

Pacific Islands Development Program

PIDP

THE TONGAN KNITWEAR INDUSTRY:
A CASE STUDY IN EXPORT MANUFACTURING
DEVELOPMENT IN THE PACIFIC ISLANDS

by

Andrew M. McGregor



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Honolulu, Hawaii

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CONTENTS

	Page
Tables	v
Photographs.....	vii
Acknowledgements.....	ix
Acronyms.....	xi
Introduction	1
The Economic Basis of the Tonga Knitwear Industry	2
The Nature of the Enterprise	2
The product	2
Markets	4
Marketing.....	4
Labor productivity	5
Wages	5
Training.....	6
The Nature of the Entrepreneur	6
The Process of Enterprise Development	8
The Role of Government in Enterprise Development	11
Investment incentives	11
The SIC's provision of physical infrastructure and land .	12
The handling of foreign entrepreneurial investment	15
The administrative procedures	17
Contribution of Aid Donors and External Agencies	18
Financial and technical assistance	18
Market access	18
The Contribution of the Enterprise to the Tongan Economy ..	19
Some Disadvantages for an Export Manufacturer in Tonga.....	21
Scope for Industry Expansion and Future Prospects	22
Applicability of This Type of Venture Elsewhere in the Region	23
Appendix I: North American promotional material for Tongan Knitwear.....	25
Appendix II: Information Requirements Sought From Perspective Foreign Investors.....	27
References	29

TABLES

	Page
Table 1. Industries located in the Small Industries Centre as of January 25, 1988	14
Table 2. Selected Tonga Exports, 1980-87.....	20

PHOTOGRAPHS

	Page
Plate 1. Hand operated domestic knitting machines are used by SPMC.....	3
Plate 2. Trainees learning to operate knitwear machines....	7
Plate 3. The sweater shown on left is more complex because segments need to be sewn together by hand.....	10
Plate 4. The Small Industries Centre located 1.5km from Nulu'alofa	13

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ACRONYMS

ACP	African Caribbean and Pacific
ADB	Asian Development Bank
EPZ	Export Processing Zone
IDIA	Industrial Development Incentive Act
IPU	Industrial Promotion Unit
MLCI	Ministry of Labour Commerce and Industries
PIIDS	Pacific Islands Development Scheme
NIDA	National Investment Development Authority
SAC	Standing Committee on Industrial Licensing
SIC	Small Industries Centre
SPARTECA	South Pacific Regional Trade and Economic Agreement
SPLC	South Pacific Leather Company Ltd
SPMC	South Pacific Manufacturing Company Ltd
UNIDO	United Nations Industrial Development Organization

EXCHANGE RATES

All currencies are in Tongan Pa'anga(T) unless otherwise stated.

1984	1T = A\$1 = US\$0.8278
1985	1T = A\$1 = US\$0.6809
1986	1T = A\$1 = US\$0.6709
1987	1T = A\$1 = US\$0.6942

INTRODUCTION

Tonga, despite its small size and remote location, has had a surprising degree of success in developing an export manufacturing sector. The Tongan government over the last decade has offered a generous package of incentives to manufacturing investors (both foreign and local). In parallel an industrial estate known as the Small Industries Centre (SIC) has been established to provide manufacturing investors with infrastructure facilities and, more important, access to land.

Given the small scale of the Tongan economy, the response to these initiatives has been impressive. Manufacturing now constitutes a significant, albeit still modest, share of Tonga's gross export earnings and represents the economy's fastest growing sector. The export-oriented industries, that have been established, range from the fabrication of yachts to the manufacture of saddles. The enterprise that is the focus of this study is the manufacture of high-quality knitwear.

Most other countries in the region offer similar incentives, and all have preferential access to export markets. Some countries such as Fiji, Solomon Islands, and Western Samoa have also invested in industrial estates projects. Yet in comparison with Tonga, the results have been disappointing and well below the expectations of the planners. Thus lessons from the Tongan experience have value for policymakers from the region as a whole.

This study examines the following key issues:

- . The inherent economic basis for high-value manufacturing products in an isolated small island economy such as Tonga.
- . The anatomy of a successful enterprise, including markets and marketing, labor productivity, costs of production, and type of entrepreneur.
- . The process of enterprise development, with particular attention to the role of government incentives and their administration and the contribution of aid donors and external agencies.
- . The policy toward, and the handling of foreign entrepreneurial investors.
- . The economic contribution of this type of manufacturing to a small island economy.

. The replicability of this type of enterprise elsewhere in the Pacific.

The Economic Basis of the Tongan Knitwear Industry

The Tongan knitwear industry is based on a single firm called South Pacific Manufacturing Company (SPMC) Ltd, which imports New Zealand wool and exports high-quality handcrafted sweaters to New Zealand, North America, and Australia. The viability of the enterprise is based on a combination of factors, including:

- . A highly skilled foreign entrepreneur/owner/manager based in Tonga.
- . The SPARTECA trade agreement.
- . Low-cost productive female labor, with a high level of hand weaving skills.
- . A government policy and administrative environment conducive to entrepreneurial investment.

The Nature of the Enterprise

The Product: Pure wool cardigans and pullovers are manufactured on hand operated, domestic type knitting machines (Plate 1). The substantial hand woven component earns the product a handicraft classification in most markets. These garments are regarded as a classical/traditional product as opposed to a "boutique" product. (A relatively narrow range of styles, approximately 35, are maintained at any one time with around eight or ten changed each year. Approximately one-third of the sales comes from the few standard styles that remain unchanged.) A successful place in the high-profit, high-risk boutique market requires an ability to respond rapidly in an extremely fluid, if not "fickle," market environment. Such a situation does not appear feasible for a manufacturer operating out of Tonga who is distant from the market in terms of both shipping and fashion information. However, it is of note that a recent World Bank report on Fiji manufacturing did recommend the entry into high fashion garment production as an appropriate strategy for that country.

