies, locate investment finance and help local businessmen establish the enterprises.

4. Establishment of an Export Fish Industry.

The enormous marine fish potential of Vanuatu has been well noted and documented by FAO and others. Up to \$10.0 million a year may be earned from fish and fish product exports. If properly organised this industry could utilise the skills of local fishermen and have local men and women in rural areas find employment in the various fish plants. The distribution of benefits could be enormous.

Several private groups have already shown willingness to invest in the fishery sector and some have already made goodwill preliminary investments and trained local fishermen. This project would assist Government in assessing the economic and social benefits of current proposals and in negotiating nationwide participation in fisheries investments in ways which would protect resources and benefit communities.

The largest potential lies in the now dormant tuna fishery, but given balanced and well managed harvesting, reef fishing could also contribute significantly as could ocean ranching of large fish species.

5. Regional Industry and Regional Cooperation.

UNIDO is well equipped to assist and promote industries which would serve the whole region and from which all countries in the region would benefit. It is important that Pacific Island countries cooperate in this way otherwise certain industries could never be viable given only local resources or a local market.

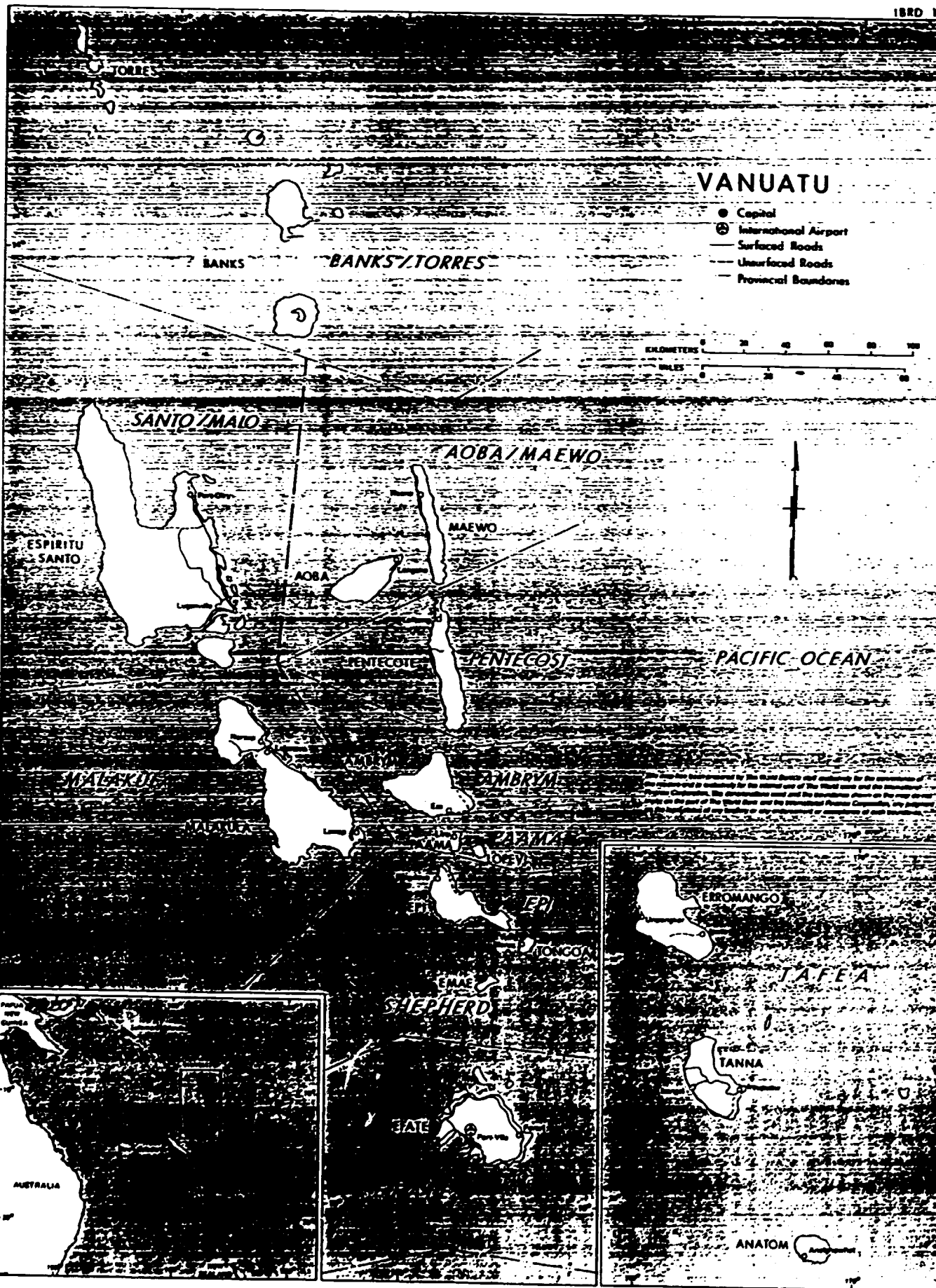
This part of the programme would help to get regional agreement and cooperation on establishment of industries which would serve all participating countries. Two examples might suffice. Vanuatu is well placed to host a regional factory to turn shell buttonblanks into finished buttons. The Solomon Islands button blank factory has already expressed interest in the idea. If other shell producing countries agree, a regional factory could be established.

A second example illustrates how Vanuatu could benefit from a regional factory in a neighbouring country. The Solomons which has a large tuna canning plant needs to start manufacturing cans in the country to reduce the cost of the empty cans which have to be imported from Singapore or similar distant country. Vanuatu's small canneries also feel keenly the cost of importing cans and would welcome a closer source of less expensive cans.

The UNIDO programme would encourage and assist and help locate finance for such regional enterprises to support agro-industry.

The whole programme suggested above could be implemented over a three year period and to minimise costs would utilise national and regional project offices for coordination. It would not take anything from UNDP IPF funds but would help the country augment scarce capital funds for investment. Total cost of the Programme might be around \$375,000 depending on the nature and duration of personnel inputs. On the benefits side the Programme could

facilitate investments of several millions which could increase local employment by many hundreds and bring in foreign currency earnings in excess of \$25.0 million a year.



FIJI - PERSONS MET

Luke Rokovada	Dep Sec, Min Trade & Commerce
John Teailia	Perm Sec, Min Prim Industries
A Sharna	Directorate of Co-operatives
Chris Lightfoot	Planning Officer, CPO
Tim Adams	Director Fisheries
Neil Underhill	Director, Fiji Coffee
Penisoni Usumake	Gen Mgr, IKA Corp
Abdul Hakik	Director, Vo-Ko Industries
Frank Eggleton	Processor and Exporter
Edmund Lee	Director, Lee's Trading
Elizabeth Clayton	Director, CHE Enterprises
C D Sharma	Mng Dir, Timber & Building Supplies
Max Grey	Timber Production Manager
James Tilbury	Gen Mngr, Feeders Seafoods
Ian R Chute	Director, Tawanga Project
Pat Duggan	UNDP Programme Officer
Sabine Roth	UNIDO JPO
Tamsy Griffin	Secretary to UNIDO Officer Fiji

TONGA - PERSONS MET

Haniteli'o Fa'anunu	Director of Agriculture
D B Sahae	UNIDO CTA
Paul Luu	Project Manager, French Coop.
W L Cordiner	British High Commissioner
John Carter	New Zealand High Commissioner
Lisiate A Akolo	Managing Director, Commodity Board
Bill Harris	Secretary, Trade, Industry & Commerce
Tom Nakao	Manager, Golden Passions
Bill Halapua	Manager, Primary Producers Div
Falekava Kupu	Chief, Industrial Promotions Unit
Bernie Wilkinson	Manager, Burns Philp Tonga
Denis R Dickinson	BESO London, England
Nigel Ringrose	UNDP Res Representative, Suva

SOLOMONS - PERSONS MET

John Allen	UNIDO Chief Technical Adviser
Keith Fisher	EEC Programme Officer
Seamus McElroy	FFA Technical Officer
Peter O'Loughlin	Finance & Marketing Mgr, Solomon Taiyo Ltd
Minoru Komito	Gen Mgr, Solomon Taiyo Ltd
Adrian E Wickham	Marketing Manager, NFD Ltd
Barry Smith	Mgr, National Fisheries Developments Ltd
Brian Woodhead	Mgr, Solomon Islands Plantations Ltd
Nick Constantine	Manager, Port of Honiara
Malcolm McGregor	EEC Project Officer
Richard Pezzulo	Small Business Advisor, UNIDO/SIG
Noel Roposi I	Govt Technical Officer, Neali Nut Station
Martin Jachnick	VSO Fisheries Specialist
Walton Abuito's	Principal Policy Analyst, PM's Office
Milton B Sibisopere	Perm Sec, Ministry of Provincial Govt
S Nanjundan	UNIDO/UNDP Review Mission
Saad K Henein	UNIDO/UNDP Review Mission

VANUATU - PERSONS MET

Jean-Pierre Nirau	Director, Nat Planning & Statis
Garvan McCann	Natural Resources Planner
Jack Hopa	Minister of Agriculture
Daniel Aaron	First Secretary
Oude Vrilink	Unido CTA
Saw Lin	Unv Bus Adviser
Tang Hon Tat	Reg Forestry Project, FAO Project Co-ord
Larry Vallance	Natai Fisheries
Simon Waters	N Efate Project
Nig Kay Brown	Pitcairn Isls Project
Bill Nolan	VAL Abattoir Manager.
Jacques Nicholls	Melektree Dairy Owner
Paul Buckley	SAEF Meat Cannery Production Manager
Georges Joe	Melanesian Shell Asst Manager
Bourdet Sergo	Business Advisor, Mel Shell

COOK ISLANDS - PERSONS MET

Tom J Marsters	Second Secretary, Agriculture
Brian Bartrum	Trade, Labour & Transport Officer
Poko T Tutara	Secretary, Trade, Labour & Transport
Ta'i Matemga-Smith	Nutritionist
Manea Turepu	Post-Harvest Treatment Consultant
Hugh Baker	Laboratory Technician
Nani Hermone	TLT Officer Aikutaki
T Jnr Maoate	Director, Aito Taki Dried Fruits Ltd
Michael Benz	Manager, Kiaorana Orange Plant
T A P Pryor	Consultant Marine Ecology & Tourism Dev
Richard Hoskins	Secretary of Agriculture
Julian Dashwood	Secretary Marine Resources

WEST SAMOA - PERSONS MET

Abu Hakim	FAO Representative
Falani Chan Tung	Director, Dept Economic Development
	Trade, Industry & Commerce
Luke Rokovada	Deputy Secretary, Ministry of Trade . . .
Jens Chr Wandel	JPO UNDP Apia W Samoa
Iulai Lavea Loia	Chief, Trade & Marketing Dev, Dept of Economic Development
Matai Vensel R Margraff	Gen Manager, WSVB Dept To . . .
Seti T Al Young	Gen Manager, Samoa Coconut Pro . . .
R F Rankin	Man Director, Talofa Wines
P Steve Percival	Director, Natural Foods Int
Farani Posala	Director, Smack & FPA
Henrietta Winterstein	Fishery Officer, W Samoa
Veta Fa'asila	Director of Fisheries
M G Kahane	UNDP Res Representative
Lars Jacobsen	FAO Officer APIA

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UNIDO PROGRAMMES AND POLICIES

The consultant in his terms of reference was asked to review and assess recent and ongoing programme and projects, to assess the impact and relevance of external assistance, and to identify actions, suggest policies and implementation options to achieve Government Objectives.

The above tasks are an ominous responsibility, yet a timely and necessary duty in the face of changes in international aid and the growing impatience of governments at the lack of impact and the slowness of development.

Review of Experience to Date:

If there is one thing that characterises the UNIDO South Pacific Programme and projects to date (and probably most UNIDO programmes) it is the fragmented and ad hoc nature of the assistance. The Organisation tends to respond to expressed needs rather than implement well thought out and longterm programmes. There is also a related tendency to substitute for longterm or integrated planning with "fishing expeditions" to look for and identify projects in a somewhat off the cuff or ad hoc fashion. There is a serious lack of strategic thinking and an apparent reluctance to address the major and fundamental constraints to industrial development.

The reasons for the programme strategy weakness are several but it is probably in the main a reaction to the way in which aid funds become available, especially UNDP IDP moneys. There is also little coordination of missions and the natural pressure on each visiting consultant to "come up with projects" and to the rather subjective and unrelated character of existing projects. Governments must also share some responsibility as officials and ministers do tend to raise with missions and consultants, ideas which happen to be uppermost in their thoughts at the time. However, the purpose of this report is not to assign blame but to determine how to improve the delivery and effectiveness of UNIDO programmes in the future. The consultant would prefer not to make detailed comments on past and existing UNIDO projects in the region. Some references will be made but miniscule criticisms of tiny elements of small projects miss the whole point - and they repeat the error UNIDO needs to avoid. In order to achieve impact and get industrial development going on the scale desired by the Government and the peoples of the South Pacific there has to be an end to the practice of frittering away scarce resources on tiny isolated efforts that will have a marginal effect at best. Let UNIDO leave such droplets of aid to the NGOs and charities which can undertake them more cheaply and more appropriately. A huge, expensive and potentially powerful Agency like UNIDO should concentrate its efforts on really substantial programmes.

Before proceeding, let it be said that UNIDO staff in the field are in many cases wanting to do this but are caught up in the present system and too often have little room for manoeuvre. Nevertheless, some are doing an excellent job and particular mention should here be made of the CTA in the Solomon where despite a cautious Government which is scrutinising all aid proposals with a jaundiced eye, - a remarkably comprehensive and integrated development plan has been compiled and accepted. Other good efforts are being made in Tonga, and in Western Samoa and the Cooks though very limited in size and number in the last two.

The other great weakness of current UNIDO programmes and the one which the consultant is convinced has most to do with lack of impact is the almost total absence of links between technical assistance and investment.

The vast majority of Government officials and private sector businessmen interviewed mentioned lack of capital as the number one constraint. Failure to address the need for capital has aggravated the local frustration with UN development efforts. To train a processor and to introduce him or her to new possibilities for industrial production and profit, then to leave them there with no access to capital just increases frustration and sows the seeds of resentment or lack of faith in UN programmes.

Too often the responsibility is shrugged off on to Government. "Let the Development Bank take care of that". To be brutally honest the development banks have proved to be a poor and inadequate vehicle for investment capital because of their bureaucratic management, limited capital and conflicting social/economic/financial goals. They need help, and industry needs capital availability on a much more substantial scale and more efficient, businesslike system.

Technical assistance without investment, like faith without works, is a useless commodity. It is interesting to note that the few really successful UNIDO projects in the region (like the Honiara garment and shell button factories) have all involved both elements.

The third major area of weakness, and one which UNIDO is aware of and is making efforts to redress is that of management. Corporate skills, business management and marketing abilities are essential in today's business and industry. To industrialise, countries have to learn to compete in the international arena, and to do so they require both technical and managerial competence of high level. This need UNIDO is now seeking to tackle and some useful models and training packages are being developed.

Coupled to management is the need for integrated planning which can help governments nationalise and improve policies and strategies for industry. There is an excellent FAO project in this field in Tonga and it appropriately

complements the entrepreneur and business training undertaken there by the UNIDO project.

A fourth area of weakness referred to already somewhat indirectly is that of thinking too small or in a too limited and short sighted way. This most obvious illustration of this is the strategy of import substitution in the South Pacific. In theory it has appeal but in practice, very serious limitations. Too often the result is inferior workmanship, inferior goods and consequent appeals for protection from cheaper imports. The businesses themselves may never be profitable due to their limited market. Most of the Governments now recognise this mistake and several progressive businessmen have shown the way to go. Produce a quality product for the world market at a competitive price and it will sell both at home and abroad.

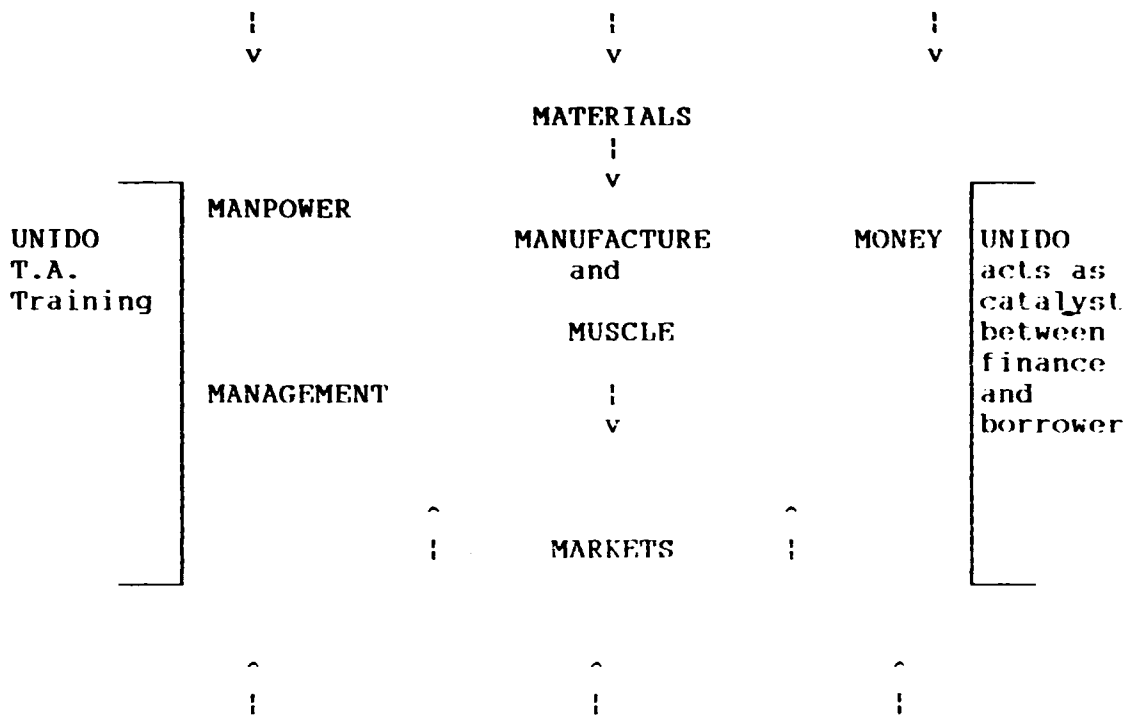
To sum up, major weaknesses have been in the areas of strategic planning, investment, management skills and markets targeted. Instead UNIDO has concentrated effort on technology and technical training, and on studies. Far too often, feasibility studies have been proposed when there was simply no investment capital in sight.

Seven Essential Elements in Industrial Development are:

Materials	Resources
Money	Capital, investment
Manufacture	Processing technology
Manpower	Human skills
Muscle	Energy sources
Management	Corporate and business skills
Markets	Demand for products

Their relationship and UNIDO's supporting and promotional role might be illustrated as in the following diagram.

UNIDO and Government prepare integrated industrial development programme and undertake initial analysis and locate funding.



UNIDO Feasibility studies, market identification, help with technology choice and promoting foreign private sector cooperation.

