Case Study: Pacific Green Industries (Fiji) Limited: Pacific Palmwood Furniture's "Green" Approach

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ABSTRACT

Pacific Green is a "green" furniture company producing up-market furniture made from "senile" coconut trees. This paper explores the unique characteristics of this company and its success in world markets. Originally operating only in Fiji, the company now sources finished wood from Fiji and carries out its manufacturing assembly operations in China. It has showrooms across the world. The paper also highlights issues which need to be further explored, including concerns from the fast growing coconut oil skin care industry in Fiji about continued availability of high quality coconut oil, since "senile" trees still produce at a reduced but reasonable rate and no formal replanting program is in place. Coconut oil is also being considered as a viable source of biofuel, placing further pressure on future coconut availability.

Keywords: furniture, environmentally friendly manufacturing, coconut, coconut oil, wood, Fiji

FIJI FURNITURE INDUSTRY

The success of Fiji Water and Pure Fiji's skin care products has demonstrated that innovative firms in Fiji can tap large markets like those in North America and Europe (Fiji Times, 14 Nov. 2002). With Fiji's abundant timber resources, and existent furniture and joinery industry, wood products can also serve as replacements for declining sugar exports. Fiji can experience gains by producing value added Mahogany products as well as products made from endogenous species. (Daily Post, 14 Nov. 2002; Yaya, 2002). More recently Future Forests of Fiji has started developing teak plantations, in cooperation with local land owners. While the following table is over ten years old, it does give a picture of the furniture industry in the mid-90's. Unfortunately more recent data could not be found.

Table 1: Fiji Furniture and Upholstery Industry, Key Statistics, 1994

Total Gross Sales	**FJD 18,092,341**
Domestic Sales	FJD 14,954,457
Exports	FJD 3,137,457
Total Value of Raw Materials	FJD 11,544,471
Value of Imported Raw Materials	FJD 4,543,945
Value of Local Raw Materials	FJD 7,000,546
Number of Employees	942
Total Wages and Salaries	FJD 4,586,897
Source : Fiji Bureau of Statistics, 1994 Census of Industries	

Table 2: Furniture Import and Export in FJD : 1995 - 2001

Year	Imports (FJD)	Exports (FJD)
1995	123,192	704,048
1996	149,098	328,466
1997	894,260	969,519
1998	963,219	1,025,311
1999	5,392,385	7,731,355
2000	10,919,857	8,930,317
2001	5,857,340	4,187,019
Source: Investment Opportunities in Furniture Industry, "Fiji Islands Trade and Investment Bureau, p.2, 2002		

Data taken from a survey carried out by the Bureau of Statistics indicates that the Furniture and Joinery Industry in Fiji generated at least FJD 28.5 million in Gross Sales and at least FJD 11.25 million in exports in 2003 (Fiji Bureau of Statistics, 2004). The industry employs at least 1,300 people full time, and has at least FJD 40 million in productive assets. These numbers are lower bounds; the actual amounts of gross sales, exports, numbers of employees and committed assets may be much higher. Table 1 lists statistics for 1994, the latest year data from the Census of Industries that was available at the time of this writing. Comparing this data with the lower bounds reported for 2002, Gross Sales have increased by at least FDJ 10 million; the number of employees has increased by at least 358; and exports have increased by at least FJD 8 million. Moreover, this growth has occurred as a result of private sector initiatives. Perhaps greater results could be achieved by providing incentives for firms in this industry to expand.

FIJI'S POSITION IN WORLD MARKETS

As Table 2 shows, Fiji's exports amount to a small fraction of the furniture exports of the larger players. However, there are currently millions of dollars of export activity generated by this industry and much of it is not quantified and officially reported. Some informal surveys and estimates suggest a figure that is considerably higher than that reported by the Fiji Trade and Investment Bureau (FTIB) for 2001.

COMPETITIVE ENVIRONMENT

The competitive environment for firms in this industry varies according to market segment. There is a certain churning among firms with gross sales under FJD 50,000 as marginal businesses fail and new firms enter (Fiji Bureau of Statistics, 2004). The ease of entry is in part due to the low capital requirements for home-based businesses. The machines they use are less costly; they can set up in a shed or carport; and avoid much of the administrative overhead involved with maintaining employees and a regular payroll. At the next level are small and medium sized firms serving local customers. Firms in this class have annual gross sales between FJD 50,000 and FJD 100,000; produce in a building intended for industrial use; and often have integrated forward, setting up their own retail showroom (Fiji Bureau of Statistics, 2004).