Tongan knitwear retails in United States from US\$90 to \$120 per unit. Indications are, however, that prices could be raised with further investment in promotion and marketing.



Plate 1. Hand operated domestic knitting machines are used by SPMC.

Markets: Approximately one-half of the SPMCs current annual production of 47,000 units is sold in New Zealand as shown below.

Market Distribution of Tongan Knitwear

Market	units/annum(a)	%
New Zealand	22,000	47
Australia	13,000	28
Canada	7,000	15
United States	5,000	10
Total	47,000	100

a. For year ending May 1988.

With expanded production, however, the Australian and North American market shares are likely to increase significantly. Knitwear was prominently displayed at the Australian EXPO Tongan pavilion, and the company is hopeful that this exhibit will substantially increase demand in that market. North American sales are starting to expand after a gradual market building process, but exports to the United States are still subject to an 17 percent duty despite being handcrafted.¹

Because Tonga straddles markets in both the northern and southern hemispheres, it can produce this essentially seasonal product year-round, without building up expensive inventories.

Marketing: New Zealand sales are through a single wholesale distributor who has retail outlets in Auckland and Wellington. This distributor is financed by SPMC via long-term credit arrangements. SPMC plans to expand its New Zealand distribution network. Australian sales are through a single retail outlet in Melbourne. SPMC also plans to establish an outlet in Sydney. The development of the North American market has been through an independent agent.

Selling prices are set in FOB terms at the beginning of the year and are expressed in the currency of the buying country.

¹ The US definition of handcrafted garments is vague. Under the "harmonized classification system", garments can qualify for a 9.5% duty if they are classified as "hand loomed and folklore". To achieve this status the garments must be "certified, in accordance with procedures established by United States Trade Representative pursuant to international understandings by an official of a government agency of that country where the products were produced." Tonga's requests to secure this status have not as yet been successful.

Currently (April 1988), they average around US\$22/unit. Price determination seems to be largely on a cost plus basis. SPMC pricing has been competitive, and price cutting has not been necessary to meet competition or to create a market share. Price stability is seen to be major marketing requirement, particularly in the North American market.

All Tongan knitwear products have a special label that indicates the prestigious combination of New Zealand wool and Tongan craftsmanship. The promotion in the United States has highlighted a romantic image of the South Seas and of Tongan royalty to differentiate the exclusive nature of the product (Appendix 1). There is probably considerable scope for up-market product promotion through investment in appropriate packaging, labeling, and advertising. SPMC has long-term plans to employ the services of a full-time marketing representative. However, this upgrade would require an estimated annual expenditure of between \$150,000 and \$200,000 to secure quality services. To justify this level of expenditure, gross sales approaching US\$3.5 million are probably necessary. This level of turnover is unlikely within the next five years or so.

Labor productivity: Entrepreneur/owner/manager, Louis Pogoni, regards the labor productivity of the SPMC factory to be above that of comparable labor in New Zealand. However, this situation took several years to achieve and required the creation of production systems, working environment, and incentives appropriate to Tonga. A prolonged learning process of trial and error was also involved. The owner/manager estimates that labor productivity has increased by 120 percent over the last decade. Only 20 percent to 25 percent of this increase is attributed to better machinery.

Supervision overhead costs are low, with only one supervisor per 100 trained workers. However, these advantages are somewhat offset by the additional training requirements due to the high post-training attrition rates.

Wages: Remuneration is on a piece rate basis except for a base US\$20/week payment made to all trainees. The knitting and sewing components of each garment are the responsibility of individual workers. The 310 employees are paid on a piece rate basis; approximately 80 percent of the workers are knitters and 20 percent sewers. Another dozen or so workers are paid a fixed wage; they are responsible for such tasks as quality control, mending, and washing.

A payment schedule exists for both knitters and sewers, varying with the size and complexity of the garment. For knitters the rate ranges from US\$4 to \$13.50 per unit, and for sewers the rate varies from \$1.10 to \$3.50. An average worker produces about four standard line garments a week--although the number can be as high as 10 to 12 units per-week for the best workers. In addition to the piece rates, a flat bonus of US\$20

is paid to workers who exceed 160 hours attendance per month. This innovation, introduced two years ago, has substantially increased labor productivity.

The most proficient workers can expect to earn around \$75 per week and the best trainees around \$30 (once the trainees' production exceeds a wage value of \$20, they are also paid on a per garment piece rate basis). The average worker remuneration is around \$35 per week, which can be regarded as an above average wage. The daily wages for non-agricultural unskilled labor are estimated to range from \$2.40 to \$5.00, while the casual rate in the agricultural sector is from \$6 to \$8 (World Bank 1986). The total weekly bill for wages for SPMC approaches \$10,000, or approximately \$0.5 million per annum. The factories' operations are competitive due to a combination of relatively low wages and relatively high productivity.

Quality control is extremely stringent, with each garment being inspected on three separate occasions, for details such as size, knots, etc. Approximately 20 percent of the garments are rejected as "seconds." Although remedial corrective action can usually be taken to upgrade "seconds," the workers responsible for the defects are subject to a substantial discount in remuneration.

Training: Since the start of operations in 1979 a New Zealand trainer/supervisor has been employed. All her direct supervision, and many of her training functions, have been transferred to Tongans, and her role now is day-to-day factory manager. The training of workers was initially conducted in New Zealand, which proved less than satisfactory, and since 1979 all training has been on-the-job in Tonga.

A substantial ongoing overhead is incurred in worker training. At present there are 75 trainees (Plate 2). Each girl receives three to four months' training, although she can make commercial garments after the first month. The expectation is that an 18 to 20 year-old worker, once trained, is employed for 18 to 24 months. This comparatively high rate of attrition is due to a combination of marriage, child bearing, and migration. At any one time, the loss of trained workers can be substantial. For instance, 60 workers left in 1987 during the two-month period when New Zealand visa requirements were removed.