Programme Recommendations:

In response to previous difficulties and to rapidly changing conditions and aspirations, there has within UNIDO been a move towards broader and more integrated sectoral programmes. The consultant recommends that the approach be strengthened and be interfaced into the development process by greater participation with Governments in their planning work. FAO has enjoyed considerable success and reaped much goodwill in recent years from its support of national policy and planning workshops which have become vital elements in national economic planning activities. UNIDO should promote similar activities. It has the tools and the expertise to support governments in this way and would find a ready response to the offer of such help. Carefully planned and soundly executed, policy and planning assistance will have greater influence on industrial development and more direct relevance to ongoing UNIDO programmes than industrial consultations which may cost more.

The programmes should be integrated and if sectoral, should be so only in the broadest sense of that term. For even greater impact and especially for poorer and smaller countries, an area development approach should be followed rather than a narrow sectoral approach which if it makes sense does so only in highly developed industrialised countries.

The area development approach looks at all resources and possibilities and lays the basis for balanced and integrated development programmes with maximisation of the complimentary and spin-off benefits one industry can have from another. It also enables much greater and effective consideration of environmental and social considerations than is possible with a narrow sectoral approach. Guidelines can be determined for all sub-sectoral development and governments can be helped to ensure that priorities are met and ultimate objectives achieved.

UNIDO has developed several useful analysis tools which may be enormously helpful to policy and planning work. The organisation may also adopt and refine some methodologies recently developed in various field situations, and proving effective in development in the third world despite formidable obstacles and constraints.

Secondly it is proposed that UNIDO become much more active in helping governments and emerging industry in the developing world to obtain investment capital. Past activity in this area has been as unimaginative and predictable as it has been unhelpful. The trend has been to take the familiar route or what is thought to be the line of least resistance and look to the World Bank or to National Development Banks for finance. The results have been either inadequate or unacceptably slow. Most Development Bank loans, National or International, take years to facilitate.

This need not be the case. Leave these slower, softer loans to the kind of social or infrastructural project they are more suited to. There is plenty investment capital available. The world financial markets have money in abundance. Good projects can attract such funds. And if the projects are not good, they should not be financed at all, whether by commercial or development banks.

Too little use has been made of the expertise available in the private banking sector. Imaginative ways of securing loans and of reducing interest costs can be put together in a financial package to suit the needs of the country and to provide adequate investment capital in an efficient and flexible way. This can be done if the advice is sought. UNIDO can play a tremendously useful role in bringing financiers and governments together and in acting as "honest broker" in any such negotiations.

Thirdly, there should be more aggressive efforts to obtain the support and cooperation of the foreign private sector. Such cooperation must of course be in the developing country's interest, and not exploitive. But with that basic premise there is still great scope for participation by foreign industry. And there is considerable interest and goodwill, particularly from small and medium sized foreign companies. Throughout the South Pacific the consultant has been surprised and encouraged by the number of small business men from importing countries who have spent considerable time and money helping local processors gear up and improve to meet their markets. In a global market (which is really what the South Pacific must deal with) it is foolish to "go it alone". UNIDO can help facilitate valuable and non-exploitive foreign industry cooperation.

In addition to foreign industry, UNIDO should improve links with local businessmen. The UNIDO Regional Industry Project for the Pacific Islands has recognized the need to work more closely with the private sector and integrate technical assistance with commercial operations. The new strategy emphasis dating from late 1988 is entrepreneur-oriented rather than project-oriented and it is integrated and target-oriented. The consultant fully endorses this approach to which he would add only his ideas on investment links detailed above.

A further indication of UNIDO's more business focused approach is the recruitment of field staff from the private sector such as the current UNIDO country director, South Pacific Region whom the consultant was not able to meet but who by all reports was extremely understanding of the private sector and promotive of its development. Perhaps more headquarter's staff in UNIDO should also be recruited from private industry.

Fourthly, there should be greater emphasis on management training for third world industry. This should focus on

corporate skills, finance and personnel management, motivation, plant efficiency, marketing and quality control. In the past UNIDO has focused more on simple technical skills. These should not be neglected but management skills should become a priority.

Marketing abilities are a vital part of any successful enterprise. Small companies and industry in remote countries may leave this to their foreign commercial partners. But an appreciation is important. In the cost structure of any popular modern manufactured or processed commodity, the proportion of the price taken up by market promotion is much larger than 30 years ago and is continuing to increase. A new entrepreneur neglects this aspect at his peril.

Fifthly, in all of the above there must be the declared intention and demonstrated commitment to speed up the delivery of development aid programmes and to reduce or dispense with bureaucratic resistance and delays. The integrated programme approach and the greater utilisation of private capital and private sector cooperation should help enormously towards this goal. But there will still be a considerable amount of institutional pruning and effort to obtain efficiency and accountability from the organisations many divisions and units.

Bureaucracies naturally become self serving and additional offices create work for themselves and for each other. Too often, too much of this work is unproductive and even an impediment to real progress. Many times it can be a substitute for real effective action. UNIDO along with all UN Agencies and government bureaucracies has to fight these trends. But it is young enough and idealistic enough to make more progress in this direction than many of the older more fossilized institutions.

On the Future Nature of UNIDO Technical Assistance:

For close on 40 years now, U.N. Agencies and bilateral and programmes have functioned on similar lines and have sought to assist the developing world with technical assistance which has been generally paternalistic although well motivated and often competently delivered. The pattern has been one of provision of foreign experts who have undertaken to train or transfer technology to a recipient and somewhat unquestioning third world or poor country. Along with the direct technology transfer there have been countless thousands of studies and reports on resources, production, industry, the economy, and innumerable other subjects and aspects of development. These studies and reports, many of which have been extremely valuable and helpful, have also tended to be self-perpetuating and even a substitute for real practical help.

A considerable change is now taking place in the relationship between the aid organisations and their client governments or recipients. This change will alter the nature of technical assistance programmes in some fundamental ways. Agencies which foresee the changes and are able to assimilate new concepts and to restructure their programmes, will find a ready demand for their services. Those who are determined to persevere with conventional approaches which are no longer relevant or effective will find themselves increasingly isolated and starved of both the funding support of donors and the goodwill of the developing world.

Firstly and very rightly, Governments wish to be treated as partners and not solely as recipients in aid programmes. They wish to be properly consulted and to have their priorities and goals supported by aid programmes and not amended to suit them. This will mean much greater government involvement in both the identification and execution of aid projects. The move is seen most clearly in a recent U.N. resolution which was strongly supported and which advocated a considerable shift in emphasis toward partnership and respect for the wishes and objectives of the developing country governments.

Secondly, governments (and donors) are becoming impatient with the ineffectiveness of many aid projects. The lack of major impact is causing them to question the value of some technical assistance and to scrutinise much more carefully all aid project proposals.

Coupled to the problem of lack of impact is the escalating cost of foreign expertise which is consuming an ever larger share of project budget. This is becoming an extremely sore point with governments and is also causing concern to donors. The gap in knowledge and competence between a U.N. expert and his government counterpart is now much less than before due to better education and training, and to have one receive ten or twenty times the remuneration of the other is a recipe for resentment at least. The resentment, though understandable, would be abated if the expert performed well and proved to be of genuine help to the country. But that is not always the case. The human factor is there, and sadly many "experts" fail to justify their enormous personnel costs.

Many governments now refuse to accept an aid project if the foreign expert costs are more than 50 or 60 percent of the total budget. Many donors are now pressing the agencies to make more use of volunteers, n.g.o.s, low cost experts and regional or national experts.

The main source of funding for United Nations Agency projects has been the UNDP IPF country programme allocations. This is now everywhere under too much pressure with the different Agencies clamoring for a larger share of the cake. Meantime the governments are demanding a greater say in how

the IPF is spent. They do not regard the money as income for the UN Agencies and would rather have more freedom to look around for more effective and less costly vehicles for projects. The effects of these changes will be felt after 1993 but must surely be prepared for now.

The forces for change have other powerful undercurrents of which the U.N. is very much aware. Environmental considerations are now viewed with the seriousness they merit by both governments and Agencies. Social concerns such as population, the role of women and the welfare of young people are a major cause for rethinking programmes. The whole area of technology choice and technology transfer is one in which governments are becoming more discriminating and more aware of the inappropriateness of some of the systems designed for capital rich, energy rich and labour expensive economies. These are all difficult issues to tackle and governments are insisting more and more that they be viewed from their perspective.

Before going on to suggest new forms and approaches for technical assistance, one observation might usefully be made. It is that the reaction of the U.N. Agencies to the portents of change has generally been one of resistance and retrenchment, particularly where they threaten sources of revenue and set bureaucratic procedures. Project money has become harder to obtain, there is more use of short term consultants than longterm field experts, Operations Divisions are finding their administrative costs rising and their support income diminishing. In that situation, any suggestion that appears to threaten further their existence (use of NGOs, national or low cost experts, aid in kind) is met with determined opposition. This probably is to be expected and the motivation may be entirely honorable. But it is misguided and short-sighted, for the changes will come, regardless.

Suggestions, What might be Done:

Logically, and in order of importance, agency support costs should be mentioned well down the list. But as this is an internal UNIDO report and as it is such a sensitive point, they are dealt with at the outset.

In order to function, the Agency must somehow meet its operating and overhead costs. Ultimately, the writer believes, this will depend on the Agency's effectiveness and on how its performance is viewed by the various donor countries and developing countries as well as UNDP. But for the immediate future and for practical purposes some formulae need to be established to ensure that the Organisation is supplied with the resources it needs to function.

This will be almost impossible to realise in the new impending situation if there is not seen to be some genuine accountability on the part of the organisation. Some

activities may have to go or to be made more cost efficient. This is an obvious point but it needs to be made if funding resistance is to be reduced.

The former and present standard 13 percent agency overhead charge will have to be viewed as only one of several ways of calculating operational costs. This is because as mentioned below, aid in kind, and sub-contracting of projects to NGOs may become more common ways of financing or executing projects.

In order to relieve pressure on headquarter's staff, field projects should be given more flexibility and certain decisions which now require to be cleared by headquarters (a process taking many months) may be resolved by joint agreement of the government, the project manager or CTA and the UNDP resident representative.

Other moneys would be made available to the Agency as the more traditional sources dried up. These are referred to in the section on Funding. Future UNIDO technical assistance projects should as far as possible be linked to investment and be part of an integrated industrial development programme. They should draw funding from any or all available sources including commodity aid or donor provided expertise. In execution they should permit a greater involvement by government and local staff or industry and even if appropriate be sub contracted for administration by NGOs or private sector groups. Tiny pieces of technical assistance should not each have to go through prolonged headquarters consideration or approval. CTAs should have access to a pool of funds for such to be utilized upon the agreement of the government, the CTA and the UNDP RR or bilateral donor representative.

Linking technical assistance to investment does two things. One, it ensures that the aid is not wasted on the vague hope that maybe it will result in investment, and two, it gives donors more confidence that the commitment is already there and in consequence the money will be utilized effectively.

Having projects form part of an overall strategy or development programme will avoid the often hasty ad hoc choice of projects and will ensure that the activities will contribute to the general objective of the country.

Funding will be difficult to get in the future. Therefore all available sources should be tapped. There are a number of opportunities currently available of aid in kind (expertise, goods) in which UNIDO is displaying little interest because there is no 13 percent overhead. That is short sighted. Other donors or co-financiers may gladly make up the difference if overall or ject costs are being reduced or shared. For execution of small isolated projects, NGOs, charities or associations may be sub-contracted and may perform the function at very low cost.

People's participation must be a more regular feature in projects, especially those dealing with rural or cottage industry and small scale enterprises. This element can ensure continuity and can greatly compensate for government administrative weaknesses in poor countries.

A greater involvement of and cooperation with the private sector in technical assistance would increase impact and inject a degree of professionalism into projects that is often lacking. There are hundreds of small industrialists and businessmen willing to assist third world enterprises and who do so as far as their means allow. A little token assistance by UNIDO could enable them to amplify the help. Several interesting cases of such private sector aid were encountered throughout the Pacific. UNDP representatives have observed that UNIDO might usefully recruit more experts, CTAs and consultants from the private sector.

Just as UNIDO has country offices in places like Poland, USSR and Japan to facilitate industrial cooperation, it might usefully have its SIFDA's or CTAs act as liaison officers in countries which may provide aid or aid services in kind but which lack opportunity or mechanisms to do so. Such aid offers are already available and the Philippines is an example of a country willing to provide help in kind.

To limit the repetition of superfluous studies and missions, UNIDO should cooperate more closely with other U.N. Agencies like FAO and with regional organisations. In the South Pacific that would include the South Pacific Commission and the Fisheries Forum among others. Too often, expensive missions are mounted to undertake studies which have already been done by other groups in the region.

Financing of Future UNIDO Programmes and Projects:

Considerable imagination and resourcefulness may be required of UNIDO to obtain the finance it will require in the future for its technical assistance and special programmes. Similar ingenuity and flexibility may be necessary to help governments gain access to the substantial investment funds they will require. But in both cases, given the will and the commitment, the funding should be forthcoming. The former procedures and methods for obtaining support may be irrelevant or less effective in the future but support may still be secured if the new situation is properly addressed.

UNDP funds will not be available as easily as before, and there will be much stiffer competition for them. The writer views this as a good thing for if the first and most easily accessed donor did not make the change quickly it would take much longer to convince the Agencies that a radical re-think of their programmes and strategies was necessary. However, some UNIDO funding will certainly be possible, especially for impact programmes of the type described in the report. This

has been ascertained from UNDP Apia and Suva, both which offices confirm their sympathies with government desires to see better results from aid programmes and greater role for the recipient country.

Bilateral aid is still a large potential source but not one to be taken for granted either. In this connection the two major proposals on investment and integrated programmes are most helpful. Securing a supporting role makes it easier to elicit contributions. The integrated package of T.A. projects allows donors to select those projects more in keeping with their priorities. Thus there is more choice provided to donors and more likelihood of a sympathetic response. Co-funding or co-sponsoring arrangements should be looked at with one donor providing cash, one expertise and another equipment. This will not appeal to UNIDO at first due to a reduction in the 13 percent overhead but then as previously stressed, the overhead financing should be renegotiated on a different formula.

Bilateral agencies will respond more willingly to requests if costs are not excessive and therefore use of low cost expertise will have to be a feature of future programmes. National experts and NGOs may also be utilized. This will probably be resisted by Agency administrations, but the end result if the ideas are accepted will be more funding for more projects. So in the long run the changes are in the Administrations interests.

Private sector support is also a possibility, and one that of all agencies, UNIDO is best constituted to facilitate. It is surprising that UNIDO has made so little use of it in the past. At the small and medium sized industry level there are thousands of manufacturers and processed food distributors who would gladly help third world industry develop to their mutual advantage. But many of these companies do not have the staff or resources or knowledge of the developing world to pursue the possibilities. They would welcome the opportunity to work with UNIDO to get small enterprises into production and to help them upgrade and expand their output. This source of cooperation and support should be cultivated.

Then there is investment capital and investment generated support. This is the area of biggest potential and the one which UNIDO has for too long stayed somewhat aloof from.

Normal practice has been to suggest that entrepreneurs seek investment capital from Development Banks or if the Government wished to undertake substantial investment, to point it to the World Bank or its regional associates. The writer wishes to suggest that private or commercial banking sources are a much larger and surprisingly more responsive source for investment funds.

Two objections will be made. One that commercial money is too expensive, and two, that the commercial banks may

require unreasonable security. Both objections are mistaken. To take the latter first, commercial banks are quite prepared to take a sovereign risk along with the World Bank, and they are much more imaginative in devising forms of security from the private sector. For instance a firm marketing contract and agreement to amortise directly from export earnings is one real possibility. Private sector financiers will in most cases find ways of securing loans as long as the projects are viable.

But the matter of cost is even more interesting. We are not talking of over the counter loans at predetermined rates of interest. We are considering the money markets of the world in which vast sums are traded every week. Borrowing from these markets an extremely competitive rate of interest can be obtained. And that is only the beginning. These loans are taken out in full in one transaction. This saves in overhead costs and then permits the borrower to reinvest the unspent moneys on national or regional commercial markets, at higher rates of interest. So the unspent portion actually earns money and there are no commitment charges as with a World Bank loan.

Then, if the purpose of the loan meet aid criteria as they would in the envisaged UNIDO integrated programmes, the government would be eligible to apply to sources of concessional loans for smaller amounts of soft money to supplement the commercial borrowing. This donors would consider favorably as the major burden is already being borne by government. The end result is a financial package that is surprisingly competitive with a World Bank loan, and it is put together in a remarkable short period of time. It also has a flexibility that is quite lacking in a World Bank loan in which to change one component of one project involves considerable negotiation and a lot of time. Under the commercial scheme, the government and UNIDO would be free to proceed with the relevant feasibility studies and to amend the investment programme in the light of their findings and in view of any new circumstances. This would be a fairly simple and straightforward procedure.

This now brings us to a further point, namely government funding or co-financing of feasibility studies from investment generated income. The unspent portion of the loan is re-invested at a higher rate of interest. A small part of the excess income would fund most of the feasibility work in a way that is painless to the borrower and does not involve the government in advance budgeting provisions. It does however imply that the government have the investments managed professionally and securely but that in any case would be a condition of any commercial loan.

Finally, something might be said on possible sources of Trust Fund moneys to finance UNIDO activities. As the present aid picture will change considerably and traditional donors may not be able to supply large sums as they did in the past,

it may be appropriate to look beyond governments to other sources. One of these may be the huge private corporations or the largest of the commercial banks who may be induced for humanitarian reasons or environmental concerns to provide trust funds for specific purposes. There is yet another large potential source which the U.N. may be in a position to gain pledges from.

It is obvious that any industrial development will directly result in an increase in the consumption of fossil fuels, chiefly petroleum. It is also clear that most developing countries do not have indigenous fuel resources and must therefore import all their petroleum. A minute fraction of the income of the major petroleum producers would form a considerable trust fund, and it would be money the petroleum exporters would ultimately recover in increased exports to developing countries. The idea is one which could perhaps be discussed at high level between the United Nations and the OPEC and oil producing countries.

Industrial progress would in addition result in greater consumption of chemicals and plastics. The enormous chemical industry corporations would ultimately enjoy increased sales from the industrialising countries. They also then might be approached for contributions to appropriate trust funds.

CONFIDENTIAL REMARKS

In reviewing the execution and impact of UNIDO programmes it is incumbent on the writer to mention a number of criticisms in sensitive areas. While these are not major criticisms, they do relate to UNIDO's image and the way in which the organisation is viewed by governments, by other UN agencies and by the private sector.

The following remarks then refer to points and issues raised which are too "internal" in nature or too sensitive to be discussed in the more public part of the report. The comments are therefore made in confidence and in the hope that UNIDO can resolve the problems amicably and with goodwill. No blame or censure is intended to be directed at any particular division or office.

An initial observation may be appropriate at first. It is that for the most part UNIDO staff are quite unaware that such problems actually exist. There is a "blind spot" in the organisation's sensors. Or if a problem is apparent it is someone else's responsibility and not a matter to be addressed. This may seem to be a harsh judgement but the point needs to be made as some readers may be quite astonished to learn that UNIDO may have an image problem or a failure in its public relations. Perhaps one reason for the blind spots is the fact that too many headquarters' staff have never served for a prolonged period in the field, and a surprising percentage appear to get to the field on only the rarest of occasions.