WAGE RATE COMPARISONS

The prevailing view among firms is that the lower wages paid by Asian competitor's places Fiji's producers at a distinct disadvantage. Fiji's wages in manufacturing are higher than in Vietnam, Thailand and China, lower than Malaysia's and on a par with the Philippines. There is undoubtedly some variation in wages, with related differences in the cost of living, within the countries, that is not captured by reporting summary statistics. The Fiji Bureau of Statistics, 2004 has reported wages for furniture workers in China as low as US$0.40/hour. (Asian Furniture News, 2003) Such differences from Fiji's hourly wages imply a need for the strategic responses which Pacific Green has adopted.

PACIFIC GREEN'S PRODUCT DIFFERENTIATION AND 'GREEN' PRODUCTION AND MARKETING

Product differentiation can be accomplished in a variety of ways and this is a competitive strategy used extensively by Pacific Green. These methods include design, green marketing, advertising and high quality product. In the case of design, the firm is positioning its offering in product space, an abstract space whose dimensions are product characteristics. If the firm is successful, it can expect competitors to copy its designs, thereby creating a need for frequent design changes in order to maintain the premium it earns. It has differentiated its products through unique, artistic designs and also makes frequent design changes in its product lines.

Green marketing can also be used to position the firm's offerings. Green marketing is defined here as the promotion of a firm's products on the basis of a good's environmental characteristics or the firm's environmentally conscious production, distribution, or packaging activities (Polonsky, 1994). Pacific Green Industries Ltd. engages in green marketing. It advertises its inputs and production processes as environmentally sustainable.

The American-based organization, Rainforest Relief, made the following statement about Pacific Green:

Pacific Green manufactures furniture made from 'senile' (spent) coconut palm trees harvested from plantations in Fiji. Rainforest Relief staff traveled to Fiji to assess the environmental aspects of the company, their harvesting, processing, and finishing. We found the company is extremely committed to producing a product that has as little negative environmental impact as possible. ... Pacific Green is continually working to lower their impact [on the environment]. A few years ago, they began binding their furniture parts with wire and leather, having come to see the glues they had been using as too toxic for the environment, the workers and the consumer.

Rainforest Relief has begun a process of formal certification of Pacific Green as Rainforest Safe ™.
Pacific Green's palmwood furniture is a beautiful alternative to mahogany or any other forest wood.
(Rainforest Relief, 2005, pages 2-3)

OVERVIEW OF THE COMPANY PRIOR TO THE FIRE OF 2004

Pacific Green Industries Limited is the brainchild of Australian designer Mr. Bruce Dowse who introduced his timber substitution theory to find alternatives to hardwood products. His successful study led to the opening of the Palmwood Timber factory in Sigatoka, Fiji, and after approximately fifteen years of operation the company continues to grow, as the demand for its products keeps rising. Today the company manufactures different varieties of household and office furniture as well as coconut timber for the up market.

Since 1998 the company's sales have more than doubled from \$4.8m to around \$10m in 2003 (the year before the fire) and currently the company is in a sound financial position with a low debt to equity ratio. Since 1998 the company has paid a dividend of around 8% per share per annum to its shareholders, suspended only in 2005. The success of the company could be attributed to its product design, quality and increased level of productivity over the years. The company's major overseas markets are Australia, USA, China, Korea, Japan, New Zealand, Europe and other Asia Pacific Countries. The company exports approximately 90% of its products overseas and thus has been declared a tax-free factory while 10% of its products are absorbed by the local economy.

Though the company does not have a vision / mission statement and HRM department, it has maintained a very good relationship with its staff and the landowners. However, with the continuous demand for its superior quality products and the sound financial position of the company, it is time for the company to expand production to maximize returns for the shareholders.

The success of Pacific Green appears to be largely due to the product quality, design and improved productivity achieved in order to maintain its competitive advantage. It is highly dependent on product differentiation (Porter cited in David, 2007). The continuous success over the years has now provided the opportunity for the company to expand its business to other Pacific Islands due to rich supply of palmwood resources. Currently the company doesn't have a systematic Human Resource Management Department and as a result the company lacks highly qualified staff that could help him in exploring other opportunities for development. However the company has all latest machines, equipment, and the employees are provided in-house training, although some limitation of quality conscious staff remains a concern for the company and requires ongoing supervision of the work being done.