The Nature of the Entrepreneur

Pogoni, who established and now manages the Tongan knitwear industry, is a New Zealand citizen. Before coming to Tonga, he owned and operated successful knitwear and garment factories in New Zealand; he also held the franchise for American brand Arena swimwear. Thus he had a proven track record in the garment industry. His established marketing connections in New Zealand



Plate 2. Trainees learning to operate knitwear machines.

proved to be crucial during the initial start-up period of the Tongan knitwear enterprise.

Pogoni has lived in Tonga since the beginning of the business and is still closely involved in the day-to-day factory operations. Close direct involvement of the enterprise seems to be a prerequisite for the success of this type of enterprise.

The Process of Enterprise Development

Pogoni first identified the possibility of establishing a knitwear factory while he was vacationing in Tonga in 1978. He was particularly impressed by the weaving skills and manual dexterity of the Tongan women. He saw Tonga as an attractive place to live and looked for a business venture that would enable him to do so. His interest coincided with the commencement of the government's active promotion of light manufacturing following the publication of the Third Development Plan in 1976.

Over a four-month period, Mr. Pogoni made two additional visits to Tonga before deciding to proceed with the project. He initially looked over several possibilities including the manufacture of swimwear. Government approval for the knitwear project was granted on his first return visit. His second visit was primarily to select employees to go to New Zealand for training.

The New Zealand Pacific Islands Industrial Development Scheme (PIIDS) provided financial assistance for the initial feasibility study. PIIDS also provided a grant to assist with training in New Zealand and a small suspensory loan for equipment. The total value of this initial assistance was NZ\$20,000. All other establishment costs and the working capital were met by the entrepreneur.

Operations began in rented premises (two rooms at the back of a house) in late 1979. Simple, low-cost machinery (valued at \$30,000) was imported from Japan. The initial work force consisted of seven trainees and the New Zealand supervisor/trainer.

Operations were shifted to the Small Industries Center (SIC) when it opened in March 1980. SPMC was the first enterprise at the SIC and immediately took an option on an adjacent site. The SIC, which is located 1.5 km from Nuku'alofa, provides industrial sites on a long-term lease. SPMC has become a show piece for the SIC and has been used as a catalyst to attract other enterprises.

SPMC's first two years of operation can be regarded as a start-up period with virtually no revenues accruing. Approximately US\$100,000 in working capital was required during this initial phase. By the end of second year the work force had grown to about 30 employees, and production had reached

approximately 100 units a week. The first sales, which began in the second year, were sold back to New Zealand as "imperfects" and distributed without the SPMC Glen Carron label. These garments were sold through the marketing chain previously established by Pogoni.

This arrangement proved crucial because it enabled quality standards to be established without jeopardizing the reputation of a fledgling knitwear industry in the unlikely location of Tonga. This marketing strategy remained in operation for the first four years of operation. The SPMC initially had an annual import quota of 5,000 units from New Zealand under the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA). By the time the SPMC was ready to enter the market with a quality product under its own name, its production had reached 500 units per week.

The SPMC began a major expansion phase in 1983 with the opening of its second facility on the adjacent SIC site, which increased the work force to approximately 140. PIIDS again provided a grant to defray training costs and a small suspensory loan for equipment (total was approximately NZ\$30,000).

An additional expansion occurred in 1986 and involved the construction of a mezzanine floor at the SIC premises and, more significantly, the opening of a second factory some 20 km from Nuku'alofa. Thus the new factory received the same concessions as the one at the SIC location because the whole of Tonga is treated as an Export Processing Zone (EPZ). The premises are rented from the Catholic Church, thereby resolving the problem of access to land. The new factory also gives SPMC access to another labor pool. Furthermore, the workers at the new factory did not face the same transportation problems that are encountered at the SIC site. The total capital cost of this expansion was US\$130,000, of which PIIDS financed 30 percent through a third suspensory loan. The expansion brought the total work force of the SPMC to approximately 320, divided equally between the two locations.

The most capital-intensive expansion is currently under way. This involves the installation of new Japanese machinery that permits the manufacture of more intricate, and thus higher value, patterns without a substantial increase in labor requirements. Currently, the production of complex garments requires that each individual segment to be sewn together by hand (Plate 3).

The SPMC sees this expansion as a labor-supplementing investment, which will allow a 50 percent increase in production with only a 10 percent increase in the labor force. These will still be promoted as hand-crafted garments, and SPMC will continue to seek handcrafted status for exports to the United States. The investment will increase the overall production capacity from the current level of 1,100 units per week to 1,600 or 1,700 per week. By increasing the garment unit value, the net



Plate 3. The sweater shown on left is more complex because segments need to be sewn together by hand.

foreign exchange contribution of the enterprise will be increased. The capital cost of this expansion is around US\$300,000 and will be financed through a loan from the Tongan Development Bank. This loan represents the first domestic financing that the enterprise has received.

The Role of Government in Enterprise Development

The government has played a crucial role in facilitating the establishment of the Tongan knitwear industry. The government's package has included providing attractive investment incentives, making physical infrastructure and land available, and providing a decision-making environment conducive to the needs of entrepreneurial investors.

Investment incentives: An attractive package of incentives, largely under the Industrial Development Incentive Act (IDIA), has been made available for export-oriented enterprises. These and other incentives include

- . **A tax holiday of up to five years from the start of operations with provision for extension upon additional investment. Under certain circumstances, a moratorium on income tax for companies may be granted after the tax holiday has been completed. The SPMC has enjoyed tax holidays on its initial and two subsequent investment expansions. For export-oriented industries, the company tax rate is now 17 percent.**
- . **Withholding tax exemption for non-resident shareholders or company entrepreneurs for the period of the tax holiday.**
- . **A lower income tax for employees of a new industry.**
- . **Carrying forward of losses without time or monetary limit.**
- . **Depreciation of assets, which may begin after the completion of the tax holiday, based on their original book value. An option of accelerated depreciation for the first five years is also available.**
- . **Customs Duty not payable on capital goods and raw materials and semi-processed products used in export production.**
- . **Repatriation of funds permitted, unless the enterprise is partially funded with local capital, in which case funds can be repatriated on a pro rata basis.**

- . **Finance**, which may be available through the Tongan Development Bank at a legally subscribed maximum interest rate of 10 percent (the SPMC is just now taking advantage of this facility).

