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## Abbreviations and Acronyms

ALTA	Agricultural Landlord & Tennant Act
BCT&AWU	Building Construction, Timber & Allied Workers Union
BLV	Bose Levu Vakaturaga (Fiji's Great Council of Chiefs)
CBD	Convention on Biodiversity
CFPs	Certified Forest Products
FBSAP	Fiji Biodiversity Strategy & Action Plan
FD	Forestry Department
FFI	Fiji Forest Industries Ltd
FHCL	Fiji Hardwood Corporation Ltd
FPL	Fiji Pine Limited
FPT	Fiji Pine Trust
FSC	Forest Stewardship Council
GOF	Government of Fiji
GTZ	German Agency for Technical Corporation
ha	hectare (10,000 m <sup>2</sup> = 2.47 acres)
IFBWW	International Federation of Building & Wood Workers
ITTO	International Tropical Timber Organisation
LLP	Logging Licensing Procedure
m <sup>3</sup>	cubic metres
m <sup>3</sup> /ha/yr	cubic metres per hectare per year
MAI	mean annual increment
MFF	Ministry of Fisheries and Forests
MLH	mix light hardwood
MSD	Management Services Division (Forestry Dept)
NCOLP	National Code of Logging Practice
NFMPP	Natural Forest Management Pilot Project (Nakavu, Navua)
NLTB	Native Land Trust Board
NWG	National Working Group
PGRFP	Pacific-German Regional Forestry Project (SPC/GTZ)
PHI	Pre-Harvest Inventory
PICs	Pacific Island Countries
RBF	Reserve Bank of Fiji
RIL	Reduced Impact Logging
SCARF	Seed Capital Revolving Fund (Forestry Sector)
SFM	Sustainable Forest Management
SPARTECA	South Pacific Regional Trade & Economic Cooperation Agreement
SPC	Secretariat for the Pacific Community
TPAs	Totally Protected Areas
TPO	Timber Production Officer (Forestry Dept)
TWIL	Tropik Wood Industries Ltd

## Executive Summary

In assessing the efficacy of landscape-scale forest certification for strengthening Fiji's forest reserve network, at issue are three concepts: biodiversity, sustainable forest management (SFM), and forest certification (FC). There is a need to review the current status and experiences of the concepts and issues affecting them, both at the international level and the Fiji context. These are as follows:

### 1. Current International Experience -

#### *Sustainable Forest Management (SFM) and Certification*

- (a) The feasibility of SFM and the definition and measurement of biodiversity are still being debated.
- (b) Certification as a marketing device for timber produced in 'well managed' forests is handicapped by difficulties over acceptable standards - particularly with respect to biodiversity conservation. Natural tropical forests, with their high levels of biodiversity, are therefore at a disadvantage in the production of certified timber.
- (c) Enough is known to implement SFM based on current best practice, but guidelines for SFM are not set out as clearly as they could be for effective implementation.
- (d) In its marketing role, certification is a driver for improved management practices, although its significance in tropical forests has been low to date.
- (e) Certification is not a driver for the landscape-scale planning and management needed for effective biodiversity conservation. Thus, certification of forests for the purpose of obtaining an eco-label for the timber produced from such forests will be of limited value in conserving biodiversity. However, certification could play other important role. For example, if alternative schemes for the payments of global services such as biodiversity conservation are to be viable, an auditing system that convinces the payees that such services are actually being performed will be essential.

#### *Markets for Certified Forest Products (CFPs)*

- (f) A minor part of the wood supplied from certified forests is actually traded as (labelled) CFPs, *inter alia*, owing to a lack of chain of custody certificates and low customer and consumer awareness and demand. Today only about 2,600 chain of custody certificates exist, mainly in Europe and North America, and issued almost exclusively by the Forest Stewardship Council (FSC).
- (g) Existing markets for CFPs continue to be mainly located in Western Europe, especially the United Kingdom, Germany and the Netherlands, and the United States. FSC-certified CFPs are today available across a large range of forest products in the more advanced markets, and PEFC-certified CFPs are slowly becoming more visible.
- (h) Consumer awareness of CFPs continues to be low, even in the more advanced markets in Western Europe, which is seen as one main impeding factor for market growth. Public procurement is an important driver of demand in several key importing countries, including the United Kingdom, the Netherlands and Germany, and is expected to remain so, *inter alia*, owing to the illegal logging issue.