The first area of criticism then is of the organisation's relations with the field and its communications with governments. UNIDO is not strongly represented in the field like FAO or UNDP and it would appear a wise policy in consequence of that to pay strict and prompt attention to protocol and to maintaining a dialogue with client governments. The noble band of hard-pressed CTAs and JPOs cannot be expected to perform well without a regular "blood-flow" or information and direction from headquarters. Too often the simplest request can take half a year or more for approval, and meantime the activity in question stagnates. Also, because CTAs are relatively junior persons in the field hierarchy, the UNDP Resident Representatives handle all major UNIDO field matters as the senior United Nations officials in the field. The UNDP RRs are often embarrassed and irritated to be informed of important decisions or messages after the event or from a second or third-hand source. This is a simple failure of protocol which should be easily remedied.

A more serious aspect of communications failure is the tardiness with which governments are treated with respect to the progress of reports and preparation of projects of vital interest to their countries. Practically every government the consultant met with asked as a matter of urgency for a copy of the mission's draft report to be sent immediately on his arrival in Vienna. The consultant assured them that he would press UNIDO to do so. The standard response then from government officials was "we get this promise from every mission and consultant but in nearly all cases it is months later before we see a copy of the report". They understand fully that a draft report has no official standing, but believe it essential that they be given an opportunity to view the draft and to prepare a prompt and substantial response

to the official report when it does arrive.

Now this may seem to headquarters staff to be a small difficulty and not something to worry about. But that is not the case. Whole programmes may be lost to UNIDO because by the time the government receives a formal proposal the initial request is forgotten or the country has turned to other donors or aid agencies for help. There is also the important matter of treating sovereign governments with due respect. A client government which feels ignored by an agency is bound eventually to regard the agency with disappointment if not with resentment. This could result in serious loss of future work in the 1990s when the UN agencies will have to justify their role as executors of aid projects.

Then there is the related matter of attitude. Development projects are national projects embarked upon by the countries upon the decision of their sovereign governments. The UN agencies provide a service of assistance to help implementation in efficient and cost effective ways. However, there is within all the agencies a subtle tendency towards dominance which shows in patronising attitudes and a failure to really listen to what governments wish and are asking for. Those offices in the agencies most directly in contact with governments usually understand the respective roles well. Some of the less directly concerned offices tend to view projects as "UNIDO projects" with the governments as mere participants. This criticism may also appear harsh but it will be borne out by any long-term field officer or consultant who deals regularly with governments.

A further criticism relates to the seriousness of UNIDO's involvement in the industrialisation of the third world. Far too much effort of expensive staff members, consultants and sections is spent on minute pieces of aid which could more appropriately be handled by a small charity or NGO. Many charity projects now exceed small UNIDO projects in cost and duration, and (dare we say it) in impact. This should not be taken as criticism of the excellent operations staff and field experts. It is rather a questioning of UNIDO's role. It is like using a bulldozer to dig over the soil in a window box. A huge expensive and awesomely equipped organisation like UNIDO should go for impact. And to do so it must raise its sights beyond the delivery of tiny pieces of technical assistance.

The point needs to be made because the industrial projects of even the small and poor developing countries are to be measured in tens of millions in cost or value. Inflation has so eroded the value of money that in terms of industrial investment, anything less than a million dollars is insignificant.

Yet, when submitting a development plan of \$50^{million}, or so to UNIDO one is met with a reaction that best described as fear from too many of the organisation's officials: "This is too big for UNIDO." In one case the consultant was informed that a project of about \$30,000 in cost would be more appropriate and within the organisation's capabilities. To such officials we must pose the question "Are we really serious or are we simply talking about industrial development and much too unsure of ourselves to tackle projects of any consequence?"

The South Pacific mission has confirmed that governments are

ambitious and together with their respective private sectors are prepared to borrow and invest the large amounts necessary to achieve industrial progress. Even a tiny country like the Cook Islands whose total population amounts to only about eight times the staff of UNIDO Vienna, is prepared to invest over \$60 million in agro-industry development. Is UNIDO to show less courage when all it is requested to do is help with feasibility studies and some supporting technical assistance?

The above remarks are made in strictest confidence and in the hope that they will cause no offence but might stimulate a dialogue within the house on the organisation's role, its attitude to and relations with client governments, and the seriousness of its commitment to the industrialisation of developing countries.

**APPENDIX TO PROGRAMMES AND POLICIES
TECHNICAL ASSISTANCE RECOMMENDATIONS**
from notes by A McNaught, UNIDO consultant.

AN EXAMPLE OF A PARTIALLY SELF-FUNDED PROJECT

1. PROJECT PHILOSOPHY

Many aid projects have significant impact at the time they are current. Indeed, the project can be considered to be deficient if this is not the case. Unfortunately however, short term projects rapidly lose their value with time, because of loss of trainees or change in the operational base of the recipient company. An alternative to this is to have a permanent presence that is partially self funding over a period of several years. This is best illustrated by an example.

2. EXAMPLE

A need is identified for encouraging better timber utilisation by proper drying of timber to specified moisture contents. Following evaluation, solar kilns are considered to be the most appropriate. Local industry requires:

- * exposure to the concept of solar kilns, as many are not aware of its viability.
- * provision of a proven design.
- * training of personnel.

Two suitable solar kilns could be built and one local permanent employee employed using aid funds. Funds are also required for 1 month's intensive training of the local employee by a non-resident expert and ongoing follow-up visits.

The kilns should be sited in a viable commercial operation, with agreements in place to:

1. Provide sufficient timber for continuous operation of the two kilns.
2. Provide a fork-lift for timber movement as required.
3. Pay for the drying at a concessional rate.

The locally trained employee would have the role of running the kiln in a commercial manner, with the assistance of 1 or 2 local people from the timber or furniture industry. These would be from companies who will be installing similar kilns, so that their attachment to the project is for the purpose of practical training. In addition, the trained employee would be able to provide general advice on timber drying.

A close working relationship is required between the outside expert and the local employee so that day to day operation problems can be resolved through long distance communication. The expert can also provide advice to the employee when required. Occasional visits by the expert (say 2 weeks every 6 months)

would be desirable to keep the project on track and to provide technical help to the employee and local industry.

2.1 Typical Costing - US Dollars

Year 1 Expenditures:

2 kilns and lab equipment, installed	\$25,000
Provision of Expert - 1 month intensive training 2 week follow-up 2 week follow-up	\$17,000
Local Employee - Salary (Diploma Standard)	\$10,000
Kiln Maintenance (generous)	\$1,000
Kiln Running Costs - electricity 2 kilns x 1.5kW x 4,300 hours x \$0.15/kWhr Approx.	\$2,000
Total Year 1 Expenditure	\$55,000

Year 1 Revenue:

800m ³ of timber dried at concessional rate of \$20/m ³	\$16,000
<u>NET COST 1st YEAR</u>	<u>\$39,000</u>

Year 2 Expenditure:

Employee Salary	\$10,000
Expert - 2 weeks - 2 weeks	\$9,000
Kiln Maintenance	\$1,000
Electricity	\$2,000
Total Year 2 Expenditure	\$22,000

Year 2 Revenue:

1,000m ³ dried at \$20/m ³	\$20,000
<u>NET COST 2nd YEAR</u>	<u>\$2,000</u>
<u>NET COST OF 2 YEAR PROJECT</u>	<u>\$41,000</u>

SUMMARY

Inputs

1. Net cost of 2 years operation \$41,000. (Salary, equipment, running costs, expert help etc.)

Outputs

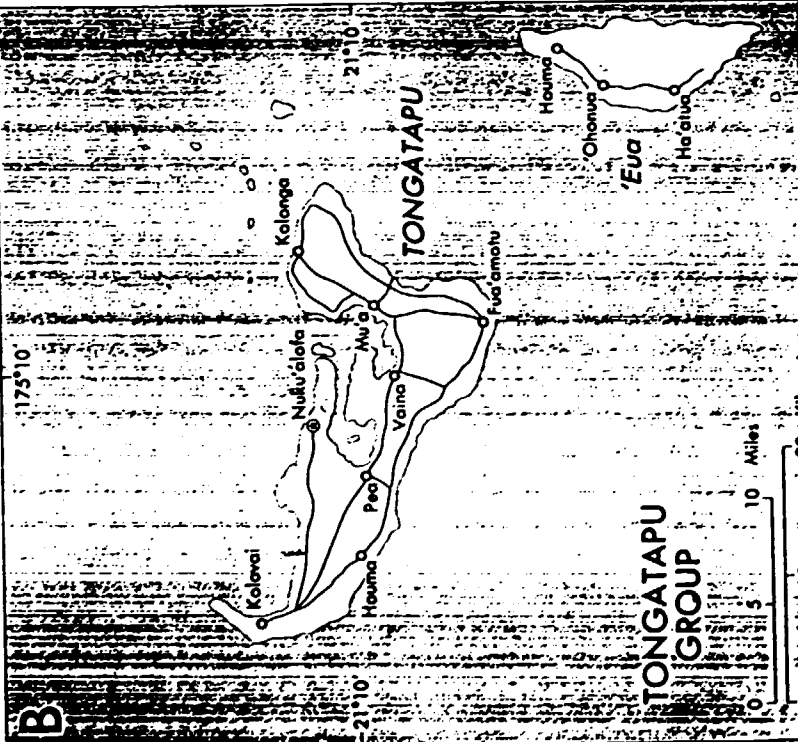
1. Two solar kilns which could be granted to the host company after the 2 year period.
2. Detailed training of a local person who then has the knowledge and contacts to act as a local adviser on timber drying.
3. On the job training of company employees that will operate proposed solar kilns.
4. Demonstration that the solar kiln works in a commercial environment.
5. Provision of well dried timber to the host company at a concessional cost.

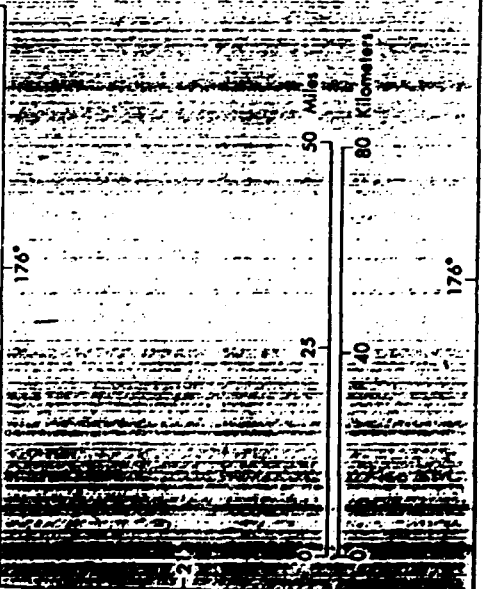
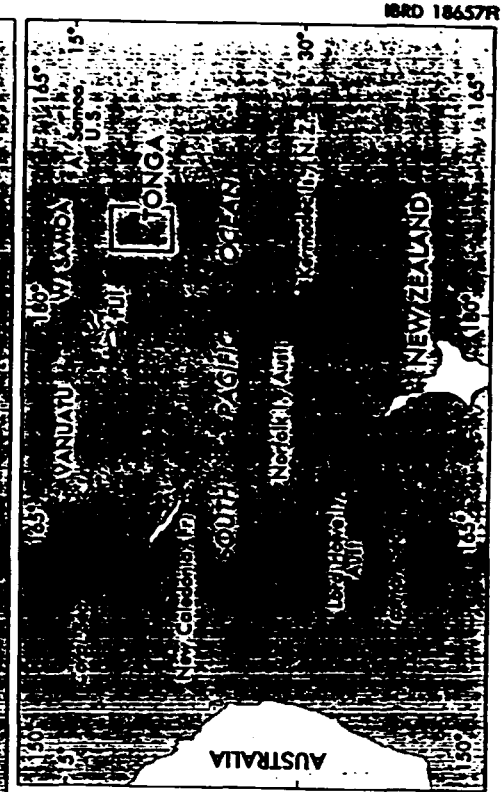
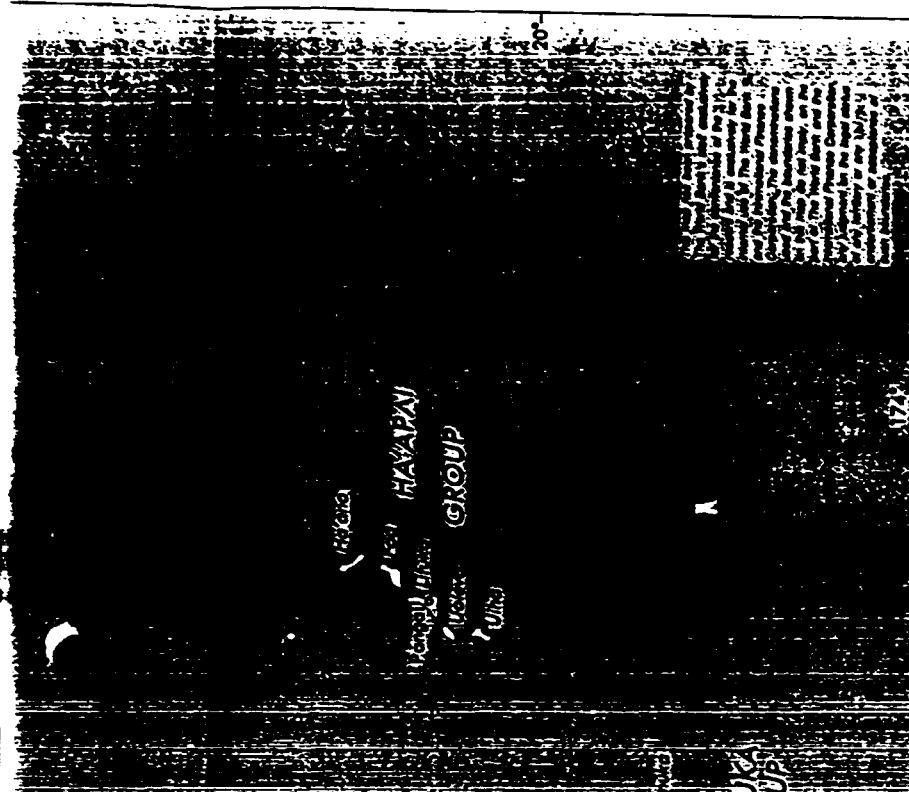
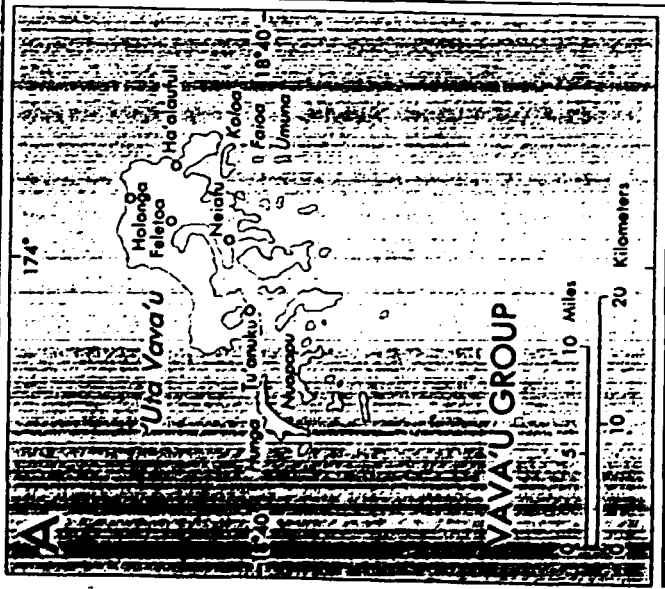
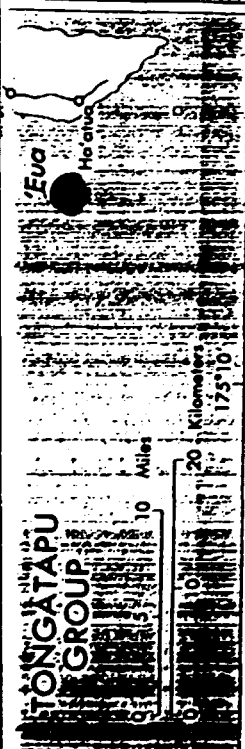
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TONGA

— Main Roads

● Capital





AdMaTec

Advanced Maritime Technologies

PROPOSAL

for

A FEASIBILITY STUDY

for a fishing base

on behalf of

IKA CORPORATION

Office
First Floor, Murray Building
16 Paterson Street, Launceston
Tasmania, Australia
Mailing Address
P.O. Box 2078, Launceston
Tasmania, Australia 7250

Telephones
Within Australia
(or overseas - operator assisted)
Tel: (003) 315859
Fax: (003) 343253
Private (after hrs) (003) 271387
[Extra 0 + 03 = 003]

Telephones
From outside Australia
International Direct Dialing
Tel: 61-03 - 315859
Fax: 61-03- 343253
Private (after hrs): 61-03-271387
[Country code 61 + 03 = 6103]

I. THE PROJECT

The proposed project would be located at Lami, in Fiji, and would consist of a fishing base including pier facilities, slipway for maintenance and repairs of fishing vessels, cold storage facilities, fish processing plant, loading facilities and general provisioning infrastructure. The total project is expected at this stage to be in the order of 10 million US dollars.

The purpose of this feasibility study will be to determine the financial viability of the project and the technical parameters inherent to its successful operation.

In addition, this study will include financial projections with a view to propose joint ventures with third parties, preferably up to a level of 49%, while IKA would retain 51% of the ownership of the operation.

The preliminary finding is that the proposed project would be a viable business venture provided that (1) supporting infrastructure was in place such as adequate power and water supplies, (2) goods and services required by fishing fleets when in port were available at competitive costs and quality, and (3) the managerial and technical skills required for the proposed project were present.

Consequently, this study will also specifically address the issue of training local Fijian managers and staff to insure the success of the operation.

II. SCOPE OF THE STUDY

The study will consist of the following principal points:

- Fisheries Economics and Research
- Preliminary Design of the Project
- Financial Evaluation

Fisheries Economics and Research

▲ An overview of fisheries resources in the region including current catch by species by area by season, to determine the economic volume of fisheries activity as a potential market for the project in that region., The investigation/data research will include such matters as effectiveness and intensity of local fishing activity.

▲ Identification of the current off-loading, handling, cold storage, processing and transportation of fish in the region as they would impact on the project.

▲ Projection of transportation costs, including frozen and fresh fish, from Lami to primary destinations compared with similar costs for alternative transshipping locations. Modes will include air freight, bulk reefer ships, containers in regular shipping services and direct deliveries.

▲ Identification of trends in technology of fishing, refrigeration, processing, and transportation of tuna and other fish species.

▲ Identification of the world markets for frozen, fresh and canned fish including trends in supply and demand and prices.

Preliminary Design of the Project

▲ Evaluation of the existing infrastructure and description of the proposed project including, but not limited to, fresh water supply, waste water disposal, solid waste disposal, electric power supply, berthing of vessels and availability of goods and services required.

▲ Determination of feasible and required capacity of cold storage and provision of preliminary layouts of the fish processing facility and general specifications of major equipment.

▲ Evaluation of requirements for ship maintenance, repairs, and overhaul base; description of recommended size and cost of such a facility.

▲ Evaluation of interrelationships between the project and other existing or planned Fijian facilities.

Financial Evaluation

▲ Estimation of capital costs of the project itself and, separately, the costs of supporting infrastructure necessary from the public sector (if additions are necessary).

▲ Estimation of operating costs and potential resulting revenues.

▲ Assessment of the export potential.

▲ Assessment of the economic and human benefits to Fiji in terms of increases in income, personal incomes, employment, tax revenues, dollar earnings, and technology transfer.

▲ Identification of managerial and technological competence required for a viable venture and the availability of suitable local human resources, training requirements and alternative sources.