The SIC's provision of physical infrastructure and land: The SIC (Plate 4) has proved to be an important incentive to manufacturing investors. Standard factory sheds are provided, together with infrastructure such as roads, sewage disposal, power, water, and telecommunications.

The demand for the facilities has far exceeded the expectations of the planners, and there is now a waiting list for sites. The Asian Development Bank (ADB) as the funding agency regards the SIC as one of its more successful projects in the region and is anxious to replicate it elsewhere.

The first phase of the SIC project involved establishing five factory sheds (each 227 sq.m) and 10 smaller units (103 sq.m.). All the sheds were occupied at the opening ceremony in May 1980, and all the smaller units were rented by the end of 1980. The second and third phases involved six factory sheds (265 sq.m.), a double shed (567 sq.m.), and a nursery shed containing space for six small-scale units, which were all fully occupied soon after their construction. The SIC now contains 27 manufacturing enterprises on an area of nearly 5 ha, which provide over 400 full-time jobs (Table 1). Initially, the primary objective of the SIC was import substitution. However, nine of the enterprises, which provide the bulk of the employment, are export oriented.

A fourth expansion phase, again involving ADB finance, is now underway on an adjacent 3 ha site. All sights have been reserved in advance. A decentralization of the SIC development is also planned for the island of Vava'u, some 270 km from Tongatapu.

The SIC's main value is its provision of long-term access to land in a situation where foreigners cannot purchase land. Leases are for 50 years. It also provides the necessary infrastructure at a reasonable cost. Rents are subsidized in that the SIC has not been recovering its full depreciation for its two factory sheds. The SPMC is paying an annual rent of around US\$6,000 annually. The SIC facilities do encounter some problems common to Nuku'alofa such as inadequate water supply and telecommunications. In addition, an adequate transportation service for workers has not yet been developed.

An important contribution of the SIC, at least during the SPMC's initial start-up period, was its tangible evidence of the government's sustained commitment to manufacturing investment, which gave confidence to investors. This support was crucial to Pogoni's decision to establish a knitwear factory in Tonga. Once



Plate 4. The Small Industries Centre located 1.5 km from Nuku'alofa.

Table 1. Industries located in the Small Industries Centre as of January 25, 1988

Company	Product	Employment
Oceanic Industrial Enterprises Ltd.	Tubular furniture, wheelbarrows	2
Jim Beaton Saddle Harness Maker	Saddle and harnesses	16
South Pacific Manufacturing Co. Ltd.	Woolen knitwear	143
Paper Industries Ltd. (Tonga)	Toilet paper rolls	6
Tonga Wood Products Ltd.	Wooden toys	3
Tonga Wire Co. Ltd.	Wire fencing and welded mesh	6
Scan Tonga Engineering Co. Ltd.	Excavators, building fabrication	32
Asian Paints Ltd.	Paint	6
Matthews & Associates Ltd. (Tonga)	Soccer ball, rugby football	4
Golden Passions Ltd. (Tonga)	Fruit juice, bulk	5
Tonga Industrial Gases Ltd.	Dump truck bodies, industrial gases, e.g., oxy-acetyline	10
South Seas Yachting Pty Ltd.	Fiberglass yachts and boats	20
Royal Beer Co. Ltd.	Beer	22
South Pacific Leather Co. Ltd.	Jackets	55
KW International	Surf skies	20
Regal Spectacles	Spectacle cases	20
Imua Pacifica Co. Ltd.	Black coral jewelry	7
Pacific Stationery	Stationery items	-
Prema and Sons	Assembly of bicycles and prams	1
Management Office		
Pone and All Enterprises	Manufacture of shoes and sandals	5
Tapueluelu Enterprises Inc.	Assembly and servicing of freezers, refrigerators, air conditioners, and electronic equipment	10
Jim Beaton Saddle Harness Maker	Saddle and harnesses	-
Flemming Electrical Co. Ltd.	Servicing and assembly of electrical motors, switch gears, electrical pumps, etc.	6
Tapueluelu Enterprises & Fletcher Const.	Construction of wooden furniture, door, and specific wooden items for construction purposes	23
Laulili'ilo'e Enterprises	Rubber sandals	13
Sweednail Co. Ltd.	Galvanizing nails	3
	Total	418

confident of its position, the company has gone ahead and made its own arrangements outside Nuku'alofa.

The handling of foreign entrepreneurial investment: Most Pacific island countries offer a similar set of investment incentives. Like Tonga, several countries have also established industrial estates to encourage investment. However, none of these initiatives has met with the same success. Tonga appears to have been more adroit in handling foreign entrepreneurial investment than other countries in the region.

Entrepreneurs in the context of this paper can be defined as businessmen with the skills and finance that they themselves wish to invest in enterprises. The SPMC entrepreneur is an excellent example. Because these investors are unlikely to have large amounts of capital to initially commit, they tend to be interested in relatively small enterprises. However, in the context of an economy the size of Tonga, such investors are likely to be the major source of foreign investment and technology transfer and thus have considerable significance.

The entrepreneurial investor is distinctly different from the large multinational investors who can mobilize substantial funds and are usually interested in investing in natural resources and large tourist plant. The magnitude of the profits from these investments are sufficiently large, and the access to funding adequate, to sustain prolonged project negotiations. Furthermore, the time frame of a large firm is likely to be considerably longer than that of the individual entrepreneur. In contrast, the entrepreneurs by nature requires quick decisions on their investment proposal. They also require a high rate of return, probably increased by the perceived risk of operating in the Pacific islands. Some entrepreneurs, however, may be prepared to discount the rate of return acceptable for the "lifestyle" attractions of living in a country like Tonga. With limited working capital available and the short time horizon, protracted negotiations and bureaucratic delays can mean the difference between viability and failure.