The company still has what might be considered an informal structure, typical of many young companies. (David, 2007). Even the marketing activities are entirely under the control of the General Manager. However the company has well established manufacturing and finance departments. The company is currently considering the establishment of a high volume manufacturing facility to meet the growing demand for the company's high quality architectural products. With a strong financial position, together with a low debt to equity ratio and the additional cushion on tax- free status being provided by the Fiji government, Pacific Green has all the factors in its favor to expand its production in the near future.

HISTORY OF PACIFIC GREEN

In early 1991 in partnership with Mr. Peter Ryan who also had 25 years of experience in retailing and furniture production and distribution; Dowse considered it the opportune time to start the palmwood factory and began looking for appropriate sites. Bruce Dowse recognized the opportunity when a timber factory was for sale in the Fiji Islands, located 8km from Sigatoka town towards Nadi on the Queen's Highway. After the events of the 1987 military coup in Fiji, the timber factory was not in a position to survive further and as a result was up for sale in 1991. Apart from getting a good deal for the factory, Fiji had the abundance of palmwood required for the industry and, more importantly, the typical Southeast trade winds in Sigatoka was an added advantage, as it accelerates the natural drying of the palmwood (Pacific Green Industries).

The palmwood company was declared a tax free factory in early 1990's because the company was engaged in exporting over 90% of its products. The cushion on tax free status will expire on 31 December; 2009. The Company has established a unique processing system which enables it to produce high quality products from senile coconut palms. After operating successfully for 10 years, finally in 2001 the company went public. Currently about 80% of the shares are owned by the founding shareholders – Mr. Dowse and Mr. Ryan, while the remaining are held by employees and other local investors. Plans are in the works to ultimately take the public company international by listing on a major stock exchange, such as the New York Stock Exchange. Although listed on the South Pacific Stock Exchange, the company is still significantly privately held. An international listing of new shares could raise significant capital for global expansion, but issues of ownership dilution also need to be considered for the existing dominant shareholders.

PRODUCT CATERGORIES

The Pacific Green is the manufacturer of quality palmwood building material and furniture. The company manufactures all types of superior high quality furniture for the up market economy. Currently the company is engaged in producing two categories of various household furniture and coconut timber.

Category I

- Household Furniture
- Office Furniture
- Corporate Furniture
- Others

Category II

- Building Materials
- Flooring Materials
- Structural & Column Materials

The various types of manufactured furniture depict the uniqueness of the Pacific and as a result the majority of its household furniture has Pacific names. Each piece of palmwood has the individual features and natural characteristics of the tree it came from. No two pieces are ever the same**.**

The different colors can occur in the one piece. No flat surface – top will ever have matching pieces. Apart from the unique superior quality palmwood furniture the company manufactures palmwood building materials, which have seen an increase in demand globally. The design of its furniture products continues to be changed at frequent intervals, to give the company a competitive advantage and keep ahead of copycats.

PRODUCTION PROCESS

The company has given the palmwood supply contract to a local organization that is entirely responsible for negotiating with the copra farmers in getting the raw materials to the factory. According to their contract, Pacific Green will pay the contractor once he delivers the raw materials to the factory at an agreed price. The leather, steel, latex foam material, and a few other raw materials are imported from Australia, New Zealand, and Italy and are carefully chosen for quality. The company processes the coconut palm into timber which is exposed to chemicals which are neither harmful nor toxic and are left in an open covered area to dry. After drying for almost a month, the workers use the timber for making the furniture and export a major portion of the finished wood pieces to China for assembly there. The company manufactures its own latex foam, specially designed for the furniture products, as only poor quality polyurethane foam is available locally.

FINANCE

The financial performance of Pacific Green Industries for the eight years from 1998 through 2005 is shown below:

Profit and Loss (F$'000)

Year Ending	**Dec. 2005**	**Dec. 2004**	**Dec. 2003**	**Dec. 2002**	**Dec. 2001**	**Dec. 2000**	**Dec. 1999**	**Dec. 1998**
Total Revenue	10,625	7,656	10,099	8,940	7,357	7,592	6,969	4,823
Less Operating & Production Cost	11,206	12,313	9,005	8,187	6,830	6,331	5,901	4,204
Net Profit Before Tax (NPBT)	**(581)**	**(4,657)**	**1,094**	**753**	**527**	**1,261**	**1,068**	**619**
Tax		----	----	----	----	----	----	----
Net Profit After Tax (NPAT)	**(581)**	**(4,657)**	**1,094**	**753**	**527**	**1,261**	**1,068**	**619**
Extraordinary Item after Tax		----	-----	---	----	----	----	----
NPAT & Extraordinary items	**(581)**	**(4,657)**	**1,094**	**753**	**527**	**1,261**	**1,068**	**619**
Transfer from Reserves		-----	-----	----	----	----	----	----
Total Available for Appropriation	(3,365)	(2,109)	3,474	2,729	2,185	2,140	1,385	756
Dividend Provided of Paid	----	686	762	349	209	482	506	438
Transfer to Reserves		----	----	------	-----	(10,000)	----	----