Report Presentation

Due to the importance of the investment involved and the necessity to present the final report to potential joint venture partners and investors, it is understood that the level of presentation of the final report will be of a very high standard and will be initially printed in 25 copies.

PRINCIPAL CONSULTANTS ON THE PROJECT

▲ J.P. Kieran, M.B.A., M.Mc., B.Sc., Managing Director, AdMaTec

Mr. Kieran has over 20 years of experience in South East Asia, the Pacific Countries, Europe and the Middle East, the United States, and Australia. He frequently consults for international companies and several governments on matters pertinent to the maritime industry, particularly with regards to harbour development, fisheries, shipbuilding, and inter-island transport.

He has managed several hundred million dollars in maritime construction projects, including several shore facilities, supply ships, fisheries research vessels and petroleum offshore platforms.

He is a former senior executive of Bechtel Corp. and Managing Director of a major U.S. facility with a 235 meters launchway, a 1200 tonnes crane for modular construction and a computerized steel cutting and welding fabrication shop producing 200 tonnes of steel per week.

Mr. Kieran has done research with NASA (US National Aeronautical and Sciences Administration). He is an Australian citizen, born in Canada, and is fluent in French and several other languages.

Academic Qualifications:

Engineering: Master Degree & Bachelor of Sciences Degree, with High Honors, from the University of California, at Berkeley.

Business: Master Degree in Finance & International Business from the University of California, at Berkeley.

▲ M.G. King, Ph.D., M.Sc., B.Sc., Senior Fisheries Consultant

Dr. King is a recognized international expert in marine biology and fisheries resources. He has 20 years of experience in the Pacific Region in fisheries resources surveys, fisheries development and management, fisheries research programmes, training of fisheries personnel and aquaculture.

He is a Senior Lecturer at the Australian Maritime College School of Fisheries and a former Lecturer in Fisheries Biology & Management at the University of the South Pacific, in Fiji.

His vast international consultancy experience includes several projects for the United Nations, the South Pacific Commission, the International Center for Ocean Development and the Hanns Seidal Foundation.

Dr. King has published several publications on the development of fisheries resources in the South Pacific and is co-author with A. McIlgorm of the university textbook "Fisheries Biology & Management for Pacific Island Students" published in co-operation with the International Development Program of Australian Universities and Colleges.

Academic Qualifications:

Doctorate (Ph.D.) University of the South Pacific, Masters of Sciences Degree (Adelaide), Bachelor of Sciences Degree (Adelaide).

Alistair McIlgorm, M.Sc., B.Sc., Senior Fisheries Consultant

Mr. McIlgorm is a recognized international expert in fisheries economics and marine resources development. He has several years of experience in fisheries project appraisal, feasibility studies and public sector cost/benefit analysis.

He has been considerably involved in appraising fisheries resources in Pacific Island countries and tuna fisheries. He is a Lecturer and Researcher at the Australian Maritime College of Fisheries and a former lecturer on the Economics of Fisheries Management at the University of the South Pacific, in Fiji.

He specializes in maritime micro & macro economics and he has extensive experience in bio-economic research of tuna fisheries management and tuna industry finance.

Mr. McIlgorm has published several publications on Pacific fisheries management and resources development and is co-author with M. King of the university textbook "Fisheries Biology & Management for Pacific Island Students" published in co-operation with the International Development Program of Australian Universities and Colleges.

Academic Qualifications:

Master of Sciences Degree in Economics from the London School of Economic and Political Science.

Bachelor of Sciences Degree in Fisheries Sciences with Commendation from Plymouth Polytechnic, in England.

FEASIBILITY STUDY COSTS

The budget for this complete feasibility study would be as follows (US \$):

Fisheries Economics & Research	\$ 14,750
Engineering/Preliminary Design	\$ 25,350
Technical Support/Drafting	\$ 4,700
Financial Evaluation/Research	\$ 3,200
Final Report Preparation/Printing	\$ 1,700
	=====
TOTAL	\$ 49,700

Plus expenses:

King/McIlgorm, Fiji (air, hotel, trans.)	\$ 9,200
Pieran (all) <i>A \$ 200 x 12 days</i>	\$ 4,600
Other administrative project costs	\$ 2,200
	=====
TOTAL COSTS	A \$ 16,000

A \$ 65,700

F \$ 60,000 -

Letter to Penisoni Usumaki, 11 June 1990, p.2

Please let me know your preliminary comments as early as possible. Mike and Alistair will be available for "field work" in Fiji primarily during July/Beg. of August. After that they have commitments in Tasmania (during which time their "desk research" part of the project can be carried out.

As for my part, I will take full charge of the assignment personally. I have a major project underway in New Caledonia at the moment which is only two hours away.

I will contact Apenisa at the Shipyard and the Director of Marine Captain Cama this week. (My clients have been keeping me busy!)

For the time being, it is best to contact me as follows:

Le Stanley
33 rue de la Riviera
Ouémo, Magenta
NEW CALEDONIA

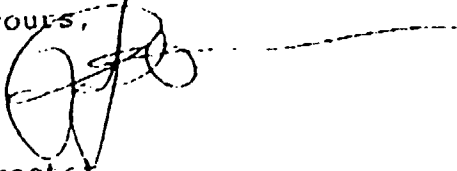
Tel: Country Code 687 + 26.32.77

Fax: Country Code 687 + 25.26.56

I would very much appreciate a prompt response so that I may plan our strategy for the coming 3-4 months, particularly with regards to Mike and Alistair's availability.

I'm looking forward to our next meeting in Fiji.

Faithfully yours,


J.P. Kieran
Managing Director

AdMaTec

Advanced Maritime Technologies

Facsimile Transmission from: J.P. Kieran, Ad MaTec

Fax No.: (687) 25.26.56
(New Caledonia)

11 June 1990

Penisoni V. Usumaki
General Manager
IKA Corporation Ltd
Queens Road P O Box 3062
Lami, FIJI

Fax: (679) ~~302994~~ 351 194

FAX: 8 PAGES TOTAL

Dear Peni,

Thank you again for your warm welcome in Fiji. I hope to have an opportunity to see you again very soon as I enjoyed our meetings.

As promised, I have given some considerable thought about the fisheries project we discussed and I have also conferred at great length already with Mike King and Alistair McIlgorm about it.

I have enclosed as promised a proposal for a full feasibility study for your comments so that we may pursue our dialogue in that regard. You should note that the approach we propose here is a "hands on" report with a complete business evaluation of the project which would allow IKA (and us too of course, on your behalf) to approach potential joint venture participants and investors and to also provide clear answers to the Fijian government on such things as employment and tax revenue issues.

As is often the case with feasibility studies, there is a wide variety of intensity level (and costs) at which such work can be carried out and we have aimed here at a sufficiently comprehensive level so that the report would be ideal for your purpose, yet without building into it any academic rhetoric of doubtful usefulness.

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IKA CORPORATION LIMITED

CORPORATE AND COUNTRY PROFILE

May, 1990

SUMMARY

Ika Corporation Limited, Fiji's national fishing company, was corporatised on January 1, 1990, and registered as a limited liability company under the nation's Companies Act, with the Government of Fiji as sole shareholder.

The company was originally established in 1975, and charged with enhancing the utilisation of marine resources in and around Fiji's territorial waters.

As a Government entity, restricted and encumbered by the dictates of the ordinance that created it, Ika's opportunities and potential for growth and development were severely limited. While it is significant that the corporation effectively filled the role defined for it - and recorded acceptable financial results - it was impossible for it to fully utilise and exploit the vast potential inherent in tuna fishing.

With our new corporate structure, however, this changes dramatically. We enter corporatisation in a sound financial position, and at a time when the world market for tuna is strong.

We also have the distinct advantage of considerable reserves of fish in our own waters which are currently not being caught. Fiji Fisheries Department experts estimate that there are some 25,000 tonnes of surface-fished tuna available in Fiji waters each year. Currently, only about 6000 tonnes are being extracted.

Clearly, this represents a substantial sum of money - at current prices some US\$13 million.

Today the new Ika Corporation Limited looks to build on its reputation for catching the world's finest tuna, and to diversify to harvest a greater share of the vast potential inherent in fisheries in Fiji and beyond.

With accumulated profits over F\$1.5 (US\$1.2) million, assets of F\$7 (US\$4.7) million, and a dynamic, profit-oriented management and board of directors, the company enters its new corporate era on sound footing.

Our long experience fishing the rich waters of the Pacific, our modern fleet, our guaranteed market and base in the heart of the world's richest tuna waters make Ika unique in the advantages it can offer to prospective partners looking to reap the rewards of the fishing grounds of Fiji and the Pacific. Ika is also looking to realise the potential that exists in support services for commercial fishing in the region.

A general overview of the company and its operations can be found in our corporate brochure. This document contains greater detail of our business plan for both the long and short-term, and discusses in more depth specific areas which we have targeted for diversification and growth. For interested parties from other nations, we have also included a general background and outline of Fiji and its economy.

IKA: THE NEXT THREE YEARS

For the immediate short-term, which we have defined as the next three years, the catchword for Ika Corporation Limited will be "diversification". Our first order of business will be to diversify our operations into other types of tuna fishing, particularly those which offer a high return.

Currently, the company operates five pole-and-line fishing vessels, which land skipjack tuna for sale to the Pacific Fishing Company (PAFCO) at Levuka. PAFCO's current annual raw fish intake is 15,000 tonnes - 60% of which is imported - at an average price of US\$670 per tonne. The company has annual sales of \$60 million.

Tuna caught by pole-and-line command premium prices in the world marketplace, both for the quality of the fish and for the method's environmental friendliness. This method will therefore continue to form the heart of our operations, at least for the foreseeable future.

It will be a fundamental part of our plans for the short-term to increase the size of our pole-and-line catch, and we are pursuing regional

initiatives in this area. To date, Ika's fishing has been restricted to Fiji's 200-mile exclusive economic zone, and to the waters immediately around it. This however restricts our fishing season to the six months of the year when the migratory skipjack are in our waters.

Part of our expansion will therefore involve following the tuna when they head north during Fiji's cooler months. Our two newest vessels were specifically designed and constructed with this in mind, and we expect to fish in Solomon Island waters later this year when the Fiji season ends.

The returns from pole-and-line fishing are, however, negligible when compared to the potential of other methods which target more-valuable fish such as the prized yellowfin tuna.

One of our first priorities, therefore, is to diversify into long-line fishing, specifically for the high-value sashimi tuna market. There is a lucrative market for this type of fish in the nations of South-East Asia - particularly Japan, where the fish is sold at auction - and in Hawaii and the West Coast of the United States.

Purse-seine fishing, for a variety of tuna species, also holds promise, as does trawling and deep-sea fishing, and Ika is interested in discussions with potential joint-venture partners for all of these.

We note, however, that Ika Corporation Limited rejects absolutely the practice of gill-net fishing, which endangers the life of the oceans on which our livelihood depends.

IKA: THE LONG-TERM

Once the short-term goals of diversification and increased catch are met, the catchwords for Ika Corporation Limited will become "value-added". By this we mean the establishment of the ability to process high-value fish and fish products for speciality markets.

This concept involves the creation of processing capacity for the preparation of such products as fish fillets, fish fingers, cooked fish and similar products.

All of these goods command high prices in the world marketplace, and the high quality of fish caught in South Pacific waters makes this a natural area of expansion for Ika.

Again, we are interested in discussions with potential partners in these areas.

IKA: THE JOINT VENTURE POSITION

As noted, Ika Corporation Limited is interested in discussions with potential joint-venture partners who share our vision of the future of fisheries in the Pacific. Our unique advantages make us an obvious choice for those interested in investment in this growing and potentially lucrative industry.

We are particularly interested in inquiries from, and discussions with, potential partners who can supply management and technical skills not readily available locally, and provide training for local counterparts, especially in the technical area.

In any joint venture, Ika would expect to hold at least a 51% shareholding, and is particularly interested in those which would require a minimal equity input from the corporation. For our part, we offer ready access to the world's finest fishing grounds, and the combination of our experience, facilities, and guaranteed markets.

Apart from those areas of diversification discussed above, there are other specific fishing-related industries which we are looking to enter.

The most notable of these is the establishment of, in the first instance, industrial-scale cold storage and ice-making facilities. Currently, the only existing facilities of this nature, at the Pacific Fishing Company in Levuka, are reserved for that company's use, and are inaccessible to local industrial-scale fishing companies.

Current local ice production is sufficient only to meet the needs of small, artisan fishermen, and is inadequate for commercial fishing on a larger scale.

There is, therefore, a ready commercial market and demand for such services, not only to meet Ika's needs, but for profitable sale to other commercial fishing ventures based in Fiji and the region. Such a facility is also vital for Ika's expansion into long-lining and other forms of fishing.

On a larger scale, we are seeking to ultimately establish a commercial fisheries base for industrial fishing concerns operating vessels of up to 100-150 GRT. This concept envisages a "one-stop shop" for such vessels, providing docking, slipway, cold-storage, engineering and repair, provisioning and other related services.

There is currently a drastic shortage of such services for commercial vessels of this size in Fiji and the immediately surrounding nations. We stress therefore that the demand exists, and though detailed feasibility studies are needed, we believe there is a considerable commercial benefit to be gained in this area.

There are two possible locations for such a centre - Suva, the capital, and Lautoka in the West of the main island of Viti Levu. Lautoka has the added benefit of its proximity to the major international airport at Nadi, thus providing ready access to air-freight facilities for fish and related products.

Because the Government of Fiji is the sole shareholder in Ika Corporation Limited, the company has the advantage of easy access to land for such a project. We note that the same applies to access to fishing licences and other necessary formalities for any of the ventures we have discussed here.

These, then, are the major aspects of Ika Corporation Limited's position today, and our plans for the future. What follows is a brief background outline of Fiji, its economy, infrastructure and facilities for business and investment.

FIJI: AN OVERVIEW

The Republic of Fiji, an archipelago of more than 300 islands covering about 650,000 square kilometres of ocean, is home to a some 720,000 people from a wondrous combination of cultures and traditions.

The indigenous Fijians, of Polynesian and Melanesian origin, represent about half of the population. Descendants of Indian migrants who came to work sugar plantations in the latter part of the last century represent an equal number of Fiji's people. There are also Europeans, Part-Europeans, Chinese, Birmans, and representatives of the other cultures and communities of the South Pacific.

From this mingling of peoples has grown the unique nation of Fiji, with a way of life that combines the best in many cultures.

Fiji has a total land area of 18,333 sq km. Islands vary in size from the two large masses of Viti Levu (10,425 sq km) and Vanua Levu (5556 sq km), to tiny one or two-hectare specks ringed by gleaming sand and crowned by tall coconut palms.

Viti Levu is the site of the capital, Suva (population in greater city area approximately 160,000), the international airport at Nadi, much of the industry and the bulk of the population.

Its strategic location has made Fiji a hub of air and sea traffic between North America, Australia, New Zealand and South-East Asia. It is also a major administrative and trade centre.

Economic growth has focussed on the sugar industry, tourism, mining, forestry and fisheries. But there has been a major expansion in investment in the manufacturing sector to serve the domestic market. There are currently a host of Fiji-made products, including garments, cement, roofing iron, packaging material, furniture, steel rods, plastics, soap, cooking oil, processed food and flour.

The emphasis now is on the development of exports, capitalising on Fiji's location, and access to some of the world's most prosperous markets, facilitated by beneficial trade agreements. Australia, New Zealand, the

United States and South-East Asia - all are within easy reach for Fiji exporters. Europe, too, is a potential outlet.

The introduction of tax-free zones has heightened interest in manufacturing for export. Coupled with an already-extensive package of investment incentives, tax-free status for export industries has made Fiji an even more attractive centre for investment.

The Government has pledged to continue to maintain an open and, as much as possible, unregulated economic environment to foster increased investment. Fiscal, monetary, exchange rate and other policies, including the incentive system, will be geared to maintain financial and economic stability.

Although the Fiji economy is characterised by its small size in terms of land area, population and a limited, fragmented domestic market, forward-looking policies have combined with an excellent labour pool, well-developed infrastructure and a wide-ranging package of investment incentives to keep Fiji on a steady path of economic development.

Since independence in 1970, Fiji has established a varied and diverse industrial sector. Currently the industrial sector contributes approximately 12 per cent of Fiji's gross domestic product. This is seen as inadequate given the huge potential inherent in this sector, and policies are geared towards increasing this figure during the Development Plan 9 (1986-1990) period.

The major objectives of the plan are to create a dynamic, growth-oriented industrial structure; expand output, particularly of goods for export markets; and increase the efficiency and competitiveness of the sector.

The introduction of tax-free zones has heightened interest in manufacturing for export. Coupled with an already-extensive package of investment incentives, tax-free status for export industries has created a surge in development in the manufacturing sector.

The emphasis is on the development of exports, capitalising on Fiji's location, and access to some of the world's most prosperous markets under major preferential trade agreements. These are the South Pacific Regional Trade and Economic Co-operation Agreement; the African Caribbean and

Pacific-European Economic Community Convention of Lome III; and the Generalised System of Preferences.

Briefly, these afford special treatment to imports from developing nations, including Fiji, in the form of a reduction in, or total waiver of, customs duties on a non-reciprocal basis.

The agreements are in operation with 23 countries: Australia, Austria, Bulgaria, Canada, Czechoslovakia, Finland, Hungary, Japan, New Zealand, Norway, Poland, Switzerland, the United States of America, the USSR, and the European Economic Community (EEC) which comprises Belgium, Denmark, the Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom. The EEC applies the Lome convention, while Australia and New Zealand apply SPARTECA to the South Pacific countries.

In general, rules of origin must be adhered to, which stipulate that goods must be either wholly produced in the beneficiary country, or although manufactured wholly or in part from imported materials or components, must have undergone a substantial transformation in the beneficiary country.

Japan, Australia, New Zealand and Canada have schemes under which raw materials imported from these countries are respectively considered as originating from the beneficiary country. In other words, goods produced in Fiji from raw materials from these countries can be exported to them under preferential customs allowances.

All these advantages are reinforced by the Government's liberal attitude towards local and foreign investors. A low rate of company taxation, incentives to encourage industries and ready repatriation of profits and capital continue to be central elements in Fiji's foreign investment policy. The special benefits of tax-free status make Fiji even more attractive.

The following types of enterprises are considered for tax-free zone/factory status:

1. Manufacturing
2. Mixing, blending and packaging

3. Assembly
4. Exportable professional services as approved by the Minister for Trade and Commerce.

The concession package for tax-free factories includes a total waiver of licensing for import of capital goods and other production materials, and duty-free import of capital goods and equipment from any source.

Tax concessions for TFZ/TFFs include no income tax payable on corporate profits for a period of 13 years provided all provisions of the Income Tax Act are met. No withholding tax on interest, dividends and royalty paid abroad provided there is no shift of revenue abroad: final dividend tax of 5 per cent on dividends paid to resident shareholders; and no restrictions on repatriation of capital and profit.

Other benefits include freedom to import specialist personnel for the enterprises, and preferential electricity tariffs. Other concessions, incentives and assistance available to investors under normal circumstances will also continue to apply.

There is long-term potential in this area for Ika Corporation Limited to expand into tax-free production of fish and related products for the growing export market.

Infrastructure and services

Fiji has an excellent and advanced infrastructure of services and facilities for business.