Some countries in the region appear to treat all foreign investors in a similar fashion regardless of the scale of the project. There often appears to be an ambivalence toward foreign investors in which they are encouraged by official policy but discouraged by bureaucratic obstacles and political actions.

But this has not been the case in Tonga. Tonga has never been colonized and in the past has adopted strong measures to minimize foreign influence and commercial involvement. The basis of the positive attitude toward foreign investment in the

industrial sector, which has prevailed for the last decade or so, is summarized by Ritterbush, to quote:

Realizing that there was no turning back, Tupou IV and his government have actively courted change via a firm commitment to developing Tonga's natural and human resources in ways that will create new sources for financial gain and employment opportunities beyond the traditional agricultural sector. Furthermore, cognizant that many Tongan citizens are presently handicapped by their lack of business expertise and limited access to capital, markets, or sophisticated equipment, the government is in active pursuit of foreign investors, expertise, and technologies to develop the Kingdom's industrial sector (p 55).

Tonga's administrative procedures seem to yield relatively quick decisions and yet at the same time appear to provide adequate safeguards against unscrupulous operators. While this group is unquestionably a threat to the Pacific islands, governments must not be too rigid in designing and implementing vetting procedures that exclude genuine entrepreneurs.

Papua New Guinea is an example, Daniel and Sims review a 1981 survey of the National Investment Development Authority (NIDA), the organization that vets foreign investment proposals. The survey showed that an average 190 days was required for the investors' initial application to be considered by the NIDA Board, and an additional six months required before registration was effected (p.32). The accounting and legal firms which advise potential foreign investors, inform their clients to expect a delay of about one and one-half years before they can begin their project even after it is approved (Daniel and Sims p. 33).

This writer knows of an investor who wished to establish an agricultural/agro-processing project in Fiji; after 18 months, he had still not received a decision from the Economic Development Board (now the Fiji Trade and Investment Board) despite his complete feasibility study. The costs of this indecision to potential investors are substantial in terms of working capital expended and alternative opportunities foregone.

Within two months of application, the SPMC was officially informed of the Tongan government's response. Four months after Pogoni's initial visit to Tonga, when he identified the possibility of setting up operations, he was selecting employees to be sent to New Zealand for training. Pogoni found that the attitude and actions of the responsible Ministry of Labour, Commerce and Industries (MLCI) were extremely positive and encouraging---although some initial start-up difficulties were reported with some other implementing ministries. The most recent firm to establish operations at the SIC, South Pacific

Leather Company Ltd (SPLC), was in operation within three months of the application to the government for a license. The SPLC makes high-quality leather jackets for export, and it currently employs a staff of 55, again mainly young females. This company was planning to establish operation in Fiji, but it abruptly diverted its proposal to Tonga after the coup in 1987. At present, the major constraint to manufacturing investors in Tonga is the availability of sites at the SIC.

The administrative procedures: The issuing of a business license to a foreign investor in Tonga involves an uncomplicated one-stop procedure and is legally based on the Industrial Development Incentives Act (IDIA). All applications for industrial and tourist projects are made to the MLCI on a standard form (Appendix 2) and (preferably) accompanied by a feasibility study. These applications are appraised by the Ministry's Industrial Promotion Unit (IPU). IPU's recommendations are sent to a Standing Advisory Committee on Industrial Licensing (SAC) for decision. The SAC is chaired by the Minister of Labour, Commerce and Industries and comprises the Manager of the Tongan Development Bank, the Director of Planning, the Secretary of Finance, and the Secretary of Labour, Commerce and Industries. The UNIDO adviser and the IPU representative also usually attend the meetings. The final decision is with the Minister, who is also the Registrar of Companies. The rest of the cabinet are not formally involved in the decision-making process, except via their officials on the SAC.

The process is said to take anywhere from two weeks to three months depending on the adequacy of the project documentation, which must include bank references and financial statements from any previous business ventures. Considerable weight in the decision-making process is placed on the entrepreneur's record in activities similar to the proposed project. High priority is given to export-oriented ventures. Joint ventures are favored although no limits imposed are on the ratio of foreign equity.

In other Pacific island countries, well-intentioned minimum local equity requirements have been a disincentive and have probably done little to encourage indigenous entrepreneurial development. Daniel and Sims indicate that the NIDA requirements, which call for "certain levels of equity to be by Papua New Guinean citizens within a period of time, have encouraged a non-productive class of front-men" (p. 33).

The SPMC has, to date, 100 percent foreign equity, and the company reports no official pressure to involve local equity partners. However, under the company's own initiative, it now has plans to make equity available to employees (up to 15 percent) and to the Tongan private sector generally (an additional 15 percent). The proposal calls for the workers' equity to be financed via a scheme involving the Tongan Development Bank.

Contribution of Aid Donors and External Agencies

Financial and technical assistance: Various aid donors have played a useful facilitating role, particularly during the initial start-up phase. Considerable assistance is available in various forms of which entrepreneur Pogoni of SPMC seems to have been able to take maximum advantage.

- PIIDS financed half the cost of the initial feasibility study and financed some of the training costs. Recently, it provided interest-free suspensory loans for capital equipment (these represented 30 percent of the capital cost of the items involved and will convert grants after five years of operation). The total value of this aid is approximately NZ\$70,000.
- USAID provided financial assistance, via the importing agent, for penetration in the U.S. market (approximate value US\$20,000). The New Zealand Trade Commission in San Francisco has played a useful facilitating role. (Both Pogoni and the agent are New Zealand citizens.)
- Various promotional visits have been financed under Article VIII of the SPARTECA Trade Agreement.
- The ADB has indirectly made an important contribution through loan financing to the SIC and technical assistance. With completion of the fourth phase of the SIC, the ADB will have contributed in excess of US\$1 million to SIC development. The Tongan government contribution has been about US\$500,000. Due to Tonga's low official per capita income, the ADB loans have been highly concessionary (a 30-year repayment period following a 10-year grace period; also, the loans are interest free with a 1 percent service charge). The New Zealand government has also provided assistance to the SIC by upgrading the sewage treatment plant.