- (i) The largest export markets for tropical timber remain in Asian countries like Japan, China and Thailand, where markets are just beginning to show a fragmented interest in certification.

## **2. The Fiji Situation -**

### *Sustainable Forest Management and Certification*

- (a) The feasibility of the 'Nakavu' SFM model is still unclear and being debated. The implementation of the next step in the 'testing and adaptation' of the SFM model's financial viability involving large-scale operational trial under commercial condition is long pending. The issue of - financial viability of SFM - which the Fiji timber industry members have been largely sceptical of, must be reviewed because it is critical to the entire concept and thus to the role that certification can play in biodiversity conservation. Thus, it is critical that an immediate start of this long pending trial is made in the designated 6,500 ha Drawa forest block in Vanua Levu by the Forestry Department and the landowner company (Drawa Landowners Cooperative Ltd) with the assistance of the SPC/GTZ-Pacific German Regional Forestry Project.
- (b) Given that industrial involvement is a necessity for forest-based development and that the timber industry in Fiji is largely private sector activities (whether privately-, community-owned or Government-owned timber companies), SFM must be profitable to the individual timber companies and stakeholders (including landowners) involved all along the production/marketing chain. The need to determine the financial viability of SFM in the Fijian context, the absence of 'premium' export prices and little or no demand for certified forest products within Fiji's current export markets, provides a gloomy outlook and a disincentive for SFM in Fiji for the present time.
- (c) A number of pertinent issues concerning forest certification and relevant to the Fiji context includes:
  - The high cost of certification and lack of information about it leading to low levels of awareness amongst stakeholders.
  - Fiji's current main export markets for all timber products are mostly within the Pacific-rim countries including the Pacific Island Countries which currently have little or no requirement for certified forest products.
  - Low level of technical knowledge and lack of training in forestry professional and technical staff.
  - Absence of 'premium' prices and no market advantage perceived by timber producers.
- (d) The current move spearheaded by the Forestry Department to establish a formal National Working Group (NWG) on certification, incorporating stakeholders from the 3 chambers of - social, economic and environmental - should be supported.

### *Communal Landownership & Compensation Payment for TPAs*

- (e) With the majority of natural forest land under Fijian communal landownership, implementing and achieving the 'Guiding Principles' of Fiji's Biodiversity Strategy and Action Plan will be largely dependent on having the necessary support and approval of landowning units and the NLTB.

However, the opportunities for forest protection and setting up of reserves and protected areas under totally protected areas (TPAs), depend largely on the provision of monetary compensation for landowners for the long term leasing of such areas. This has been highlighted by both the Forestry Department and NLTB as the single most important constraint in implementing a network of forest reserves and protected areas. Other practical and legal hurdles concerning the establishment of such reserves/protected areas are discussed in Section 3.2.3.

*National Rural Land-Use Policy for Fiji*

- (f) The establishment of a comprehensive and representative system of reserves and conservation areas at the national and local levels is critical to successful biodiversity conservation. This requires the implementation of a national land-use plan where an adequate network of conservation areas is secured. This process is still pending in Fiji with the submission of the draft 'National Rural Land-Use Policy for Fiji' (NRLUP) awaiting formal Cabinet endorsement.

Further, the implementation of such a plan will enable the identification and proper management of Fiji's 'multiple-use' natural forest estate, ie. where natural forest is to be maintained under forest cover but to be used for timber production, catchment protection, wildlife habitat, recreation and amenity uses and for minor forest products. This will form the 'National Forest Master Plan' which will be formulated as an outcome under the NRLUP process.

Under the current Fiji scenario, the immediate task will be to make a start on implementing the next step in the 'testing and adaptation' of the 'Nakavu' SFM model through the long awaited trial under large-scale operational and commercial condition. This will demonstrate the financial viability of SFM to the timber industry members; the issue is critical to the entire concept and thus to the role that certification can play in biodiversity conservation.