In telecommunications, the country is equipped with the latest in technology, for both internal and international communications. All major cities and towns have automatic telephone exchanges, and Fiji is linked by cable and satellite to world-wide communications networks. Direct dialling to most countries is now available in the capital and some other centres. Telex facilities are comprehensive, and the latest in facsimile technology is in wide use for both domestic and international transmission of messages.

Fiji has almost 4800 kilometres of roads, of which 1200 are all-weather links. A modern highway connects the capital, Suva, with important centres in the west of the main island. Buses operate around Viti Levu and through towns and suburban areas, and a domestic air network serves the major islands.

Fiji is regularly served by air from Australia, New Zealand, the United States, Canada, Europe and Japan. Connections are readily available to any of the world's major centres. International airports are located at Suva and Nadi.

Suva and Lautoka are international ports of entry, and have wharf facilities with capacity to handle large cargo vessels. Levuka, site of the tuna industry's processor and cannery, Pacific Fishing Company Limited, is also a port of entry.

Approximately 60 per cent of Fiji's population has access to piped water, including all urban areas. The current commercial water rate is US\$0.216 (\$F0.318) per 220-gallon unit.

All towns are supplied with electricity. The current commercial tariff is US13.91 cents (F20.46 cents). A maximum demand tariff for large industrial users of US\$12.11 (\$F17.82) per kilowatt hour per month and US9.42 cents (F13.86 cents) per unit also applies. Further discounts can be negotiated based on usage. The domestic charge is US13.91 cents (F20.46 cents) per unit.

Financial and accounting services are available from a number of international accounting and auditing firms, including Coopers and Lybrand, Peat Marwick and Company, Price Waterhouse, Touche Ross, Ernst and Whinney and Pannell, Kerr, Forster.

Full banking and financial services are provided by the following banks: National Bank of Fiji, Westpac Banking Corporation - Australia's largest bank with offices in 65 countries- Bank of New Zealand, Australia and New Zealand Banking Group - also large international financiers - India's Bank of Baroda, and the Merchant Bank of Fiji.

Financing of projects is also available locally from the Fiji Development Bank, and the Fiji National Provident Fund. The Fiji Development Bank, in

particular, has schemes tailored for foreign investors, especially in joint ventures.

Manpower and other factors

Fiji has an extensive pool of disciplined, well-educated, hard-working and adaptable labour. The labour force is well spread throughout the country. Labour numbers at the time of the 1986 census were 241,160. The education standard is high, with 77 per cent having achieved primary education to secondary levels, and four per cent to tertiary level.

The official language is English, and all business and commerce is conducted in this language. It is spoken fluently by many of Fiji's people.

* * *

OUTER ISLANDS AGRICULTURAL DEVELOPMENT PROJECTA. SUMMARY

1. Project Title : Outer Islands Agricultural Development
2. Sector : Agriculture, Fisheries and Marine Transport
3. Implementing Agency : Ministry of Primary Industry
4. Project Objectives : To develop the agricultural potential and income generation opportunities for residents in the Outer Islands of Fiji.
5. Estimated Total Cost : \$24.70 million
6. External Financing Requirement : \$24.70 million
7. Project Description : The project aims to improve the opportunity for the participants to produce and sell agricultural produce and fish. The project will provide roads, jetties and slipways, ice-plants, extension services and technical assistance. A recently completed feasibility study indicates that the economic and financial benefits are sufficient to justify the required investments. Real social benefits for the island people through increased income generation opportunities are attainable.
8. Project Duration : 3 years
9. Other Funding Agencies Involved : The feasibility study was financed by the Asian Development Bank.

B. PURPOSE

A number of studies have identified the following as the major constraints towards the development of production in the outer islands :

- . Low value products, with the exception of some timbers and sea products such as sandalwood and beche-de-mer. However, stocks of both of these are limited.
- . High transport costs to market. Almost anything the islands produce is also available from the main islands with much lower transport costs.
- . Inadequate, unpredictable and infrequent shipping services.
- . Lack of a fisheries infrastructure, including small jetties and slipways, ice plants, cold stores and ships with freezer capacity.
- . Lack of market information. Even where shipping services are good, there is a lack of up-to-date information on the prospects for new crops.
- . Lack of extension and adaptive research facilities and advice due to the shortage of staff and facilities.
- . Lack of input supplies. There is a shortage of suitable planting material for new crops, such as vanilla and hybrid coconuts, and other agricultural inputs are not easy to obtain.
- . Lack of credit. There have been problems in the past with the granting of Fiji Development Bank loans to individuals because of the lack of collateral for the loan. Also, visits by Fiji Development Bank officials or agents have often been infrequent.
- . Hurricanes and fire have wreaked havoc from time to time, the latter, at least, being avoidable.
- . Disappointing past experiences, often through a lack of adequate project management. The present proposal is not the first time that developments have been tried on the islands, but many - copra, cocoa, fisheries, pine plantations - have not come up to expectations. This new proposal includes provision for project management.
- . Conservative and conservationist attitudes, for example the almost universal refusal to cut down senile coconut palms. This constraint is related to the situation where the very complex net of traditional social interactions and obligations in the villages may deter the more adventurous and entrepreneurial spirits, particularly those who have been educated in Viti Levu, away from their home island.

The project would create income generating activities to the outer islanders confronted with such severe constraints.

C. CONTEXT

A principal aim of the Fiji government is the advancement of rural prosperity and the creation of employment, especially in rural areas. Population drift from the outer islands to urban centres is considered undesirable.

D. RESOURCES NEEDED

Technical Assistance

- . Shipping services analysis and planning, including reviewing the effects of relocating copra mills
- . Vanilla expertise
- . Fisheries consultancies
- . Project Management

Financial Resources

\$24.70 million is needed to finance the entire project.

E. EXPECTED IMPACT

- (i) Employment - Increased opportunity for 4400 families (25,000) persons, arresting drift to urban areas and possible return to the outer islands of those who have already migrated to other parts of Fiji.
- (ii) Income - Possible incremental net income of \$20 per family per day.
- (iii) Private sector development.
Possible private sector involvement in construction of roads, jetties. The activity of island people in commercial agriculture production enterprises from farm to market.
- (iv) Public sector
Project management responsible to the Ministry of Primary Industry (MPI).
- (v) Strengthening of extension services to the outer islands.

F. FINANCING MODALITIES

A combination of cash grant, aid-in-kind and technical assistance is requested for the project.

G. MANAGEMENT AND ORGANISATION

Project Manager will be responsible to the Ministry of Primary Industry (MPI) for project implementation.

PROJECT PROFILE NO. 2NORTHERN DIVISION AGRICULTURAL DEVELOPMENT PROJECTA. SUMMARY

1. Project Title : Northern Division Agricultural Development
2. Sector : Agriculture
3. Implementing Agency : Ministry of Primary Industry (MPI)
4. Project Objectives : To support the expansion and diversification of agricultural production in the Northern Division of Fiji.
5. Estimated Total Cost : \$7.50 million
6. External Financing Requirement : \$7.50 million
7. Project Description : The project area covers 8584 ha in the island of Vanua Levu, the second largest island in the Fiji group. The land affected consists of some foothills and lower coastal areas of flat land. The project would stimulate agricultural production by the 3500 inhabitants and the project would establish and rehabilitate cocoa plantations, rehabilitate existing coconut plantations, develop pastures and establish a cattle breeding unit to provide steers to village producers. Some 239 ha would be drained for rice production and the project would provide 26 km of feeder and subdivision roads. Extension and on-site research would be strengthened. Major benefits would accrue from increased production of rice, cocoa, coconuts and cattle. The construction of feeder roads would also stimulate production

of traditional crops. In order to ensure proper implementation, a management agency would be established to carry out the project on behalf of MPI.

8. Project Duration : 5 years
9. Other Funding Agencies Involved : Fiji Development Bank. The feasibility study was financed by the Asian Development Bank.

B. PURPOSE

The main aim of the project is to increase the incomes of people in the project area. This is to be pursued by promoting more intensive but sustainable use of the land resources. The range of commercial activities open to the population is to be increased and more effective support services and institutions are to be developed.

The project has been prepared in line with the economic policies recently announced by government. Particular attention has been paid to the emphasis on encouraging private sector activity and promoting entrepreneurship among the indigenous Fijians. The project also addresses the question of the future of the estate sector. Arrangements are proposed for the redevelopment of estates and the experience gained will equip the government to formulate policies of more general application to estate land throughout Fiji.

Account has also been taken of the need to restrict growth in recurrent government operating expenditures. Components have been designed to make a lasting impact on the area within the project period and with minimum addition to post-project recurrent operating expenditures.

C. CONTEXT

Government policies call for increased rural prosperity and job creation with emphasis on exportable products. Further, the capacity of ministries such as MPI is constrained so that a special project management organisation is needed. Cocoa development in the area is already significant and the project would provide much needed inputs to cocoa management for small and large holders.

D. RESOURCES NEEDED

Technical Assistance

- . Extension Adviser/Trainer for 4 years
- . Farm Management Specialist for 2 years
- . Research Advisers
- . Management Agency

Financial Resources

A total amount of \$7.5 million is required to finance the project. In addition, participants in this project are expected to meet the cost of on-farm development through credit from the Fiji Development Bank.

E. EXPECTED IMPACT

Benefits expected from the project include :

- (i) Foreign exchange - From exports of cocoa (610 tonnes/yr) and coconut (522 tonnes of copra/yr); import replacement of rice (746 tonnes/yr) and beef (107 tonnes/yr).
- (ii) Employment - Farm development opportunity for 570 households rising to 750 households; income to around \$2000/yr.
- (iii) Private Sector Development - Increased farm development and estate rehabilitation and development will inevitably utilise idle capacity and strengthen many sectors of the whole economy.
- (iv) Public Sector Investment - MPI Extension and research division, Fiji Development Bank Credit.

F. FINANCING MODALITIES

A cash grant is requested for the project, together with the provision of technical assistance.

G. MANAGEMENT AND ORGANISATION

The Ministry of Primary Industry will be responsible for extension and research, while the Management Agency will be responsible for the project implementation, including capital works, estate management and all other project activity reporting to and responsible to MPI.



PROJECT PROFILE NO. 3BA RIVER WATERSHED MANAGEMENT PROJECTA. SUMMARY

1. Project Title : Ba River Watershed Management
2. Sector : Agriculture/Land Conservation
3. Implementing Agency : Ministry of Primary Industry/Land Conservation Board
4. Project Objectives : To reduce the soil erosion in the project areas and to act as a fore-runner for other similar projects and to promote soil conservation throughout Fiji.
5. Estimated Total Cost : \$10.40 million
6. External Financing Requirement : \$10.40 million
7. Project Description : The project aims to mitigate losses over 32750 ha (33% of the total catchment) through intensive soil conservation works, changing land use from sugar cane to tree crops and timber. The project will also encourage the planting of pines in place of mission grass and the reafforestation of indigenous forests.

A strong project team (20 persons) is envisaged in a multi-disciplinary project with special focus on convincing and assisting farmers to adopt soil conservation measures.

The project will create a demonstration area and promote financial incentives for farmers to forego immediate income in favour of future benefits.

Major benefits from the project are reduced river dredging, reduce soil nutrient losses, gains in sugar productivity and income from tree crops and pine trees. Economic analysis shows an FIRR of 15.9%.

8. Project Duration : 5 years
9. Other Funding Agencies Involved : Fiji Development Bank for on-farm development.

B. PURPOSE

The inhabitants of the Ba River Watershed use the natural resources of the land for food, shelter, transport, communications, industry, energy production and recreation. In fact, land resource use is the basis for the people's survival and enjoyment, it is, therefore, essential that they ensure the land use is sustainable.

The natural resources of the Ba watershed can only be managed for quality and sustained availability through an integrated approach. The impact upon them cannot be corrected, controlled or modified in isolation. Therefore, a plan of action must be developed to integrate the management of the resources of the Ba river watershed.

Watersheds provide natural units for implementation of land resource management. They have readily identifiable boundaries and the characteristic patterns of water movement within them make them ideal as a unit for planning and implementing management strategies.

The unfortunate aspect of current land use within the Ba watershed is that individual land users have proceeded with their form of use in isolation, often causing severe degradation of the resource.

C. CONTEXT

There is serious concern about soil erosion in Fiji and its long term impact on the levels of sustainable income. There is also a need to maintain and increase present levels of agricultural output, particularly for export. Improving rural prosperity is a government objective.

This project aims to satisfy these long-term and short-term objectives through protecting Fiji soil resources in a productive manner for existing farmers. This will offer new

employment, income generation and the opportunity for ownership of tree crops and pines to participants.

D. RESOURCES NEEDED

- Technical Assistance

- . Consultancies
- . Technical counterpart to project manager
- . Land Use Planner - Farming
- . Soil Conservationist - Roads and Urban
- . Logging Advisor - Logging Code
- . Hydrologist
- . Data Processing
- . Forestry - survey of forest resource

Financial Resources

A total of \$10.40 million is required. \$0.90 million and \$9.50 million for technical assistance and cash grant, respectively.

E. EXPECTED IMPACT

1. Foreign Exchange : Sustain income from sugar and new income from timber. Savings in import content in the current costs of dredging and fertilisers.
2. Employment : Soil conservation in agricultural and forestry activities will provide very significant additional employment opportunities in the Ba area, resulting in the acquisition of valuable skills.

Project staff of 20 of which 50% will be local.

F. FINANCING MODALITIES

Technical assistance and cash grant.

G. MANAGEMENT AND ORGANISATION

- . Executing agency - Ministry of Primary Industry
- . Project management responsible to MPI
- . MPI to coordinate with other departments, i.e., Public Works, Forestry, Fiji Pine Commission.
- . MPI will also coordinate with the Land Conservation Board and the Town and Country Planning Department.

PROJECT PROFILE NO. 4SUGAR INDUSTRY EXPANSION FEASIBILITY STUDYA. SUMMARY

1. Project Title : Sugar Industry Expansion Feasibility Study
2. Sector : Agriculture
3. Implementing Agency : Economic Planning and Statistics Division of the Ministry of Primary Industry.
4. Project Objectives : To carry out feasibility studies on:
- (i) Re-introduction of sugar production in the Central Division of Fiji.
 - (ii) Establishment of small sugar mills and cane juice plants in Fiji.
 - (iii) Cane stockpiling facilities at Labasa mill; one of the four existing mills in the country.
5. Estimated Total Cost: \$2.00 million
6. External Financing Requirement : \$2.00 million
7. Project Description : The feasibility study for (i) is expected to be carried out within a period of 24 man-months and will involve a team of 6 people with expertise in sugarcane agronomy, fabrication and transport systems, engineering, agricultural/environmental economy, plant sizing and costing, engineering and rural sociology.
- The second feasibility study would be carried out in a period of 12 man-months with expertise

in the fields of milling technology, plant sizing and energy requirements, agronomy, management and operations of cane transport systems, financial and economic analyses. This study which is required to be undertaken immediately will involve 4 people in the areas of engineering/fabrication, agronomy, economics of transportation and financial/economic analysis.

Technical assistance is also sought for a feasibility study on the improvement of stockpiling facilities at Labasa mill.

8. Project Duration : Three studies each of about 4 months duration.
9. Other Funding Agencies Involved : Local cost component to be met by the Fiji Government.

B. PURPOSE

The Fiji Sugar Corporation (FSC) is of the view that small mills would not be commercially viable given the enormous capital outlay they require, coupled with the uncertainty of returns from sugar sales on the world market. Studies in Australia have also recommended a move away from smaller mills to larger units in order to benefit from economies of scale. In the Philippines and Hawaii, mills have had to close due to non-viability under depressed market conditions.

The current FSC pre-feasibility study on the possible relocation of one of its mills' functions to another is nearing completion. The subject of a more detailed consideration of the potential of small mills would be considered in the light of the findings of this study. Hence, the objective of the proposed studies is to assess the potential for the establishment of small sugar mills in Fiji.

C. CONTEXT

Government is committed to achieve an annual sugar production target of between 550,000-600,000 tonnes annually. The existing milling capacity with some additional capital expenditure can handle up to 600,000 tonnes of sugar production,

provided operational efficiency is maintained. However, sugar production in excess of this amount would require major expansion of factory capacities or perhaps a new mill, as well as opening up new areas for planting.

D. RESOURCES NEEDED

Technical assistance to undertake the studies.

E. EXPECTED IMPACT

The findings of the studies will help to shape the future of the sugar industry.

F. FINANCING MODALITIES

Cash grant and technical assistance.

G. MANAGEMENT AND ORGANISATION

The studies will be under the management and supervision of the Ministry of Primary Industry.

PROJECT PROFILE NO. 5FRESH PRODUCE EXPORT INDUSTRY DEVELOPMENTA. SUMMARY

1. Project Title : Fresh Produce Export Industry Development
2. Sector : Agriculture
3. Implementing Agency : Ministry of Primary Industry
4. Project Objectives : To improve the industry organisation and establish an appropriate pre-export treatment and inspection system so as to assist the orderly marketing and production of agricultural produce.
5. Estimated Total Cost : \$0.50 million
6. External Financing Requirement : \$0.50 million
7. Project Description :

The project, through the services of the agro industry expertise attached to the MPI, will promote the formation of a producers' and exporters' association. The association, in consultation with farmers and government, will :

 1. Formulate quality control standards.
 2. Operate pre-export treatment facilities.
 3. Coordinate air freight booking and the development of the availability of air freight space.
 4. Generally promote orderly market and production development with the legal right to levy exporters to obtain capital and operating funds.

The MPI quarantine service will oversee pre-export treatment and quality control.

The technical assistance input by an expert in pre-export activity will be provided to the association. The entomologist in a regional capacity with the South Pacific Commission will co-ordinate the research necessary to prove the effectiveness of the pre-export treatment and will provide importing countries with evidence.

8. Project Duration : 1 year
9. Other Funding Agencies Involved :
- (i) Government of New Zealand through the provision of dry heat treatment equipment and through a joint New Zealand/Cook Islands research and development project on dry heat treatment.
 - (ii) South Pacific Commission (funded by various agencies) through the Commission plant disease unit which has identified and is beginning implementation of a regional project on fruit flies, including pre-export treatment.

B. PURPOSE

Technical expertise in the following areas to complement and facilitate existing projects:

- (i) Agro industry expert familiar with the production and export of tropical fruits (6 months).
- (ii) Expert in fruit produce treatment and quality control (12 months).
- (iii) Entomologist to carry out a regional role within the plant disease unit of the South Pacific Commission in the treatment and field assay of fruit flies. This project will protect the increasing exports of Fiji grown fruit and produce (other than ginger) and will set the scene for farmers and exporters to proceed confidently.

C. CONTEXT

Fiji is aiming to diversify exports and there are successful examples of airflown export produce, notably to Australia, New Zealand and Japan; the major products being pawpaw (papaya) and mangoes.

This sector has been targeted for growth. Production provides cash income opportunities for Fijian farmers with small holdings. Fiji is determined to protect access to markets by upgrading pre-export treatment and to develop markets through orderly industry management.