Market access: Without duty free access to the New Zealand and Australian markets under SPARTECA, the SPMC could not have been established. The initial 5,000 unit quota for New Zealand was of crucial importance. With imported New Zealand wool and Tongan labor, the enterprise easily meets SPARTECA's rules of origin requirements (50 percent of the production costs must comprise island content or combined Australian and New Zealand content).

Pogoni believes that the recent total removal of quotas into New Zealand for the Pacific islands was too sudden. He fears a trade union backlash that may adversely affect the SPMC, an enterprise that was never really in competition with New Zealand labor. Much will depend on the nature and extent of Fiji's garment industry's response.

If the Mauritius experience proves relevant, there is cause for concern. Mauritius, over the last decade has had spectacular success in the expansion of its garment industry, which is mainly based on the export of cheap clothes to Europe. However, the volume of its sales are such that Mauritius is now finding its clothing exports increasing subject to quota restrictions.

The Contribution of the Enterprise to the Tongan Economy

The economic contribution of the venture is considerable despite the a high raw material import content. Current employment is around 320, which makes the venture Tonga's largest private sector employer. The labor force is expected to increase to about 400 employees over the next year or so, following the installation of new machinery. The SPMC will thus surpass the government-owned desiccated coconut factory as the largest single employer. According to the 1984 Tongan mini-census, the economically active labor force was 30,976 of which only 4,304 females were employed (World Bank 1986:). The annual wage bill of the enterprise is currently around US\$0.5 million in an economy with an official GDP level of less than US\$100 million.

The annual gross foreign exchange earning of the enterprise is estimated to be now approximately US\$1.3 million (based on average FOB price of US\$22/unit). In 1986 Tonga's FOB exports for that year of \$7 million (Department of Statistics 1987). Knitwear exports are likely to increase to around US\$1.5 million with the new capital investment, which will increase the number of units and the value per unit. These developments are significant for a small open economy in which imports exceed exports by a ratio of 4:1 and where consumption expenditures exceed the GDP (Table 2).

Current production requires the importation of about 40 tonnes of yarn, with a value exceeding U.S.\$600,000. Raw material requirements will be around 50 tonnes with the completion of the current expansion phase. Thus there is almost a 50 percent direct foreign exchange leakage in the importation of materials.

The capital cost of imported machinery, with the installation of the new machinery, will approach US\$450,000. In comparison, the cumulative wages bill, after 10 years of operation, has been around US\$4 million. Thus the enterprise has had, and continues to have, a low capital labor ratio.

The direct tax revenue contribution of the enterprise is low because of the incentives provided. The company has paid a minimal company tax and will continue to do so for at least another five years, when the tax holiday on the current major expansion expires. Some tax revenue is currently received from the factory workers. Once the workers' earnings exceed US\$38 per week they are subject to a marginal income tax rate of 10

Table 2: Selected Tonga Exports, 1980-1987

	1980	1982	1985	1986	1987
Agricultural based exports					
Copra	943	-	-	-	-
Coconut oil	3,045	1,291	2,742	2,040	1,616
Bulk desiccated coconut	659	230	526	519	552
Bananas	394	88	823	1,021	1,234
Watermelons	149	253	235	-	1
Root crops	557	261	360	196	579
Vanilla	261	629	401	1,056	1,217
Manufacturing based exports					
Knitwear	74	65	332	162	637
Sporting equipment	105	338	194	110	46
Saddle and leather goods	-	-	8	17	32
Excavators and parts	-	-	254	157	17
Total exports	6,909	3,646	7,170	8,805	
re-exports	258	642	613	748	
imports	30,135	41,205	58,930	68,460	
Balance of trade	-22,968	-36,917	-51,147	-58,907	

Source: Statistics Department of Foreign Trade Report (various issues).

percent. In any one week, about 45 percent of the employees have earnings above the taxable threshold. On a weekly wages bill of US\$10,000, the tax payable is estimated to be approximately US\$120.00.

The Tongan government obtains a minimal amount of its overall revenue from direct taxation. Over 50 percent from its income is derived from taxes on international trade. The share of direct taxes has fallen in recent years as part of an aggressive policy to encourage private investment. In 1985 the company tax rate for export-oriented industries was lowered from a range of between 25 and 42 percent to 17 percent. The slippage of direct revenue has been accepted as a necessary cost of the employment and foreign exchange the hoped for increase in private investment would generate

In five years, with no additional major capital investment, the SPMC will be subject to normal company tax. While the rate is relatively low, the impact of its imposition is difficult to assess. Superficially, the SPMC has all the characteristics of a "foot loose" industry. It is based on cheap labor and imported raw materials, and it operates out of rented premises. However, a closer examination suggests that this type of entrepreneurial investment is more fixed and takes a longer-term perspective than might be expected. Considerable investment has been made in training and management systems that are not transferable to another location, although some of the "learning costs" would be transferrable to another Pacific island country. Perhaps of greater importance is that the decision-making entrepreneur is based in Tonga, where he has seen the enterprise grow from scratch and has become well integrated into the community. Thus, relocation of the business to another location would involve substantial costs, many of which are non-financial. A more likely development is that this enterprise may eventually establish subsidiary operations in other Pacific islands countries. Given the size of the potential market, this event would not be detrimental to Tonga.

Some Disadvantages for an Export Manufacturer in Tonga

Offsetting the advantages of trade agreements and cheap productive labor are several disadvantages for an enterprise in a country as small, and as isolated, as Tonga. The most obvious is the high freight cost. The scale of SPMC operations is such that all garments are air freighted to the market place. The current rates are

- . New Zealand US\$.72c/kg
- . Australia US\$1.70/kg
- . USA U.S.\$2.80/kg

The average garment weighs around 700 g. The inward freight charges for wool shipped from New Zealand are currently NZ\$3,000 per container.