Source: South Pacific Stock Exchange, http://www.spse.com.fj

The company continued to pay high dividends of 8% per share until 2005, when it was decided by the Board that dividend payments were unjustified in light of the loss incurred.

Balance Sheet (F$ 000)

Year Ending as at	**Dec. 2005**	**Dec. 2004**	**Dec. 2003**	**Dec. 2002**	**Dec. 2001**	**Dec. 2000**	**Dec. 1999**	**Dec. 1998**
Cash	100	225	1,172	711	127	995	419	4
Loans and Advance	7	36	---	2	30	81	63	21
Inventories	3,862	3,817	3,234	3,441	3,094	2,634	2,197	2,066
Debtors	645	911	1,140	1,173	1,225	641	741	276
Term Deposit	---	---	---	---	429	787	---	---
Other	347	904	861	239	240	245	204	90
Total Current Asset	**4,960**	**5,892**	**6,407**	**5,566**	**5,144**	**5,383**	**3,625**	**2,457**
Fixed Assets	3,303	2,559	5,899	6,295	6,230	5,421	5,284	4,929
Terms Deposit	---	---	---	---	---	---	---	---
Intangible	5	45	559	867	1,173	1,067	1,004	1,102
Other	---	---	---	---	---	---	---	---
Total Non-Current Assets	**3,308**	**2,604**	**6,458**	**7,162**	**7,403**	**6,488**	**6,287**	**6,031**
TOTAL ASSETS	**8,268**	**8,496**	**12,865**	**12,728**	**12,547**	**11,871**	**9,912**	**8,488**
Current Liability:								
Overdraft	338	4	---	108	347	66	---	112
Short Term Loans	167	181	557	663	552	867	843	127
Other	1,399	1,577	1,009	597	1,060	1,137	1,131	1,016
Total Current Liabilities	**1,904**	**1,762**	**1,566**	**1,368**	**1,959**	**2,071**	**1,974**	**1,255**
Long Term Loans	1,605	1,338	535	831	1,368	1,157	950	790
Other	---	56	81	102	13	52	75	93
Total Non-Current Liabilities	**1,605**	**1,394**	**616**	**933**	**1,381**	**1,209**	**1,025**	**882**
TOTAL LIABILITIES	**3,509**	**3,156**	**2,182**	**2,301**	**3,340**	**3,279**	**3,000**	**2,137**
TOTAL NET ASSET	**4,759**	**5,340**	**10,683**	**10,427**	**9,207**	**8,592**	**6,913**	**6,351**
TOTAL S/H EQUITY	**4759**	**5,329**	**10,683**	**10,427**	**9,207**	**8,592**	**6,913**	**6,351**

Source: South Pacific Stock Exchange, http://www.spse.com.fj

The effects of the political instability in Fiji in 2000 had very little effect on the performance of the company, but there's always a threat that if there were a strike at the wharf then the company would face difficulties in delivering its product to its customers. However the political instability, economic recession and the events of September 11, 2001 on the global front had a major impact on the company's level of profitability in Year 2001. In 2002 the Net Profit after Tax (NPAT) was back on track. The Company's two divisions – Overseas and Local market has a similar production cost and revenue allocation.