## 1.0 INTRODUCTION

There is general consensus that deforestation is the most powerful direct threat to forest biodiversity, and timber harvesting, although a long way behind in the directness or totality of its effects, is among the next most serious of threats. The non-timber objectives of sustainable forest management (SFM) such as the conservation of biodiversity are, therefore, most easily and fully met by halting deforestation and keeping commercial timber production out of the forests. This is the principle underlying the reservation of totally protected areas (TPAs) or 'Forest Reserves' and 'Protected Areas' as in Fiji.

However, few developing countries including Fiji, have the financial resources, the desire or the technical capacity to allocate all their natural forests under well-managed TPAs. Most continue to encourage the industrial utilisation of their natural forests due to the income and employment this provides.

The certification of timber production forests to sustainable forestry standards has emerged as a possible biodiversity conservation strategy in recent years. Three systems - the Forest Stewardship Council (FSC), the Pan European Forest Certification (PEFC) system, and the Sustainable Forestry Initiative (SFI) - have certified in excess of 100 million hectares since 1995. The Forest Stewardship Council's standards have by far the greatest support from the environmental community. An examination of publicly available audits confirms that the process of certification does require improvements to management that significantly improve the value of certified forests for biodiversity.

At larger scales though, the contribution to biodiversity conservation is less clear and will be limited due to the current status of the three concepts of: biodiversity, SFM and certification. Biodiversity is difficult to define and measure satisfactorily, the implementation of certification still faces many practical problems, and SFM is still being debated.

When certification takes place in the absence of a satisfactory and enforced land use plan, it is possible that certification only displaces impacts to other forests. At present, only about 6% of the world's roundwood production is certified by the FSC, meaning that it is probably not relieving logging pressure on high conservation value forests to any significant extent. In the absence of effective regulatory capacity that can control illegal logging, observed price premiums and market access provided by certification are insufficient to outweigh the profits from liquidation logging and conversion to other uses. The relative poor financial returns from sustainable forestry help explain why the FSC has made relatively little progress into tropical countries, where most of the world's biodiversity occurs, and where the threats to biodiversity are greatest.

## 1.1 Fiji Economic & Trade Conditions

### 1.1.1 National Economy

Fiji's economic recovery is being driven by a revival in consumer spending and tourism. According to the Reserve Bank of Fiji (RBF), real GDP was on course to grow by 4.4% in 2002 compared to 4.3% in 2001<sup>(1)</sup>. However, the vital sugar industry, which has traditionally been beset by industrial disputes, low productivity and a strong resistance to change, now faces a new crisis in the shape of the land lease and ownership issue together with the current sugar industry re-structuring process, which remains a serious political problem.

Going into 2003, the RBF forecasts the economy to grow by 5.7% with the tourism sector again expected to lead economic growth with strong contributions from the wholesale and retail sector and the building and construction sector, as a result of hosting the 2003 South Pacific Games in Suva during 28 June to 12 July.

The natural resource sector, which includes agriculture, fisheries, forestry and mineral resources, contributed 16.6% of total output in 2001 compared to 19.3% in 2000. It is expected to fall slightly to 16.1% of GDP in 2002 and 15.5% in 2003, due to decline in sugarcane production<sup>(2)</sup>. Annual growth of 1.1% and 1.7% is forecast for 2002 and 2003 respectively; the increases are largely attributed to higher output from the fisheries and forestry sectors.

The forestry sector is increasingly becoming a critical part of Fiji's economy as it encompasses the entire range of production processes from logging, milling and value-added operations to production inputs in construction and other industries. Ensuring sustainability of the industry is therefore of paramount importance, whilst providing assistance and building capacity to resource owners thus facilitating their participation in the industry. Government has developed a policy framework for the utilization of Fiji's plantation mahogany resources. In 2003, Government will lay the groundwork to enable the industrial phase of the mahogany utilization plan to commence in 2004.

### 1.1.2 General Trade

In line with most developing countries, the last decade has seen Fiji adopt an export orientated, outward looking approach to trade relations. Import restrictions have been largely lifted in favour of export promotion, and as such Fiji now has a more open economy with increased volumes of both exports and imports. Fiji is a signatory to a number of bilateral, regional and multilateral trading agreements (refer to summary of existing trade agreements in Figure 1).

Figure 1<sup>(3)</sup> shows Fiji's key annual economic and trade indicators for 1997-2001.