Once sales to a particular market approach 6,000 units every four to six weeks, then sea freighting via container becomes feasible. The back-loading charges for a container from Tonga are relatively low because most return empty. A container capable of carrying 6,000 units would currently cost around U.S.\$1,300 (approximately U.S.\$0.22 per unit) for New Zealand and \$1,500 (approximately U.S.\$0.25 per unit) for Australia.² However, based on present expectations, that level of sales will not be achieved for several years. However, in the meantime, transportation costs could be reduced through "broken bulk" back loading.

Export manufacturing enterprises in Tonga, despite the SIC still face infrastructure constraints such as the inadequate, water supply and telephone system. These difficulties can be partly be attributed to the success of the project, wherein growth rates far exceeded the expectations of the planners.

Scope for Industry Expansion and Future Prospects

The SPMC has only one retail outlet in Australia and a minute market share in North America; and as yet it makes no sales to Europe. Tonga as an African Caribbean and Pacific (ACP) country would qualify for duty free entry under the Lome Convention. In transforming New Zealand woolen yarn into sweaters the product changes tariff classification (which is not

² The following shipping cost applied October 1988

Tonga to Auckland Container

- Pacific Forum Line - NZ\$2,553
- Warner Pacific Co - NZ\$1,270

Broken Bulk

- Pacific Forum Line - NZ\$145/m3
- Warner Pacific Co - NZ\$146/m3

Tonga to Sydney Container

- Pacific Forum Line - A\$1,608
- Warner Pacific Co - A\$1,470

Broken Bulk

- Pacific Forum Line - \$98/m3
- Warner Pacific Co - Not available

the case for garments made from fabric). Thus it seems that Tongan knitwear would meet the Lome Convention" rules of origin" requirements, as is the case for Mauritius.

While Tonga faces virtually unlimited market for expansion, labor supply presents itself as a serious constraint to growth. Tonga's official unemployment level is relatively high, 15.7 percent of the economically active labor force in 1984. Yet out-migration and an exceptionally high rate of remittances mean that Tonga does not have a large pool of low-cost labor available. A Mauritius manufacture type export boom based on low-cost garments is highly unlikely in the Tongan context, regardless of whether it is desirable. There is reported to be already increasing pressure on the availability of suitable labor, particularly in the Nuku'alofa' area.

Even though a new SIC is now planned for the Vava'u group located some 250 km from Nuku'alofa, the advantages of labor availability for any export-oriented venture will be offset by problems of inter island transportation and lack of supporting infrastructure.

Over the long run, Tonga will need to look to industries with a higher value added and greater skilled labor component. Such industries are more compatible with Tonga's comparative advantages. The yacht fabricating factory, which has already begun operations at the SIC, may indicate a future trend.

Applicability of this Type of Venture Elsewhere in the Region

Most of the small islands of the South Pacific, in principle, could offer equally suitable locations for the type of enterprise described in this paper. They are all a party to SPARTECA, offer a generous package of incentives, have low-wage structures, and have a female labor force with the required skills in varying degrees.

Countries like Kiribati and Tuvalu are obvious examples. These micro states have an abundant supply of available labor. Severely limited out-migration means that the rate of worker attrition would be lower than that in Tonga. The countries also have a well-entrenched weaving and craft tradition. Kiribati mats and Tuvalu baskets and fans are among the finest in the Pacific. On the negative side, the transportation constraints are even greater than they are in Tonga. These countries are served by unreliable air service with minimal cargo carrying capacity. Shipping is infrequent and mainly oriented toward Australia. However, there are low-cost "back loading" opportunities into the Australian market, as verified by the used aluminum cans that are already a viable export.

The two fundamental limiting factors, however, are (1) the identification of suitable entrepreneurs who are willing to

invest their capital and skills in the Pacific islands and (2) the administrative systems that can expeditiously accommodate such investors.

Hampshire Mills presents:

Tonga Sweaters, 100% Pure Lambswool

All Hampshire Mills sweaters are made from pure high quality Perendale lambswool. This premium wool combines the most sought after characteristics of resilience, flexibility, strength and warmth, and features exquisite 'loft' and 'hand'.

The patterns used in the Tonga line are traditional classics from the Isles of Aran in Ireland's Galway Bay. By tradition, each combination of stitches contained a secret "code" knitted by the fisherman's wife or sweetheart which told of the man's amorous commitment.

With pride, Hampshire Mills brings you craftsmanship of Ancient Polynesia and the special magic of 100% pure Perendale lambswool.

CREWMAN'S ARAN KNIT PULLOVER



A rugged traditional Aran Isle knit, fully fashioned with cable designs on the body and sleeves. Double rib crew neck, cuffs and waistband.

STYLE #700	S	M	L	XL
BEACH SAND				
POPPY RED				
MIDNIGHT BLUE				
COCONUT				
JADE				

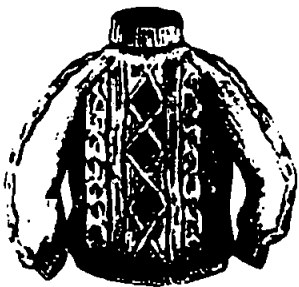
BASKETWEAVE CREWNECK



A handsomely textured sweater with shaker knit sleeves and drop shoulder. Double knit crewneck with rib knit cuffs and waistband.

STYLE #711	S	M	L	XL
BEACH SAND				
ROYAL TONGA BLUE				
OATMEAL				
POPPY RED				

CREWMAN'S ARAN TURTLENECK



As above, but with softly rolled turtleneck collar. Exceptionally warm.

STYLE #722	S	M	L	XL
BEACH SAND				
MIDNIGHT BLUE				
OATMEAL				
POPPY RED				

THE COBBLESTONE



A strikingly attractive pattern available in a variety of colour combinations. A truly unique and beautiful sweater.