D. RESOURCES NEEDED

Technical Assistance

- . Agro Industry Expert - 6 months
- . Export Expert - 12 months
- . Entomologist - 12 months

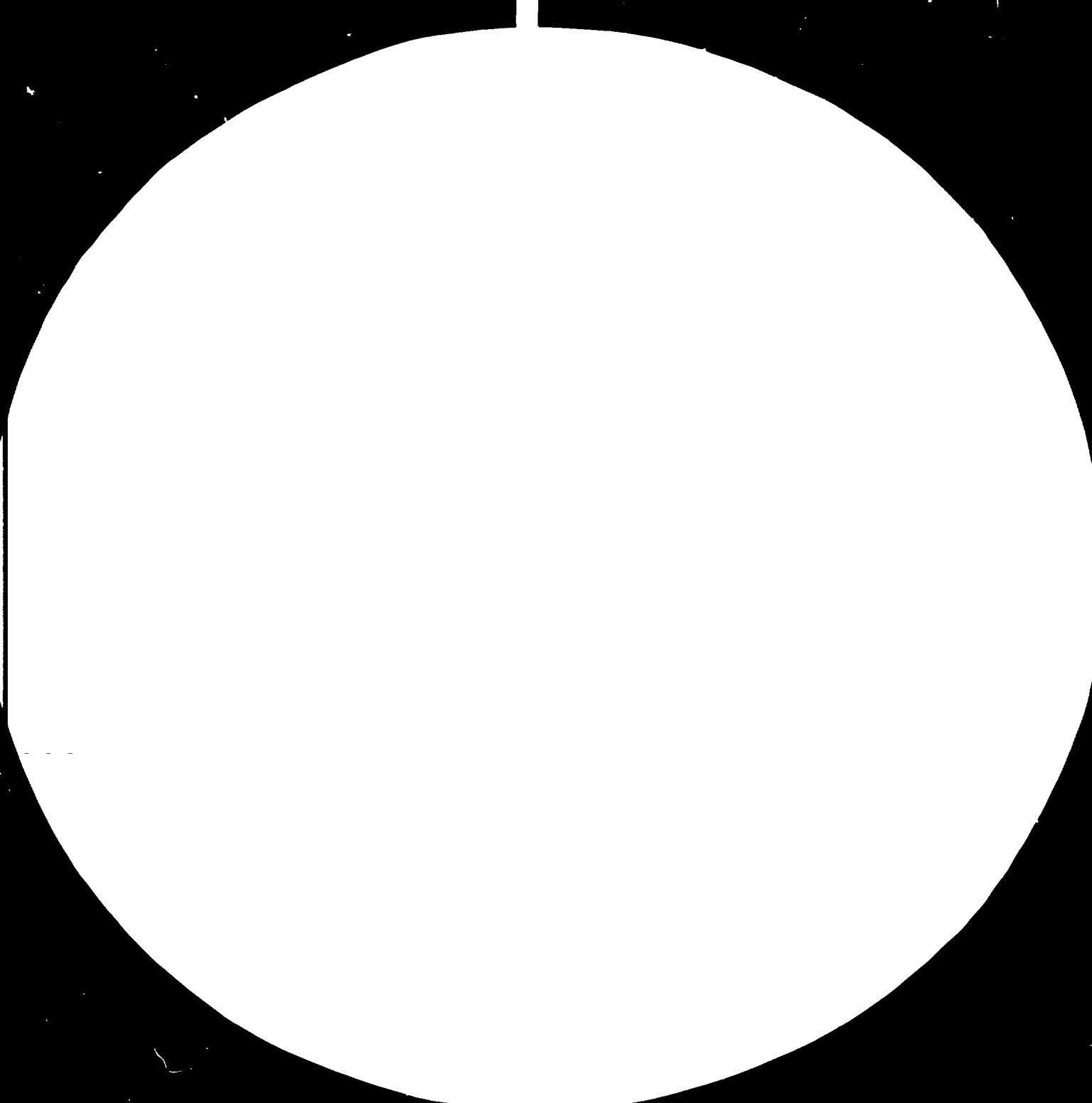
Financial Resources

Total resources needed for technical assistance and other inputs is \$0.50million.

E. EXPECTED IMPACT

The following benefits are expected :

1. Maintenance of current level of exports
2. Employment generation for farmers, producers and exporters
3. Private Sector Development:
 - . A significant step in the establishment of a viable fresh produce export industry based on Fiji's natural endowments.
 - . The establishment of farmers and an exporters' association will provide a forum for communication and understanding between producers, exporters and government.





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

4. Public Sector Development

The enacting of any necessary legislation to allow the proper formation of the association with sufficient powers to carry out their assigned tasks on behalf of their members.

F. FINANCING MODALITIES

Technical assistance and cash grant.

G. MANAGEMENT AND ORGANISATION

Overall coordination of establishment and direction would be the responsibility of MPI. Operationally, the TA consultants will report to the unit to which they are assigned.

PROJECT PROFILE NO. 6CONSTRUCTION OF FISHING VESSELS FOR IKA CORPORATIONA. SUMMARY

1. Project Title : Construction of Fishing Vessels for Ika Corporation.
2. Sector : Fisheries
3. Implementing Agency : Ika Corporation
4. Project Objectives : To increase tuna catches for the government owned cannery, Pacific Fishing Company (PAFCO).
5. Estimated Total Cost: \$10.80 million
6. External Financial Requirements : \$10.80 million
7. Project Description : The project involves the construction of two pole and line fishing vessels a year for the next three years.
8. Project Duration : 3 years
9. Other Funding Agencies : None

B. PURPOSE

Ika Corporation was established by the government in 1975 to undertake commercial tuna fishing. The Corporation is based in Lami. In early 1987, the company was operating five pole and line tuna fishing boats three of which it owned and two on charter from the Hokoku Suisan Corporation of Japan. The entire catch of skipjack and yellowfin tuna is sold to PAFCO at Levuka.

The Corporation has generally performed poorly since its establishment. Although it returned a small profit in the early years of operation, by 1986 it had accumulated trading losses of over \$3.0 million. During the first half of 1986/87 it made a modest trading profit of \$4,000. The contribution by the government of \$2.6 million during 1986, combined with improved performance during the 1986/87 season, has improved the company's immediate outlook.

The fish produced by Ika is generally of a high quality and, therefore, suited to the type of solid pack production PAFCO is geared to. Most overseas fleets produce a lower quality fish, which is not usually suitable for the PAFCO solid pack product.

The PAFCO factory requires Ika vessels and other local operators to supply 7,500 metric tonnes of skipjack and yellowfin tuna. To achieve the required tonnage from Fiji waters, the local fleet of pole and line vessels needs to be increased. Hence, it is proposed that the local fleet be increased by 2 vessels per year over the next three years to a fleet of nine vessels by 1992.

C. CONTEXT

The principal objective of the Industrial Fisheries Development is to expand tuna fisheries. More vessels will facilitate increased catch by Ika Corporation for full utilisation of the PAFCO processing facility.

D. RESOURCES NEEDED

Financial resources and aid-in-kind through the provision of building materials for the fishing vessels.

E. EXPECTED IMPACT

The benefits from this project can be summarised as follows:

- . Increased export earnings from export of canned tuna.
- . Increased employment in fishing and processing factory.
- . Fuller utilisation of the processing factory.

F. FINANCING MODALITIES

Cash grant and aid-in-kind.

G. MANAGEMENT AND ORGANISATION

Ika Corporation in close consultation with the Government shipyard.

PROJECT PROFILE NO. 7HARDWOOD REFORESTATIONA. SUMMARY

1. Project Title : Hardwood Reforestation
2. Sector : Forestry Sector
3. Implementing Agency : Ministry of Forests
4. Project Objectives :
 - To reforest 4,500 hectares of logged forest annually in order to ensure sustainability of long term supply from harvested areas.
 - To ensure sustainable management of the indigenous forest in the future.
 - To create employment in depressed rural areas leading towards more equitable income distribution.
 - To widen the economic base of the nation.
 - To assure maintenance of most of the existing forest cover.
5. Estimated Total Cost: \$25.00 million
6. External Financing Requirement : \$25.00 million
7. Project Summary :
 - Approximately 4,500 - 5,000 hectares is logged annually. The Ministry of Forests has been undertaking a replanting programme at levels matching the area harvested annually. This project should ensure that the area harvested annually is replanted.
8. Project Duration : 10 years
9. Other Funding Agencies Involved : Australian and New Zealand bi-lateral assistance.

B. PURPOSE

The replanting of logged indigenous forest with mahogany and other hardwoods at levels matching annual harvest has been undertaken in the past by the Ministry of Forests. Funding for this programme had been provided by the Fiji Government and assisted by both the New Zealand and Australian Governments.

Recently, funding assistance from the Australian and New Zealand Governments has been markedly reduced and continued aid support for this programme is uncertain. Prior to receiving any aid funding for this work only levels of around 20% of the area harvested were being replanted. Funding support is essential if reforestation is to match the area harvested annually.

C. CONTEXT

The development potential of the forestry sector depends greatly on a constant and sustainable supply of wood for its processing industry. If there is to be a reduction in harvesting from the natural forest, then it is essential that plantations provide the alternative wood supply for the various processing industries. Sustainable management of the remaining natural forest is only possible once plantations commence to supply the needed resource to sustain processing industries.

D. RESOURCES NEEDED

Technical Assistance: Nil

Financial Assistance:

\$25.00 million

E. EXPECTED IMPACT

The project will ensure sustainable management of forests, assure the maintenance of most of the existing forest cover, widen the economic base of the country in the future, create new value-added processing industries that can rely on a sustainable supply of assured volumes and species. Continuing employment opportunities will be available to people in the rural areas where agricultural potential is often limited.

Improved plantation management should help to raise the proportion of sawn logs in the harvested yields and this will result in higher values obtained for production.

F. FINANCING MODALITIES

An annual cash grant of \$2.50 million over 10 years is required.

G. MANAGEMENT AND ORGANISATION

The Ministry of Forests will be responsible for the implementation and management of this project.

PROJECT PROFILE NO. 8FOREST COVER INVENTORY AND MONITORING OF DEFORESTATIONA. SUMMARY

1. Project Title : Forest Cover Inventory and Monitoring of Deforestation
2. Sector : Forestry Sector
3. Implementing Agency : Ministry of Forests
4. Project Objectives :

To determine the condition of the natural forest cover including coastal mangrove areas.

To train Ministry of Forests personnel in the use and interpretation of satellite imagery in order to enable continuous monitoring of forest area changes.

To provide forest area statistics on the remaining production forests, protection forests, non-commercial forests, forest plantations and special areas for reservations (short term).
5. Estimated Total Cost: \$1.20 million
6. External Financing Requirement : \$1.20 million
7. Project Summary : A forest inventory was carried out in 1967. The forest cover has since changed significantly due to logging and conversion of forest areas to agriculture and other land use. The proposed forest inventory should update the extent and condition of the natural forest for better

resource planning and management. The project will also provide forest area statistics to better plan industrial development and forest management.

8. Project Duration : 3 years
9. Other Funding Agencies Involved : None

B. PURPOSE

Information on the remaining total forest resource and cover is now out-dated and inadequate. The last inventory was carried out over 20 years ago. The Ministry of Forests is charged with the responsibility for regulating natural forest exploitation and management of the natural forest. In order to do this with reasonable confidence, reliable data on the extent and condition of the natural forest is essential. Deriving appropriate sustainable forest management, protection and conservation strategies would be conditional on reliable information being available.

C. CONTEXT

The success of the forestry sector is dependent on the sustainable provision of forest products for industry development and for domestic demand in the country. The strategy to maximise the sustainable contribution of the sector to the development and diversification of the economy (whilst bringing the indigenous Fijian people into fuller and more active participation in forest sector development at all levels) and to environmental conservation is dependent on reliable information for planning and management. Much of the work to be undertaken by the Ministry of Forests is dependent on the completion of a forest inventory prior to commencement. Such activities include : forestry land-use planning, land rehabilitation, forestry systems research, silviculture and ecology, industrial and export market development.

D. RESOURCES NEEDED

Technical Assistance

1 Inventory Adviser with expertise in
data processing 24 man-months

1 Remote Sensing and Mapping Adviser	12 man-months
1 Field Inventory Adviser	12 man-months
Short term consultancies (Volume functions, parks, silviculture etc.)	8 man-months

Financial Assistance

The project is estimated to cost \$1.20 million

E. EXPECTED IMPACT

The forest inventory is expected to provide for government reliable information on all forest resources for improved planning and management of sector development.

F. FINANCING MODALITIES

A cash grant for the total sum of \$1.20 million is required.

G. MANAGEMENT AND ORGANISATION

The Ministry of Forests will be responsible for management and implementation of this project.

PROJECT PROFILE NO. 9FORESTRY SECTOR EXPORT MARKET DEVELOPMENT AND TRAININGA. SUMMARY

1. Project Title : Forestry Sector Export Market Development and Training
2. Sector : Forestry Sector
3. Implementing Agency Involved : Ministry of Forests
4. Project Objective : To identify, specify, evaluate and establish Fijian timbers in export markets for high quality, high value timbers and value-added wood products (short term).
- To train marketing personnel in the skills and methodology of high quality wood marketing, research, analysis and servicing (long term).
- To launch diploma level forestry training in line with new high value forestry strategy.
5. Estimated Total Cost:
- | | |
|---------------------------|----------------------|
| Export Market Development | \$2.0 million |
| Training | \$2.0 million |
| | <hr/> |
| | <u>\$4.0 million</u> |
6. External Financing Requirement : \$4.0 million
7. Project Summary : In order for an export oriented strategy to succeed, considerable knowledge and contact with high value markets have to be developed. This project will provide both market information and training.
- The Fiji Forestry Training Centre presently runs a three year Forestry Technician

Certificate course. This project will convert the course from a 3 year Forestry Certificate Course to a 3 year Forestry Diploma Course.

8. Project Duration : 5 years
9. Other Funding Agencies Involved : None

B. PURPOSE

Under the guidance of, and working in close association with, one or more marketing specialists fully conversant with potential target export markets, selected local personnel with an interest and aptitude in marketing will :

- (i) identify market niches for high quality, high value timbers and wood products which Fiji could supply;
- (ii) characterise and quantify those markets in terms of the dimensions, specifications, standards which Fijian supplies would have to meet and the market size and price relationships; and,
- (iii) initiate the market penetration processes, in Fiji with respect to manufacturing, handling and despatch to the standards required, and at the customer end with respect to orders, payments and servicing.

This project will also serve to upgrade the 3 year technician certificate level training to diploma level. It is important to design a completely new curriculum which would cater for new tasks and shift emphasis into new areas, as well as upgrade skill levels for existing tasks. The Diploma level course must be newly conceived and designed and must not just be grafted onto the present technician level certificate course by adding subjects.

C. CONTEXT

It is expected that markets for general utility timber grades will become increasingly difficult to penetrate as softwood plantations in the region reach maturity. Large surpluses of several utility grades will exist in the region. Fiji has the timbers to produce high value wood products. If the forestry sector is to realise its potential to significantly contribute to the development of the country, the only solution for Fiji is a high value wood products marketing strategy.

As the sector develops the need for skilled manpower to cater for expanding levels becomes more critical. In order for the sector to succeed trained personnel must be readily available locally at various locations.

D. RESOURCES NEEDED

Technical Assistance

Marketing expert (4 x 6 month terms)	24 man-months
Forestry Training Specialist	24 man-months
Follow up visit	2 man-months

Financial Resources

Export Market Development: \$400,000 over two years and \$100,000 per year for the life of project.

Training - \$2.0 million

E. EXPECTED IMPACT

This project should considerably reduce wasteful processing and utilisation of valuable Fijian timber species. High value timbers will be processed and marketed to yield the maximum returns possible from those species. The survival of the sector will be ensured when the market for general utility timber declines as forecasted. Also, less volume will need to be harvested annually to yield the same returns.

F. FINANCING MODALITIES

A cash grant for \$4.0 million is required.

G. MANAGEMENT AND ORGANISATION

The Ministry of Forests will be responsible for the implementation and management of this project.

APPENDIX
TIMBER INDUSTRY FIJI

DEVELOPMENT PROPOSAL BY C.H.E. INTERNATIONAL OF SUVA, FIJI

1.1 THE COMPANY - C.H.E. INTERNATIONAL

Clayton Howard Enterprises International Ltd ("C.H.E. International") is a limited liability company incorporated in Fiji. Its shareholders are:

Elizabeth Clayton (Australian)
Peter Howard (Fijian/Australian)
Mabel Howard (Fijian)

Peter and Mabel Howard are husband/wife and are the local shareholders, currently holding 75% of the issued share capital of the company.

The company was established in November 1988, and from virtually a zero base has expanded over the last two years to the point where it now holds confirmed orders in excess of US\$2 million for the current year.

The company manufactures and supplies furniture to a number of clients world-wide, the major one being IKEA. Although primarily supplying to IKEA'S Australian market at the present time, product endorsement has been obtained from IKEA Sweden for its other international markets. In addition, expansion is underway with other clients in South-East Asia and the Pacific Basin.

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CLAYTON - HOWARD
ENTERPRISES

1.2 Project Concept and History

Fiji's supply of high quality indigenous timber, including indigenous, plantation pine and mahogany species, as well as the country's relatively low labour cost, provides an ideal opportunity to manufacture quality, value-added wood products including furniture, wooden toys, kitchen /bathroom utensils, doors, door jambs, architraves, parquetry etc.

The decision to manufacture wood products in Fiji is further encouraged by the following:

a) Tax advantage:

- (●) The government of Fiji has established Tax Free Zones and Tax Free Factories to stimulate investment. A "tax holiday" is provided to a business engaged in enterprises where 95% of goods manufactured are exported-i.e. there will be no income tax payable on corporate profits for a period of 13 years and no withholding tax on interest, dividends and royalties paid abroad.

All items such as materials and equipment used for establishment purposes will be duty-free, and there is no duty payable on importing manufacturing raw materials and exported products.

b) Preferential access to the major markets of the world:

Under SPARTECA to Australia and New Zealand (Rules of Origin apply):

Under G.S.P. to the United States, Japan, Canada, Eastern Europe and the European Free Trade Association; and

Under LOME III to all EEC countries.

- (●) c) Strategic location in the South Pacific for transportation by air or ship.
- d) Communication facilities-ISD telephone, telex, facsimile.
- e) Favourable supply/demand position in a "post-coup" economy.
- f) Well-educated and skilled labour is readily available.
- g) Low cost of wood as the base raw material.

C.H.E. International Ltd gained Tax Free Factory ("TFF") status in October 1988.

1.3 Expansion

The shareholders have now made a decision to expand the base operation, and are planning to establish a "state-of-the-art" intergrated industrial operations to include:

- . Ready -to-assemble knock-down pine furniture manufacturing ;
- . Hardwood (indigenous and plantation) fine furniture manufacturing;
- . Scft furniture manufacturing ; and
- . Foam manufacturing.

C.H.E. will expand into the first three areas based on its demonstrated expertise in furniture manufacturing, however at this stage it is anticipated a Joint Venture would be formed for foam manufacture with a recognized expert in this area.

2. Infrastructure and Plant Requirements

Intial forecast for the capital cost and ongoing operational costs of the various components have been carried out with regard to preliminary input from the well -known Danish specialist, M.Kruger & Co.a/s. It is intended at this stage that M.Kruger & Co be engaged to complete the necessary detailed feasibility analysis, project implementation and staff training programmes required.