(1) Fiji Times: Friday 13 December 2002 - Business Section

(2) Fiji Government (Nov 2002): 'Minister of Finance 2003 Budget Address - Economic & Fiscal Update Supplement', Ministry of Finance & National Planning

(3) Lenora Forestry Consulting Services (Dec 2002): 'Forest Products & Trade in the Pacific Region' - Report prepared for the FAO Sub-Regional Office for the Pacific Islands, Apia, SAMOA

In 2001, exports (excluding aircraft) grew by 2.8% largely due to higher receipts from gold, fish, mineral water and fruit & vegetables<sup>(2)</sup>. Exports of garments, textiles, sugar, timber, footwear and copra fell during the same period. In line with the subdued world economic outlook, total export earnings in 2002 are expected to increase marginally by 0.1%. For 2003, export earnings are forecast to grow significantly, by 7.4%, largely due to higher receipts from all major export commodities, except sugar, molasses and copra. Mineral water, gold, garments, fish and timber exports are forecast to record good growth in 2003.

**FIGURE 1: Fiji Key Annual Economic & Trade Indicators, 1997-2001**

<b>FIJI</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
▪ Population (million) <sup>a</sup>	0.79	0.80	0.81	0.82	0.83
▪ Real GDP growth (av; %) <sup>a</sup>	-0.9	1.5	9.6	-2.8	3.8
▪ Exchange rate (av; 1 F\$:US\$) <sup>b</sup>	0.6929	0.5035	0.5093	0.4674	0.4391
▪ Exports incl. re-exports (US\$ m) <sup>b</sup>	621.5	511.7	611.4	581.3	537.4
▪ Imports (US\$ m) <sup>b</sup>	964.9	722.1	905.9	820.9	793.8
▪ Balance of trade (US\$ m) <sup>b</sup>	-343.4	-210.4	-294.5	-239.6	-256.4
▪ Main exports (F\$ m) <sup>b</sup>					
- Garments	243.6	302.8	322.1	332.9	313.9
- Sugar	213.4	244.2	263.2	237.5	222.0
- Fish	50.4	49.4	57.5	88.8	98.4
- Gold	73.9	70.5	76.4	75.7	85.4
- Timber products	34.0	54.8	35.6	44.9	41.3
▪ Direction of Exports <sup>b</sup> (% of total)					
- Australia				32.6	27.5
- USA				20.2	25.9
- UK				19.3	18.3
- Japan				4.4	5.9
- New Zealand				4.6	4.7
▪ Sources of Imports <sup>b</sup> (% of total)					
- Australia				46.7	39.8
- New Zealand				16.2	18.7
- Singapore				5.7	5.5
- USA				4.5	5.0
- Japan				4.6	4.7

<sup>a</sup> Reserve Bank of Fiji *Quarterly Review*,  
<sup>b</sup> Fiji Islands Bureau of Statistics.

**Summary of Existing Trade Agreements:**  
1. SPARTECA; 2. Lome/Cotonou Agreement; 3. World Trade Organisation (WTO); 4. Melanesian SpearHead Group (MSG); 5. Generalised System of Preference (GSP); and 6. Signatory to the PICTA and PACER agreements.

(Source: Lenoa Forestry Consulting Services (Dec 2002): 'Forest Products & Trade in the Pacific Region' - Report prepared for the FAO Sub-Regional Office for the Pacific Islands, Apia, SAMOA)

Fiji's principal import sources and export markets are shown in Figure 1. The three largest export markets (Australia, USA & UK) accounted for about 72% of exports in 2001. In the same year Australia and NZ together accounted for about 58% of Fiji's total imports from all sources. The EU is of major importance to Fiji as an export market, and the balance of trade between Fiji and the EU is heavily in Fiji's favour. The future of sugar exports to the will be a crucial factor in Fiji's assessment of the options open to it.

Garments are Fiji's largest exports. The garment industry is in a state of decline, with a number of firms relocating away from Fiji. A number of factors are behind these developments, including erosion of preferences as restrictions on the exports of competitors are relaxed, the loss of favourable tax incentives, and the attraction of new preferential arrangements favouring production in locations in Africa.