STYLE #766	S	M	L	XL
BEACH ROY. TONGA				
BEACH POPPY RED				
COCONUT FAWN				
JADE ELPH. GREY				

FIRESIDE CARDIGAN, MEN'S



A traditional Aran knit cardigan with garter stitching on the body and sleeves, and polished coconut shell buttons. Ribbed cuffs, waistband and V-neck collar.

STYLE #741	S	M	L	XL
BEACH SAND				
MIDNIGHT BLUE				
OATMEAL				
POPPY RED				
ELEPHANT GREY				

H.M.C. (HIS MAJESTY'S CHOICE)



A unique cableknit body sweater with finely knit rib collar and placket, with two handmade coconut shell buttons, ribbed cuffs and waistband. A royal choice.

STYLE #765	S	M	L	XL
BEACH SAND				
ROYAL TONGA BLUE				
POPPY RED				
OATMEAL				
MIDNIGHT BLUE				

FIRESIDE CARDIGAN, LADIES'



As above, but with cozy crew neck.

STYLE #774	S	M	L	XL
BEACH SAND				
MIDNIGHT BLUE				
POPPY RED				

LOONS



A striking loon design in beautiful feminine colours. A classic for the fireside and for the fields, with ribbed collar, cuffs and waistband.

STYLE #774	S	M	L	XL
HALVE BEACH				
ROYAL TONGA BLUE				



100% pure Lambswool

from Royalty

A gift



Style # _____ Size _____
For longer life, hand wash or dry clean this garment.

HAMPSHIRE MILLS

PRINTED IN CANADA

Whenever the King and Queen of the island Kingdom of Tonga go abroad, or whenever dignitaries visit their sandy white shores, they show their royal pleasure by presenting as gifts these beautiful lambswool sweaters which are hand knitted in their islands.

What is so very remarkable about these lambswool sweaters? To begin with, the wool is produced from New Zealand's finest hybrid Perendale sheep. This lambswool combines the most sought after characteristics of resilience, flexibility, strength and warmth. The yarns are then imported to the Kingdom of Tonga, in ancient Polynesia, where native craftspeople hand knit each sweater with painstaking care. Using Hampshire Mills' traditional Irish and New England patterns, they slowly weave the sweater pieces together to produce a finished product with no visible seams. Then they carefully add finishing touches such as buttons, hand made from coconut shells, before preparing them for the long sea journey that brings them to our Hampshire Mills' storehouses.

There are, of course, many ways to acquire an authentic Tongan sweater. You could arrange an audience with their Majesties the King and Queen of Tonga and receive a sweater as a royal favour. Or you can visit fine stores where quality Hampshire Mills' garments are available.

Either way, you will have acquired a sweater that is in every way worthy of its royal heritage.

HAMPSHIRE MILLS

APPENDIX II.

INFORMATION REQUIREMENTS SOUGHT FROM PERSPECTIVE FOREIGN INVESTORS.

1. Name of Entrepreneur/Enterprise Company:
2. Contact address in Tonga:
Overseas:
3. Nature of Development of the Prime Facility (Hotel, Motel, etc).
 - describe type of facility
 - approximate cost of development (T\$)
 - equipment, materials, etc. (itemized list to be furnished giving cost of each and source of procurement)
 - construction cost
4. Plans (to be attached)
 - site plans (Yes/No)
 - detail construction plan (Yes/No)
5. Marketing of Enterprise:
 - Does a reasonably assured market for the Prime Facility exist on a continuing basis?
 - Have markets already been established? (Adequate details to be furnished)
6. Resources and Organization:
 - Capital (extent and how proposed to be financed?)
 - Is local equity participation envisaged? If so, give details
 - Form of organization
7. (List of shareholders or partners showing their residential address against each) to be filled by companies or those intending to register a company in Tonga.
 - (a) Capital paid up now:
 - (b) Capital to be paid when project is implemented:
 - Expected rate of returns
1st year, 2nd year, 3rd year onwards.
 - Citizenship of applicant/company shareholders.
8. Manpower Requirements:
 - expatriate staff
 - local personnel:
9. Utilities:
 - Please state arrangements envisaged in regard to:

- site and land requirement
- housing
- sewerage and effluent disposal

10. Please state estimate requirement of:
- electricity consumption (KWH)
capacity (kw)
 - water (m3/day)
 - any other facilities
11. When do you plan to commence the enterprise?
12. Is this your first tourist prime facility operating? If not, please state locations where you have already established facilities; type of business, annual turnover, etc.
13. Please attach financial statement, if a company; otherwise a Banker's Certificate and two business references may please be furnished. (This would help us greatly in assessing your application).

Attached	Not attached but will be sent later	Not available
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14. What incentives and assistance do you require from the Tongan Government? (Please consult the Industrial Development Incentives act, 1978 and clearly specify).
15. Any other relevant information?

I certify that the information given above is correct to the best of my knowledge and belief.

Date: _____ Name: _____

Place: _____ Signature: _____

Please Note:

- (i) The information will not be disclosed to third parties.
- (ii) The application (with 6 spare copies) is to be submitted to:

Secretary
Ministry of Labor, Commerce & Industries
P.O. Box 110
Nuku'alofa, Tonga Island

- (iii) Each application should be accompanied by a fee of \$5.00.
- (iv) If space is inadequate in the application; please furnish details in a separate sheet.

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PACIFIC ISLANDS DEVELOPMENT PROGRAM

The Pacific Islands Development Program (PIDP) of the East-West Center serves as the regional Secretariat for the Pacific Islands Conference of Leaders. PIDP provides the research and training products based on the issues and problems identified by the heads of government in the region. The Conference, which meets every three years, selects the leaders to serve on its Standing Committee. This Committee reviews PIDP's projects annually to ensure that they respond to the issues and challenges raised at each Pacific Islands Conference. This process enhances and provides focus for the East-West Center's mission in the Pacific islands region.

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