THE FIRE OF 2004

In November, 2004 the furniture making factory burned to the ground, the cause accidental. However, a few days before the fire, a small fire had started and been extinguished without damage in a different part of the factory that was in an area subject to frequent small fires not covered by the insurance. To date the insurance company has not paid Pacific Green for the damages caused by the major fire. The matter is now in court. The insurance company's rationale for non-payment is that the small earlier fire had not been reported to them. As this was not part of the insurance cover, such fires had never been reported in the past, as it was considered not relevant to the primary operation, which was covered. The 2004 fire had such a drastic impact on Pacific Green that the fire contributed to triggering a major change in its manufacturing direction in 2005. This situation triggered a scenario that had been under earlier consideration but never implemented: the shifting of assembly operations to China, also shifting much employment, especially employment growth accompanying corporate growth to China from Fiji. Fiji continues to manufacture the palm wood to finished furniture specifications and then ships to China, where duty on raw wood product is negligible but very high on finished value-added product. It also served to take advantage of much lower wage rates in China and enhanced the booming China market for Pacific Green furniture, allowing the company there to sell for much lower prices at greatly increased volume. Fiji employees dropped from about 200 to about 40 following the fire and the shift of assembly operations to China. Three issues were fundamental in shifting approximately 80% of Pacific Green's furniture assembly operations to China.

1. The Success of the Chinese Operation

Pacific Green had established a purchasing office in China in 2003. This allowed the company to deal direct with suppliers and competitive manufacturers and not pay the extra agency fees for suppliers through Australia and New Zealand. Visits to this office (in Guangdong City) revealed the vibrancy and professionalism of the Chinese furniture industry. China was bursting at the seams with an incredible demand for prestige furniture and building materials. In March 2004 the company participated in the Guangdong International Furniture Exhibition displaying Pacific Green's Fijian made furniture. This was a "trade only" display and its cost far exceeded anything else attempted in other countries. The reception was good but problems with quality; particularly upholstery stitching, and the high import duty (35%) made the company uncompetitive with Italian and other European designs, which were manufactured in China.

To overcome this, the company decided to export from Fiji all the finished Palm wood and match it up in China with locally assembled upholstery (from largely imported materials). By importing only wood, although finished wood, the company was exempt from the duty levied on finished furniture. This gave the company free access to an untapped market that can be measured in billions of dollars. By July 2005 the factory and showroom in Guangdong were underway and in August 2005 the company started to assemble furniture from the palmwood imported from Fiji. The first franchised showroom opened in Beijing in late September. This has been successful and the operators were looking for a second location in Beijing as well as opening in Shanghai in December 2005. At our most recent count there were 12 showrooms in China, with this number likely to have expanded by now.

As for the furniture manufacturing operation in Guangdong, the factory was established to supply the Chinese market and it was profitable from an early stage. Everything is precise and exact and above all the quality is built-in. International buyers to the company showroom are complimenting the company on the company's new "quality look" and wanting to buy! The foray into China, assembling and selling Palm wood furniture is exceeding the expectations of the company.

2. Perception of Pacific Islands "quality"

Most Fijian citizens who have traveled or sold things abroad realize the problem that exists. The problem is "quality" or more realistically "lack of quality". There are continuous debates of the quality issues of the South Pacific area. Pacific Green has been able to compensate for the difference between Fijian manufacturing and consumer expectations by providing service "backup" in the major markets. But with the company markets expanding in America - and the advent of the company's architectural building products - it has become increasingly difficult to service quality problems (with the company furniture) in distant cities. The importance (and the difficulty) of "stopping quality problems" at the company became paramount. To lift the quality immediately the firm expanded its assembly and export operation into China, where low wage rates allowed better expatriate supervision and oversight of operations, ensuring improved quality standards.

3. The emergence of strong demand for architectural building products

Such strong interest has been shown in the company and in China operations in the company's product "samples" that the company needed to look forward and increase Palm wood processing; not only for furniture but for all types of building materials. Sigatoka in Fiji was capable of expansion (there are two mills in reserve) but the ideal solution was a sister plant in China, for assembly, which led to the company operating 80% from there.

Therefore it was decided in 2005 that the company will:

1. Expand the Fijian plant to meet the growing international demand for Palm wood and building materials made from Palm wood
2. Concentrate the furniture assembly in China with the companying Palm wood and Palm wood components from Fiji. Some limited assembly is performed in Fiji, mainly for the Pacific Island market.

From a Fijian economic point of view, the company believes it has vastly reduced what the company imports and has expanded the company value through added mass exports. The company workforce has changed its emphasis to the primary production of palm wood, accompanied by limited assembly operations, mainly for the South Pacific market. This means that some people had to "swap over" functions; some employees were retrained and redeployed and any made redundant were compensated and given preference if suitable posts became available in the future.