The current forecast of capital requirement is F\$3 million, calculated as follows:

Purchase suitable property and upgrade both services and access infrastructure F\$ 200,000

Construct buildings, including :

-Factory building	2800m2	
-Sheds	1400m2	
- Administration	250m2	
- Staff building	250m2	
- Energy	72m2	700,000

Plant and equipment requirements	750,000
Other investment cost	750,000
Raw materials initial purchase	300,000
Working capital	300,000

page 4

3. Summary and Conclusion

C.H.E. International Ltd has been established in Fiji since 1988, and since that time has proven its ability to conceive and implement first class manufacturing activities within the furniture industry.-

In particular, C.H.E. International has demonstrated the ability to not only successfully market to international clients but, of equal importance, to also meet the critical production, quality control and shipping deadlines necessary to satisfy this demanding clientele.

With a proven "track record" in Fiji, strong local shareholding and skilled management, C.H.E. International Ltd is well placed to ensure funds advanced by the European Development Bank are utilized to best advantage in the improvement of Fiji's capacity to supply competitively to world markets.

Favourable consideration is therefore sought of this application for funding to the extent of US\$4 million.
F\$3

For further information on C.H.E. International Ltd, contact should be made in the first instance as follows:

Ms Elizabeth Clayton
Managing Director
C.H.E. International Ltd
P.O.BOX 2082
Government Building
SUVA.FIJI.

che
CLAYTON - HOWARD
ENTERPRISES

WORKING PAPERS

FOR

INDEPENDENT STUDY ON THE TIMBER & VALUE-ADDED
INDUSTRIES IN FIJI

MAY, 1990
FIJI FURNITURE MANUFACTURERS' GUILD

EVALUATION OF THE FIJI TIMBER INDUSTRY

The FIJI FURNITURE MANUFACTURERS' GUILD has called on the Interim Government to initiate the undertaking of a comprehensive, independent study of the Fiji Timber Industry in the light of the development of a substantial furniture manufacturing industry.

Recommendations emulating from this evaluation should enable the Government to make decisions and subsequently develop policy. The need to have well chosen, well respected consultants is paramount.

The key question in the evaluation study is:

PAGE ONE DOES FIJI HAVE SUFFICIENT, WELL MANAGED RESOURCES TO SUSTAIN OR WARRANT LARGE SCALE INVESTMENTS IN THE VALUE-ADDED INDUSTRIES TO SATISFY THE MARKET DEMAND AT INTERNATIONALLY COMPETITIVE PRICES?

Considering all factors,

WILL THIS BRING A GREATER NETT RETURN TO FIJI THAN EXPORTING THE RAW TIMBER?

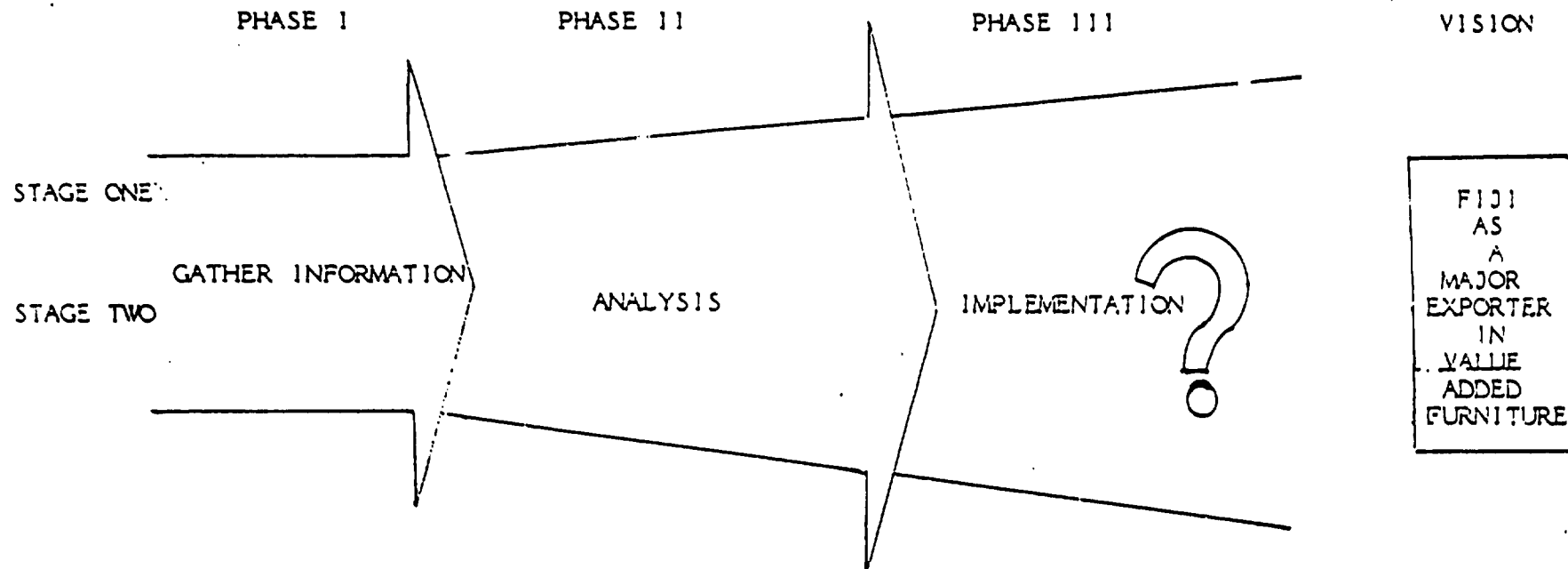
if the answer to this question is GREATER, then

PAGE TWO AN OVERALL CORPORATE PLAN MUST BE PUT IN PLACE FOR SHORT, MEDIUM AND LONG TERM DEVELOPMENT OF THE VALUE ADDED INDUSTRY. (involves further evaluating- training, duties, required R & D, shipping, level of investment, management & production systems, kiln drying, marketing)

I suggest the consultancy team could include a-

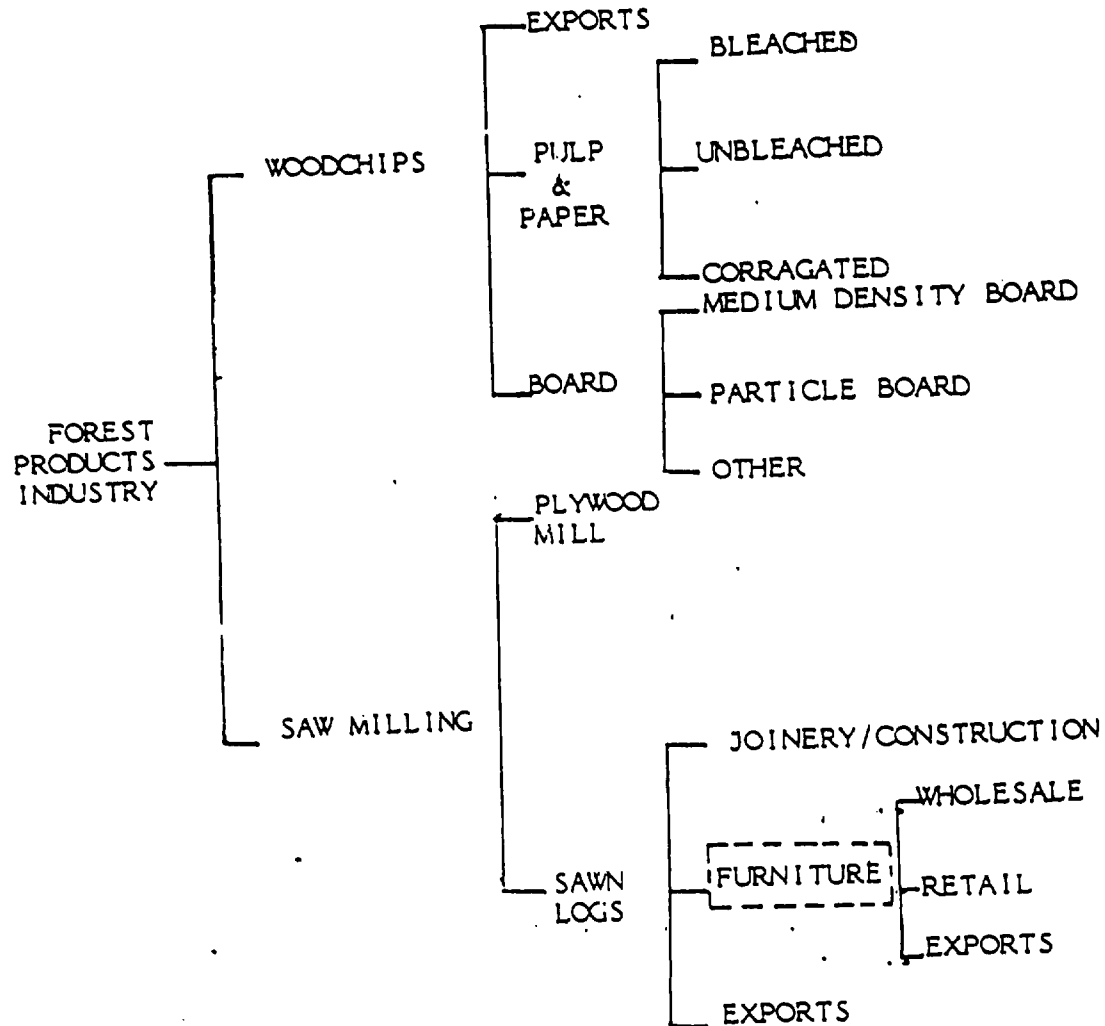
- STAGE ONE FOREST ECONOMIST
- " FOREST RESOURCE PERSON
- " FORESTER WITH LOCAL KNOWLEDGE
- STAGE TWO FURNITURE PRODUCTION SPECIALIST (Knowledge of such systems as Integrated Factory Zoning, K-Systems of Scandinavia an advantage)
- STAGE TWO HUMAN RESOURCE SPECIALIST
- STAGE ONE STRATEGIST/CORPORATE PLANNER (PROJECT CO-ORDINATOR)
- STAGE TWO FURNITURE MARKETING RESEARCH ANALYST

THE FIRST STEP TOWARDS REALISING A VISION OF BEING A MAJOR EXPORTER IN FURNITURE IS TO LOOK AT AN OVERALL CORPORATE STRATEGY FOR THE INDUSTRY AND ANALYSE THE VIABILITY OF ACHIEVING THE VISION.

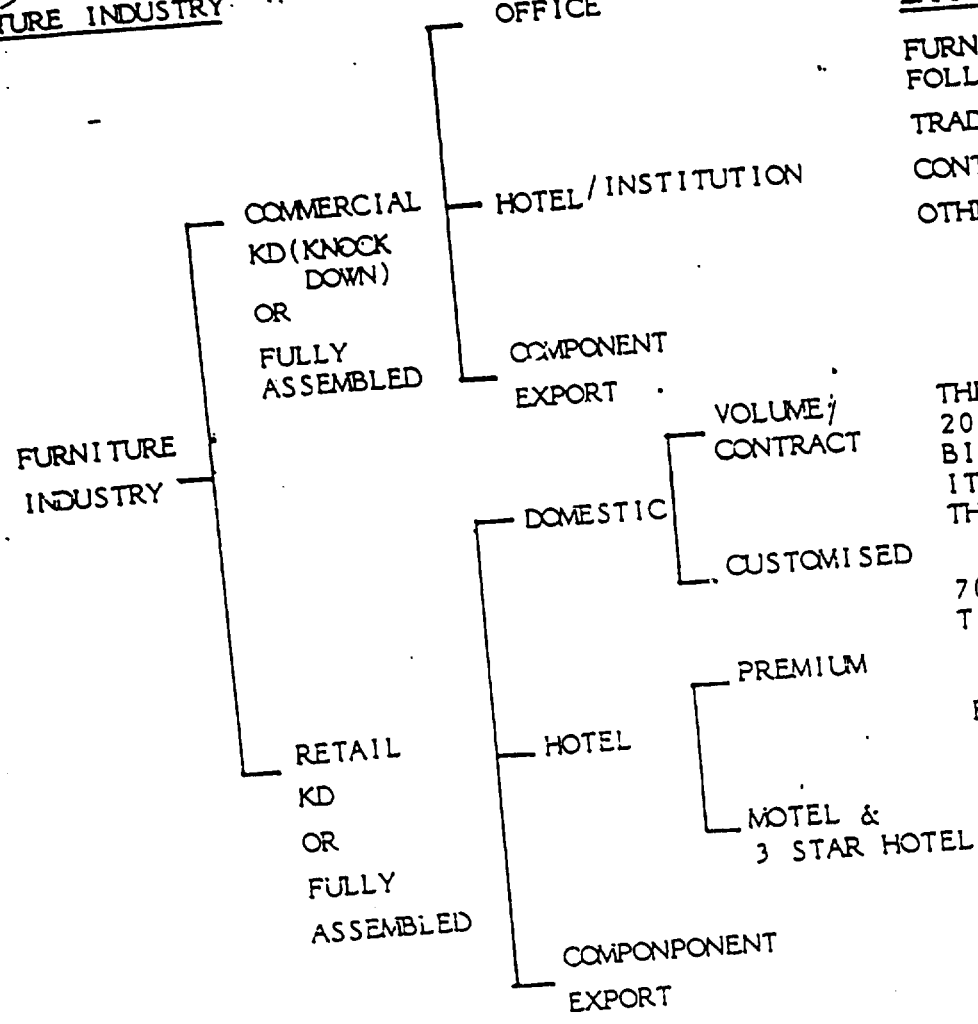


VALUE ADDED CHAIN IN THE FOREST PRODUCTS INDUSTRY

FURNITURE IS ONE VALUE ADDED ELEMENT ALONG THE FOREST PRODUCTS INDUSTRY CHAIN



FURNITURE INDUSTRY



EXAMPLE STATISTICS

FURNITURE IS SOLD ACCORDING TO THE FOLLOWING BREAKDOWN:

TRADITIONAL	45%	70%
CONTEMPORARY	50%	25%
OTHER+ORIENTAL	5%	5%
		<hr/>
		EUROPE
		U.S.A.

THE WHOLESALE U.S.A MARKET IS 20 BILLION U.S. DOLLARS WITH 3 BILLION BEING IMPORTED FROM TAIWAN, ITALY AND NOW INDONESIA, MAYALSIA, THAILAND.

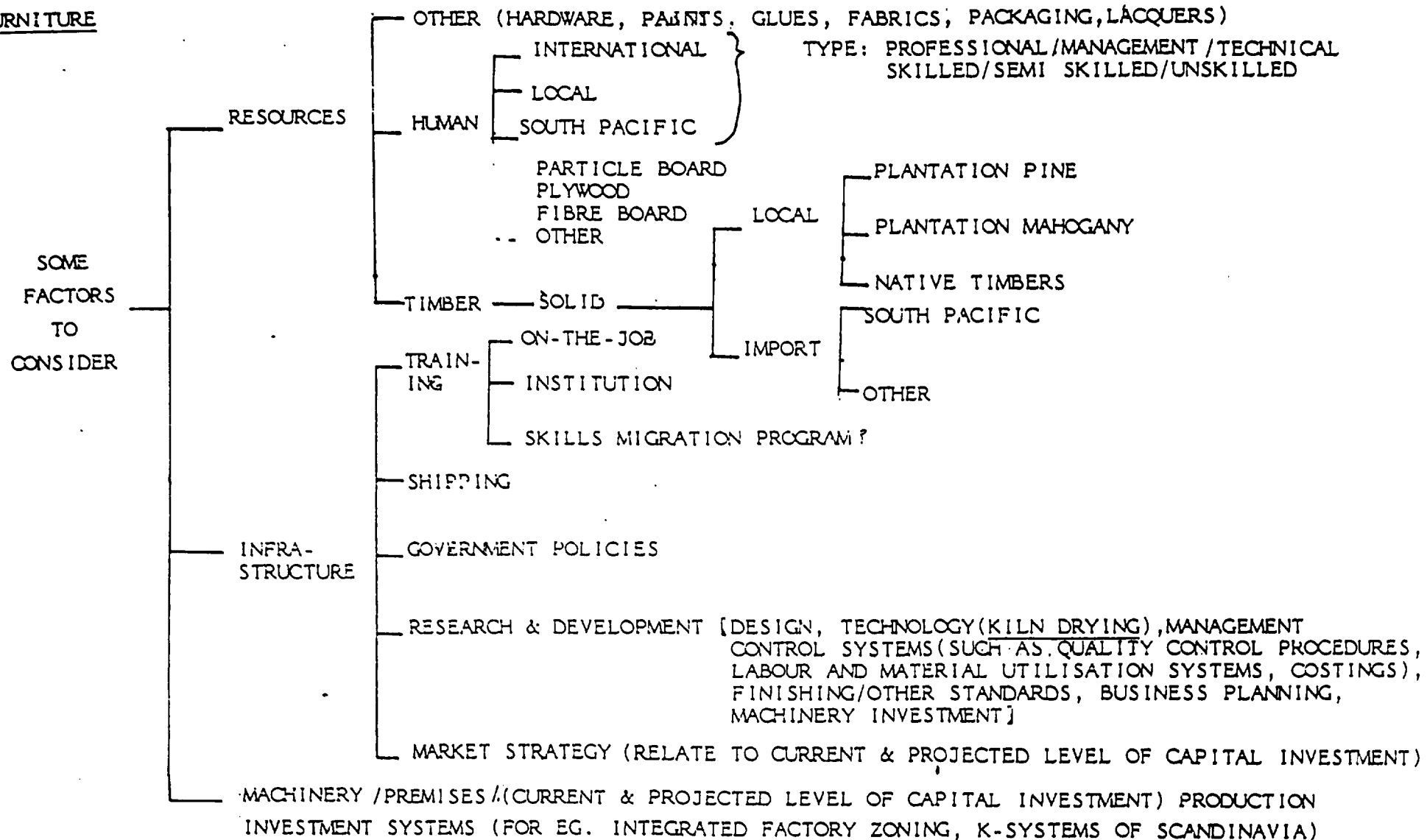
70% OF FURNITURE SOLD IS MADE FROM TIMBER

FURNITURE (FOR EXAMPLE IN THE U.S.A.) IS SOLD ON THE FOLLOWING CRITERIA:

- STYLE
- PRICE
- FINISH

SOME FACTORS TO BE CONSIDERED IN AN OVERALL CORPORATE STRATEGY FOR A VALUE ADDED INDUSTRY

FURNITURE



PLANNING FOR THE FUTURE OF THE FURNITURE INDUSTRY IN FIJI

MARKETING

THE WORLD WIDE CONSERVATION MOVEMENT WILL EFFECT THE ENTRY OF FIJI TIMBERS AND TIMBER PRODUCTS INTO EXPORT MARKETS - IT IS ONLY A MATTER OF TIME BEFORE THIS HAPPENS. IF FIJI CAN ADVANCE ENLIGHTENED RAIN FOREST MANAGEMENT POLICIES, CONSUMER'S ABROAD, IN ENVIRONMENTALLY CONSCIOUS COUNTRIES, WILL THEN ACTUALLY PROMOTE FIJI'S TIMBER PRODUCTS FOR US. WE MUST ENSURE THAT PROCESSES WITHIN THE MANUFACTURING PROCESS ARE ENVIRONMENTALLY SOUND. FOR EXAMPLE, FURNITURE MANUFACTURERS IN CALIFORNIA CANNOT USE A PARTICULAR (POPULAR) FINISH ON THEIR PRODUCTS BECAUSE OF DAMAGE TO THE ENVIRONMENT. THIS PARTICULAR PROCESS SHOULD NOT BE DONE IN FIJI.

KILN FACILITIES ARE A HIGH PRIORITY IN FIJI - SCALE?