MARKETING

At present the company faces only limited competition in its chosen niche of high value added palmwood furniture. There is another company in Fiji producing palmwood furniture, which is relatively unknown, perhaps due to marketing, quality and design problems. The other major competitors, current and potential, are located in Indonesia and Malaysia, which have the world's largest potential palmwood timber output (Jakarta Post Online, 2006). Currently Pacific Green is believed to have around 20% of the market share globally, but over the past ten years it has continuously increased its market share as its product design and quality become better known through expansion of its world-wide show rooms.

Pacific Green's research has proven to be very successful and the modifications it made to the machines are helping them in producing superior quality furniture with the difficult to work palmwood. However the company's success may attract competitors in Fiji and elsewhere. While the company enjoys extensive know-how in the treatment of palm timber, and its fabrication into furniture and building supplies, little of this know-how is susceptible to patent protection and as a result the company will continue with its research and development activities to further improve its quality. The continuous investment in R&D has really given Pacific Green the competitive advantage as the company is able to continuously improve on its product quality and on three occasions the company has won product quality awards. The superior quality furniture being carefully manufactured by the company to meet the individual customer needs has really led to a significant rise in demand for Pacific Green's furniture globally.

The marketing activities are under the responsibility of the General Manager who uses the e-commerce facilities to promote the company's product to the targeted customers locally and abroad. Apart from having a website, the company has been regularly advertising in the daily newspapers, signposts, and its products are effectively promoted on many local TV talk shows, where Pacific Green furniture is used on the set. Their furniture is also used extensively in up market hotel lobbies. The company's primary overseas markets include Australia, USA, China, Korea, Japan, New Caledonia, Tahiti, American Samoa, New Zealand, Europe and other Asian countries. In 2004, apart from the showroom in Fiji, the company had showrooms in Australia, New Zealand, USA (30 outlets), China (12 outlets), Ukraine, Russia, Germany, Samoa, New Caledonia, Tahiti and Japan and this coverage is continually expanding. The demand for palmwood furniture is relatively high in the hotels and corporate organizations locally which cater for roughly about 10% of the company's sales while the rest is from abroad. The international showrooms have personnel who are responsible for carrying out the marketing activities in their respective countries and orders are also placed to meet specific customer needs. An increasing number of Fiji homes now also have Pacific Green furniture, boosted by a semi-annual factory sale with significantly reduced prices, which also helps clear discontinued styles and models of furniture.

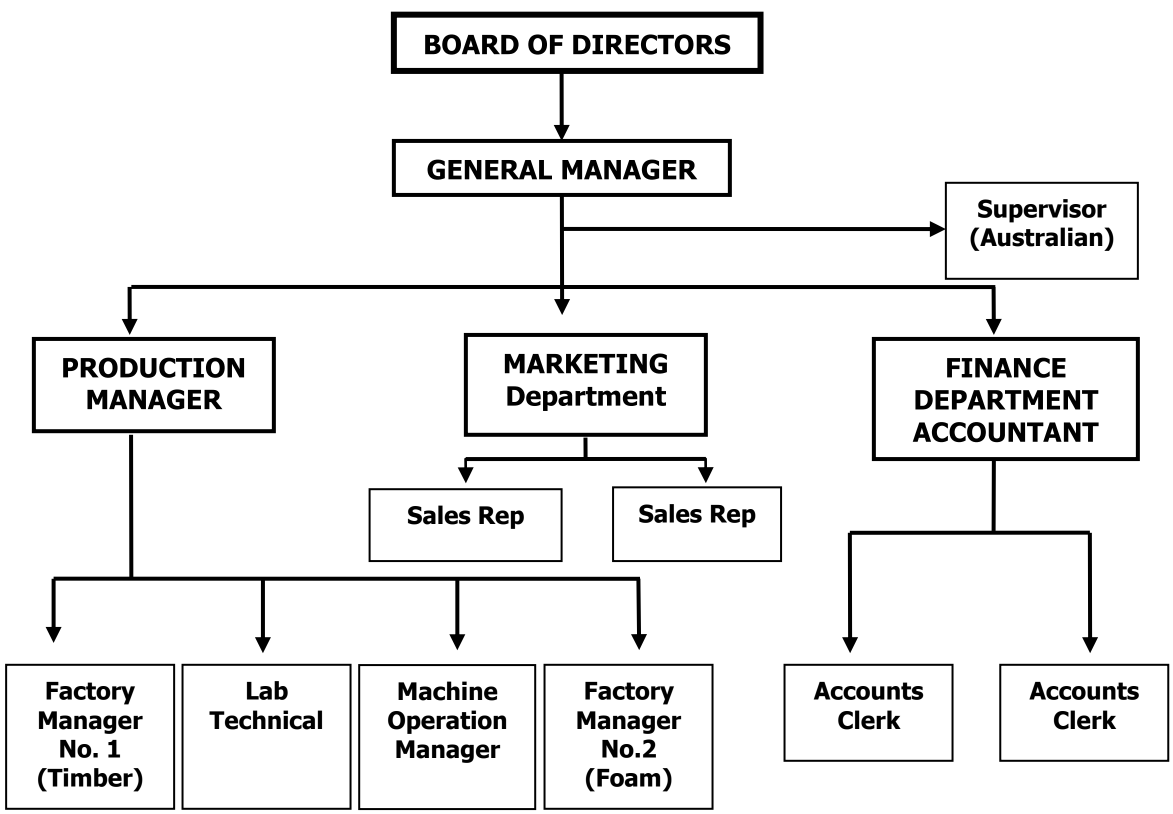
EMPLOYEES

As mentioned earlier, the company employed approximately 200 people in Fiji prior to the fire (2006: approximately 40-50 staff) and, with the exception of one, all were locals located living within a radius of 30 km from the factory. After the company was listed on the South Pacific Stock Exchange in 2001, the employees were given the opportunity to buy shares in the company and to date a significant number of employees have bought close to 10% of the shares in the company. The investment in shares by employees has really lifted the morale of the workers and this has been reflected in increased productivity and the share price almost doubled between 2002 and 2004. The company enjoys a very low staff turnover and in the last 12 years only two employees suffered minor injuries. However the company has a very good compensation scheme and it also ensures the safety and health of the workers. The employees are paid above the wage rate that is paid in other furniture companies and promotions, as well as rewards, are based on both productivity and performance. The employees have the freedom to join the in-house unions.

SOCIAL AND COMMUNITY RELATIONSHIPS

The total workforce now consists of approximately 50 employees from Yadua village on whose land the factory is located. To date the company has maintained a very good relationship with the villagers and landowners and in order to further strengthen their relationship the company has provided sponsorship to the children of the village in their education. This will contribute to a more educated workforce in the future, as currently some of the employees do not have a secondary education. The company still has a 47 year leasing agreement from the landowners, which will expire in the year 2053. The recruitment of factory workers is normally done by the production manager, together with a team of five senior workers from the factory, whereas for the senior positions recruiting is solely done by the General Manager. Pacific Green emphasizes good community relationships.

ORGANISATIONAL CHART (Fiji)



INTERNATIONAL OPERATIONS IN 2006

Pacific Green typically expands internationally by "franchising" individual dealers in each country with exclusive territorial rights. These dealers are identified at International Trade Shows. The dealers own and maintain the showrooms, and import the furniture, as needed, from Pacific Green factories overseas (mainly from China). Showroom standards are clearly laid out in the dealer franchise agreements to maintain an overall consistent quality image.

The Chinese factory is company owned and operated, with 3 expatriate Australian managers assigned full-time to ensure quality standards are maintained in both process and product. The company employs approximately 140 Chinese factory workers plus the three Australian supervisors. They produce about 80% of all finished furniture. It is important to note that all wood, finished for use, is sourced from Fiji and profits are returned to Fiji. China now has 12 showrooms, all through franchised agents with separate geographical territories within China.

In addition to the obvious benefits of improved furniture quality at lower wages and operating costs, the China assembly operation has significantly improved company profitability just through duty savings for China sales. Considering that sales to China are about $15 million a year, the 35% duty savings amounts to over $5 million dollars a year in profit. Additional newer showrooms are now located in Brazil, The Ukraine, Dubai, Vanuatu, Samoa, Tahiti, Noumea, and PNG. This shows significant international expansion on a truly global scale.

Under the new manufacturing arrangements, Fiji now employs approximately 40 workers, manufacturing all palmwood to finished specifications, latex foam production, and about 20% of the furniture assembly (mainly for sale in Pacific markets).