STANDARDS (ESPECIALLY OF PRODUCTS EXPORTED) FOR MANUFACTURED ITEMS SHOULD BE DEVELOPED - ?

EXCISE DUTY OR ROYALTY SHOULD BE PLACED ON THE EXPORT OF SAWN TIMBER DEPENDING ON PROJECT FINDINGS, PARTICULAR WITH REGARD TO QUESTION 5 IN STUDY OBJECTIVES.

THE GOVERNMENT SHOULD BE SELECTIVE ON THE TYPE OF VALUE ADDED INVESTMENT FROM FOREIGN INVESTORS TO ENSURE THERE IS A "FIT" INTO THE OVERALL CORPORATE PLAN FOR THE DEVELOPMENT OF A FURNITURE (OR VALUE-ADDED) INDUSTRY. IT MAY WELL BE THAT THE REPORT WILL SUGGEST THAT A FURNITURE INDUSTRY SHOULD DEVELOP FROM THE PRESENT LOCAL FURNITURE INDUSTRY BY GIVING SUPPORT RATHER THAN ENCOURAGING FOREIGN INVESTMENT. THE OBVIOUS QUESTION THOUGH IS WHAT LEVEL OF INVESTMENT IN THE FURNITURE (LOCAL AND/OR FOREIGN) COULD WELL MANAGED, NATURAL & PLANTATION RESOURCES SUSTAIN?

AFTER A RECENT CDI WORKSHOP WHERE THE WORKSHOP LEADERS VISITED SOME 30 FACTORIES IN FIJI, THEY REPORTED ON THE FURNITURE INDUSTRY AS FOLLOWS:

THE AIM OF THE WORKSHOP LEADERS WAS TO ASSESS THE POTENTIAL OF FURNITURE MANUFACTURERS OF VALUE ADDED WOOD PRODUCTS TO OVERSEAS MARKETS PARTICULARLY EUROPE & THE U.S.A. (GIVEN THE MANUFACTURERS PRESENT INVESTMENT LEVEL) AND TO IDENTIFY THE PROBLEMS THAT THE MANUFACTURERS HAVE IN PRODUCING EXPORTABLE QUALITY ITEMS.

THE MAJOR PROBLEMS^H THE CONSULTANTS FOUND WERE COMMON TO ALL FACTORIES AND INCLUDED:

1. THE SHORTAGE OF TIMBER AT THE RIGHT PRICE, QUALITY AND QUANTITY TO ENABLE THE COMPANIES TO BE COMPETITIVE IN WORLD MARKETS
2. A SHORTAGE OF KILN DRYING FACILITIES TO PRODUCE TIMBER OF 8 - 10% MOISTURE CONTENT.
3. ADEQUATE KNOWLEDGE OF THE FINISHING STANDARDS REQUIRED BY OVERSEAS MARKETS.
4. A LACK OF ADEQUATE MANAGEMENT CONTROL SYSTEMS SUCH AS QUALITY CONTROL PROCEDURES, LABOUR AND MATERIAL UTILISATION SYSTEMS, COSTINGS ETC.
5. UNDERINVESTMENT IN THE TYPE OF MACHINERY AND EQUIPMENT NECESSARY TO PRODUCE PRECISION FURNITURE AT GOOD PRODUCTIVITY LEVELS.

PLANNING FOR THE FUTURE OF THE FURNITURE INDUSTRY (CONTINUED)

DESIGN PROJECT

MASTER WOOD CRAFTSPEOPLE/DESIGNERS COULD BE BOUGHT IN ON A PROJECT TO WORK WITH LOCAL PEOPLE IN AREAS WHERE FORESTS HAVE BEEN CUT AND THERE STILL REMAINS CONSIDERABLE AMOUNTS OF VALUABLE TIMBER ON THE FOREST FLOOR. A SIMILAR PROJECT WAS MOST SUCCESSFUL IN MAYALSA IN SHOWING LOCALS WHAT COULD BE DONE, DEVELOPING SKILLS, AND INDICATING THE FINANCIAL RETURNS FOR ITEMS. MASTER CRAFTS-PEOPLE USUALLY WORK WITH HAND TOOLS RATHER THAN HEAVY MACHINERY REQUIRING THREE PHASE ELECTRICITY THEREFORE ACCESS TO MORE REMOTE LOCATIONS COULD BE MADE.

FUTURE USE OF MAHOGANY

A SPECIFIC PLAN FOR THE LOCAL USE OF MAHOGANY SHOULD BE DEVELOPED. IT IS EXPECTED THAT THERE WILL BE A TREND BACK TO DARKER TIMBERS BY 1993. RESEARCH & DEVELOPMENT COULD BE DONE NOW BY HAVING FURNITURE MADE FROM MAHOGANY & ALLOWING IT TO "SIT" IN VARIOUS MOISTURE ZONES AND BE MONITORED FOR STABILITY ETC. RESEARCH COULD BE OBTAINED FROM BRAZILIAN MADE FURNITURE ITEMS MADE FOR EXPORT. OUR INDUSTRY SHOULD BE GEARING UP TO CAPITALISE ON THIS PLANTATION TIMBER.

CORPORATE PLAN

REFER TO DIAGRAMS ATTACHED

THE GOVERNMENT (STUDY) NEEDS TO ADDRESS:

- TIMBER ISSUES
- TRAINING ISSUES
- CURRENT DUTIES ON RAW MATERIALS PARTICULARLY HARDWARE
- SHIPPING ISSUES
- ASSISTANCE WITH RESEARCH & DEVELOPMENT PARTICULARLY WITH KILN DRYING TECHNOLOGY, MANAGEMENT CONTROL SYSTEMS, PRODUCTION SYSTEMS, INTEGRATED FACTORY ZONING SYSTEMS, ETC.

TRAINING/WORKFORCE

SYSTEMATIC TRAINING OF CABINET MAKERS, DESIGNERS, UPHOLSTERERS NEEDS TO COMMENCE IMMEDIATELY.

A SKILLS MIGRATION PROGRAM MAY WELL NEED TO BE PUT IN PLACE AS THE PRESENT SYSTEMS CANNOT COPE WITH THE PRESENT DEMAND FOR SKILLED STAFF.

INFORMATION FROM ABROAD

INDONESIA HAVE COMPULSORY REAFFORESTATION SAVING FUNDS (AS HAS MALAYSIA). THIS IS US \$10.00 FOR EVERY CUBIC METRE OF TREES CUT.

INDONESIA AND MALAYSIA HAVE A FIGURE OF US\$ 1000 PER HA FOR THEIR REAFFORESTATION PROGRAM

THE INDONESIAN GOVERNMENT HAS INCREASED EXPORT TARRIFS ON SAWNWOOD BY BETWEEN US\$ 250 TO US \$ 2,500 (DEPENDING ON SPECIES) PER CUBIC METRE FROM NOVEMBER 1989.

FROM JUNE, 1990, THE MALAYSIAN GOVERNMENT WILL PUT AN EXPORT LEVY ON SAWN TIMBER OF BETWEEN M \$ 60 TO M \$ 120 PER CUBIC METRE DEPENDING ON THE WOOD SPECIES AND SIZES. M\$120 EXPORT LEVY ON VENEERS.

SHOULD ANY RESEARCH STUDIES OR PROJECT STUDIES BE AVAILABLE FROM INDONESIA, THAILAND OR MALAYSIA, ACCESS TO SUCH WOULD BE WORTHWHILE.

THE INTEGRATED FACTORY ZONING APPROACH TO DEVELOPMENT OF THE FURNITURE INDUSTRY, FROM SINGAPORE, IS WORTH LOOKING AT.

THE K-SYSTEMS APPROACH TO DEVELOPMENT OF THE FURNITURE INDUSTRY (PARTICULARLY PRODUCTION ASPECTS), FROM SCANDINAVIA, IS WORTH LOOKING AT.

THE NETWORKING APPROACH IN ITALY WOULD BE WORTH LOOKING AT

MR OOI OENG HOCK FROM MIDA (MALAYSIA) HAS DEVELOPED AN INTERESTING PROPOSAL TITLED "INVESTMENT STRATEGY ON FURNITURE PROJECT MANUFACTURING".

FIJI SHOULD JOIN ITTO (INTERNATIONAL TROPICAL TIMBER ORGANISATION) WHICH FOCUSES ON TROPICAL HARDWOODS AND IMPORT/EXPORT MARKETS WITH DUE CONSIDERATION TO CONSERVATION OF RESOURCES, AND AMONG OTHER GOALS, PROMOTES VALUE-ADDED PRODUCTION, AIMS TO ENSURE TROPICAL FORESTS CONTINUE VIABILITY TAKING INTO ACCOUNT THE 3 MAJOR FORESTRY INTEREST GROUPS - PRODUCERS, CONSUMERS AND CONSERVATORS.

THE WORLD BANK NOW EVALUATES ALL NATURAL RESOURCE PROJECTS FOR THE ENVIRONMENTAL IMPACT BEFORE THE BANK SUPPORT IS PERMITTED. THE WORLD BANK SHOULD ALSO BE ENCOURAGED TO REVIEW PROJECTS IN FIJI WHICH THEY HAVE ALREADY FUNDED TO ENSURE THESE PROJECTS ARE ENVIRONMENTALLY SOUND. AUSTRALIAN GOVERNMENT SHOULD DO THE SAME WITH THEIR AID PROJECTS.

BRAZIL, WHERE FIJI'S MAHOGANY ORIGINATES FROM, HAS AN EXPORT FURNITURE INDUSTRY. ANY REPORTS FROM BRAZIL WOULD BE WORTH LOOKING AT.

THE UNITED NATIONS GLOBAL ENVIRONMENTAL MANAGEMENT SERVICES (GEMS) BASED IN NAIROBI, SHOULD BE CONTACTED TO ASCERTAIN IF THEIR SYSTEM OF GLOBAL SATELITE IMAGERY USED TO MONITOR DEFORESTATION COULD BE APPLIED TO FIJI.

FIJI FURNITURE INDUSTRY

The furniture manufacturing and export industry is one of many wood based industries that could add value to what remains of a valuable native forest resource. The logging of these forests will require greater justification and control in the face of a growing international anti-logging lobby.

The multiplier affect of value-adding industry is essential if Fiji is to recover the investment in exotic species (softwood and hardwood plantations).

Fundamental questions have to be answered in precise quantified and time based terms before large scale expansion of integrated industry should even be considered. These mainly relate to the long term availability of key timber species and the ability of the industries to compete for this raw material against the raw timber export markets.

QUESTIONS

1. What is the long term availability and sustainability of supplies of native timbers by species and grade in view of the urgency of providing for conservation needs of these forests and the possible restriction of access to certain species and even of extinction of some species?
2. What is the possibility if not probability that an international embargo could be placed on Fiji timbers and timber products if the management and conservation of Fiji's native forests is perceived as unsatisfactory?
(Note: Fiji is not a member of I.T.T.O.)
3. What is the availability of plantation timbers, particularly hardwoods, in terms of yields and in particular in terms of government policy on resource and allocation?
4. What government policies, in relation to providing incentives for value-adding industries relative to the export of raw timber - and in particular, the effects of subsidies on such exports in depressing the development of value-adding industries.
5. With government policies and subsidies aside, what is the extent to which value-added industries can compete with the raw timber export market assuming that such trade reflects the true nett value of the product back to Fiji.

QUESTIONS WE NEED TO HAVE ANSWERED AS FURNITURE MANUFACTURERS'.

SUPPORT FUNDS FOR THE FURNITURE INDUSTRY

THE INTEREST-FREE LOANS OF UP TO OR OVER ONE MILLION DOLLARS, PROVIDED TO MEMBER COMPANIES OF T.E.O.F., THROUGH THE E.D.B. (F.T.I.B), HAVE THE LOANS BEEN REPAYED? DO THEY SHOW ON THE BOOKS OF THE COMPANIES WHO HAVE MADE CLAIMS? (IE. ACCOUNTABILITY FOR THESE INTEREST-FREE LOANS). COULD THESE MONIES BE NOW REDIRECTED TO ASSIST THE DEVELOPMENT OF VALUE-ADDED INDUSTRIES? WOULD THE GOVERNMENT TAKE STEPS TO RECOVER ANY OUTSTANDING LOANS? ARE EXPORTERS OF SAWN TIMBER STILL RECEIVING SUBSIDY VIA THESE INTEREST-FREE LOANS? IF SO, WHY? COULD SUCH SUBSIDIZATION BE DETRIMENTAL TO THE DEVELOPMENT OF A VALUE ADDED INDUSTRY BY ARTIFICIALLY INFLATING PRICES OF TIMBER?

TIMBER RESOURCES

IS ALL LOGGING IN THIS COUNTRY CARRIED OUT IN A WELL MANAGED & AN ENVIRONMENTALLY SOUND WAY? WHAT IS SAID BY-
FORESTRY DEPARTMENT SAY ON THIS?
FORESTRY LOGGING SCHOOL
ENVIRONMENTALISTS
INDEPENDENT OPINIONS

CAN THE PLANTING OF INDIGENOUS FORESTS BE STEPPED UP, OR MORE FOREST AREAS LEFT ALONE TO REGENERATE AFTER FIRST FELLING?

WHAT ARE THE CONSEQUENCES OF REAFFORESTING WITH PINE AND MAHOAGANY? WHY ARE THE NATIVE SAPLINGS POISONED WHERE MAHOAGANY IS PLANTED? (Ref: BULL'S PHOTOGRAPH COLLECTION, NATIONAL TRUST)

WHAT ENVIRONMENTAL IMPACT STUDIES HAVE BEEN DONE ON FIJI'S FORESTS? IF SO, ARE THESE SOUND AND ACCEPTABLE TO ENVIRONMENTAL ORGANISATIONS? ARE THE RECOMMENDATIONS BEING IMPLEMENTED?

^{GROUND}
IF A/SURVEY WAS DONE ON ANY NOMINATED PRODUCTION AREA IN FIJI COULD VALUABLE CUT TIMBERS BE FOUND LEFT ON THE FOREST FLOOR?

WHY ARE SOME VENEERS NOT AVAILABLE TO THE FIJI MARKET WHEN THEY ARE IN FACT MANUFACTURED HERE?

ARE THE FORESTRY AGENCIES CAPABLE OF EFFECTIVELY CONTROLLING LOGGING OPERATIONS IN FIJI?

SHOULD PLANTATION FOREST REPLACE NATURAL FORESTS?

HOW EXTENSIVE ARE THE PRESENT FOREST RESOURCES? HOW RELIABLE ARE THE FIGURES CURRENTLY USED BY THE DEPT. OF FORESTRY?

ARE LOGS STILL BEING EXPORTED FROM FIJI BY PEOPLE WHO ARE BREAKING THE LAW?

ARE THERE LOGGING GUIDELINES IN PLACE? ARE THESE AVAILABLE?

IS THE SECTOR REPORT DONE BY THE FORESTRY DEPARTMENT IN 1989 AVAILABLE TO THE FIJI FURNITURE MANUFACTURERS' GUILD?

THERE IS A PROBLEM IN FIJI, FOR LOCAL FURNITURE MANUFACTURERS' TO READILY OBTAIN HIGH GRADE, DRY/SEASONED NATIVE TIMBER FOR MANUFACTURING FOR THE LOCAL AND EXPORT MARKETS. WHY IS THIS, WHEN LOCAL MANUFACTURERS' ARE PREPARED TO PAY A FAIR AND GENUINE PRICE TO MATCH THE TRUE EXPORT PRICE?

COULD AUDITED DISCLOSURE OF PRICES RECEIVED FOR TIMBER ABROAD BE MADE AVAILABLE? COULD A SURVEY BE DONE ON THE PRICES FIJI TIMBERS ARE SOLD FOR, IN THE MARKET PLACE, ABROAD? ARE FIJI FURNITURE MANUFACTURERS' BEING ASKED TO MATCH A TRUE NETT EXPORT PRICE?

ARE WE GETTING MAXIMUM RETURN FOR EACH TREE FELLED? FOR EACH CUBIC METRE OF TIMBER?

IS THE SUSTAINABLE HARVESTING MODEL, PICHIS-PALEAZU PROJECT, IN PERU WORTH IMPLEMENTING IN FIJI?

WHAT DID THE "TROPICAL FORESTRY ACTION PLAN" REPORT? HAS ANY RECOMMENDATIONS BEEN IMPLEMENTED IN FIJI?

ARE THERE ANY SPECIES OF TIMBER WHICH SHOULD NOT BE LOGGED AT ALL FOR ANY PARTICULAR PERIOD? WHICH TIMBERS ARE MOST UNDER THREAT? IS THE AREA OF NATIVE FORESTS KNOWN WITH PRECISION? ON WHAT GROUNDS HAS THE FIJI FORESTRY DEPARTMENT COME UP WITH ITS PRESENT STATISTICS ON THE STATE OF FIJI'S FORESTS? IS THIS A RELIABLE METHOD THAT COULD STAND UP TO SCRUTINY? WHAT IS THE TREE WASTAGE FACTOR I.E. THE NUMBER OF TREES FELLED TO WHAT IS EXTRACTED BY EACH OF THE LOGGING COMPANIES? OR, WHAT IS THE EXTRACTABLE MERCHANTABILITY VOLUME, COMPARED WITH THE LRD SURVEY VOLUME IN A FELLING COUPE? ARE SURPRISE LOGGING AUDITS ON LOG REMOVALS BEING CARRIED OUT, PARTICULARLY ON LICENCES AND PERHAPS AT NIGHT IN ORDER TO MAINTAIN CHECKS AND BALANCES?

HAS ANY CONSIDERABLE LOGGING OCCURRED IN NON-COMMERCIAL/PROTECTED FOREST AREAS?

IS THERE PRESENTLY A LEVY ON LOGS HARVESTED IN FIJI? IF SO, HOW MUCH IS THE LEVY AND IS THIS A REALISTIC FIGURE AND IS IT POLICED? HOW IS IT COLLECTED AND WHAT IS THE MONEY USED FOR?

OTHER

IS IT TRUE THAT WHERE INAPPROPRIATE AND SHORT TABLE-TOP TRUCKS ARE USED IN SOME LOGGING AREAS, ESPECIALLY ON VANUA LEVU, TREES ARE CUT TO THE LENGTH OF THE TRUCK'S TABLETOP, LEAVING THE REMINDER OF THE TREE ON THE FOREST FLOOR?

F.F.I. IS A MAJOR CONCESSION HOLDER IN FIJI OF 206,394 HA. WHAT CRITERIA IS USED TO ASSESS RENEWAL OF THIS CONCESSION WHEN IT COMES UP IN 1992?

DO ANY EXPORTERS OF TIMBER AND TIMBER PRODUCTS SUCH AS PLYBOARD HAVE A MARKETING SYSTEM SET UP ABROAD, SO THAT REALISTIC PRICES FOR TIMBER ARE ONLY REALISED IN THE FOREIGN RECEIVING COUNTRY? (I.E. TRANSFER PRICING) IS THIS AN ACCEPTABLE METHOD OF OPERATING?

COULD TIMBER BE CUT FOR THE FURNITURE INDUSTRY RATHER THAN FOR THE CONSTRUCTION INDUSTRY, PARTICULARLY THE HIGH VALUE ADDED TIMBERS AS THIS WOULD AVOID WASTE?

IS FIJI A MEMBER COUNTRY TO ITTO (INTERNATIONAL TROPICAL TIMBER ORGANISATION)?