Primary markets for Pacific Green Products in 2006 are approximately as follows:

USA (30 showrooms: California, Florida, Virginia, Los Vegas)	65%
China	10%
Fiji	10%
Other South Pacific Islands, Australia, and New Zealand	10%
Other	5%

FURNITURE DESCRIPTION

Furniture is unique, with lots of heavy palm wood and leather, usually in cream, tan, or black colors. While other colors, such as hunter green and orange, have been used in the past, the "signature" colors are the three mentioned above. The company is now experimenting with some new upholstery such as natural patterned cow hide and is intending to introduce some high quality fabric upholstery. The new styles are being continuously introduced to stay a step ahead of copycats. The style is unique and easily recognized by anyone familiar with Pacific Green

FIJI FACTORY SHOWROOM

Pacific Green has an attractive showroom, well signposted, along the Queen's Road, the major thoroughfare between the capital city of Suva and the tourist centre and international airport in Nadi. The atmosphere is comfortable and friendly, with clean restrooms and coffee available, making it a comfortable place to stop and stretch ones legs, while enjoying, and being tempted to purchase, the attractive and unusual furniture. Prices are not indicated on the display merchandise, requiring one to ask a sales assistant to get more information. One of the author's finds this uncomfortable and inconvenient, but the company seems to find it an advantage by enabling more vigorous personal selling and possibly initiating price negotiation.

CONCLUSION AND AREAS FOR FURTHER RESEARCH

Today after over 15 years of Dowse's successful theories, the company produces world standard furniture and building materials. There is no waste, the byproducts go into ultra inexpensive heating, cooking and agricultural uses – all of which is particularly supportive of the local community. Since its inception, the company has overcome many obstacles. During the early days, the company faced problems in designing the machines to cut coconut timber due to the nature of the wood but quickly the company overcame this problem after making modification to the machines. Now, the company is able to produce world-class superior furniture products which is gaining popularity worldwide. The company has succeeded mainly due to sheer guts, determination, and imagination combined with the hard work put in by the employees.

All in all, Pacific Green provides an excellent example of how a quality oriented manufacturing company, with "green" practices, and global niche marketing (with high value added), can succeed in a developing country and assist that country in establishing a "quality" image. However, Pacific Green also poses some interesting dilemmas. While still a Fiji Company, it has shifted most of its assembly operations to China, negatively impacting local Fiji employment and higher value-added exports from assembly. Furthermore, one reason for the shift was to get better quality product from China. This should provide some deep reflection on Fiji's part about its success in establishing and maintaining a quality image. It also needs to think about incentives to keep success stories like Pacific Green within the country.

Recently another dilemma has arisen. In this author's discussions with the major up-market coconut oil based skin care product company exporting to niche markets in the USA and elsewhere, it was indicated that this company, along with its competitors, have grown concerned about the dwindling supply of top quality virgin coconut oil required for their products, with an indication of diminishing supply and quality. It is believed this is due to the increasing demand for palm wood, causing trees which are still producing respectable amounts of coconuts, even if not at peak production, to be cut down prematurely. This, combined with an apparent lack of formal replanting programs, appears to be beginning to impact a booming market by limiting supply of critical raw material. This is an area requiring further research to verify and quantify the potential impact. It may be that palm wood demand is encouraging premature cutting of mature, but bearing, trees and negatively impacting other industries reliant on different parts of the coconut palm. This potential shortage of coconuts may be further negatively impacted by the intention to use coconut oil as a biofuel replacement for petroleum-based fuels, with research rapidly progressing in that area. It appears that replanting programs need to be implemented immediately.

REFERENCES

1. Broschat and Crane, 1984, The Coconut Palm in Florida, http://edis.ifas.ufl.edu/MG043, accessed 28 August 2006.
2. Chan and Elevitch, April 2006, Species Profiles for Pacific Island Agroforestry: Cocos nucifera, http://www.agroforestry.net/tti/, accessed 28 August 2006.
3. David, F., 2003. *Strategic Management: Concepts*. (9th edition). Pearson Education Ltd., New Jersey.
4. Fiji Bureau of Statistics, 1994 Census of Industries
5. Fiji Trade and Investment Bureau (2002), *Investment Opportunities in the Furniture Industry*
6. Jakarta Post Online, August 24, 2006, http://www.thejakartapost.com/yesterdaydetail.asp?fileid+200 Accessed 28 August, 2006.
7. Pacific Green, www.pacificgreenfiji.com, accessed 28 August 2006.
8. Polonsky, 1994, An Introduction to Green Marketing, *Electronic Green Journal*, Vol. 1, issue 2, November 1994. Retrieved from: http://egj.lib.uidaho.edu/edj02/polon01.html, accessed 28 August, 2006.
9. South Pacific Stock exchange, www.spse.com.fj , accessed 28 August 2006.
10. Yaya (2002), *Daily Post*, 14 November, 2002.

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