In 2001, consistent with strong domestic activity, import payments grew by 2.9%, underpinned by higher imports of food, machinery & transport equipment and chemicals. Fiji's overall balance of payments position was anticipated to weaken further in 2002, to a deficit of F\$85.2 million, from a deficit of F\$30.2 million in 2001.

There has been a continuing shift in the direction of Fiji's export trade over the past five years, due to industries such as garments and general free trade approach, adopted by countries including Fiji's major trading partners. Fiji's goods enjoy preferential and unrestricted access to Australia and New Zealand under the South Pacific Regional Trade & Economic Cooperation Agreement (SPARTECA). Figure 1 show that Australia continues to be the main export market and main source of imports. Although SPARTECA was signed in 1987, it continues to offer significant viability.

In light of joining WTO, trade preferences are eroding with the gradual dismantling of preferential trade agreements. With Fiji's ratification of the WTO Agreement, transparency is being introduced by the gradual reduction of tariff barriers and the removal of most licences and subsidies. Policy changes have begun to be made that will offer non-discriminatory trade practices to potential investors. Current obligations being implemented include the modification of the Customs Valuation System. Fiji would also have to harmonise to new systems of Sanitary and Phytosanitary Measures, and to new Rules of Origin<sup>(4)</sup>.

## **1.2 Fiji Forestry Sector - General**

### **1.2.1 Forest Resources & Classification**

#### ***Natural Forests***

Fiji is blessed with its comparatively still large remaining indigenous or natural forest resources totaling approximately 740,000 hectare (ha) as at end of 1999<sup>(5)</sup>, and which offers a great potential for the implementation of sustainable forest management (SFM). However, finding a mechanism that satisfies the needs of Fijian landowners, timber industry and government is the challenge facing Fiji's forest policy makers.

The Fiji indigenous timber industry is currently based on an area of around 400,000ha of production (or loggable forests) with an average stocking of 45 m<sup>3</sup> of commercial species per ha<sup>(6)</sup>. Table 1.0 summarizes the status and classification of forest resources in Fiji as at end December 1999.

(4) Lenora Forestry Consulting Services (Dec 2002): 'Forest Products & Trade in the Pacific Region' - Report prepared for the FAO Sub-Regional Office for the Pacific Islands, Apia, SAMOA

(5) Ministry of Fisheries & Forests/Forestry Department: '1999 Annual Report'

(6) Fiji-German Forestry Project/GTZ: 'Fiji's Natural Forest Inventory, Terms, Method & Results (1991-93)' by GOPA Consultants, FGFP/GTZ Technical Report

**Table 1 : Status and Classification of Fiji's Production Forest Areas As at December 1999 (000 Hectares)**

DIVISION	PRODUCTION FORESTS		PROTECTION FORESTS	INDIGENOUS LOGGED FOREST	TOTAL FOREST AREA	TOTAL LAND AREA
	Indigenous Forests	Plantation Forests				
NORTHERN	86.59	37.28	119.17	105.26	348.30	553.55
CENTRAL	80.19	29.78	65.92	81.34	257.23	427.80
WESTERN	5.11	44.28	57.23	139.14	245.76	611.00
<b>TOTAL</b>	<b>171.89</b>	<b>111.34</b>	<b>242.32</b>	<b>325.74</b>	<b>851.29</b>	<b>1592.35</b>
% of Total Forest Area	20.2	13.1	28.5	38.2	-	100.0
% of Total Land Area	10.8	6.9	15.2	20.5	53.4	-

(Source : Forestry Dept Annual Report 1999, Appendix 1)

**NOTE :** Figures for Indigenous forests stated above excludes the forested areas for the islands of Gau, Ovalau, Koro and Taveuni. Mangrove forests totalize 42,464 Ha are also excluded.

### ***Pine Plantations***

Fiji Pine Ltd (FPL) plans to establish 52,000 ha of pine plantations nation-wide, of which 36,000 ha will be on Viti Levu and 16,000 ha on Vanua Levu. As at end of 2001, FPL has achieved a total stocked area of 43,201 ha out of which 29,010 ha (67%) is on Viti Levu and 14,191 ha (33%) on Vanua Levu<sup>(7)</sup>.

### ***Mahogany Plantations***

As at end of 2002, the Government-owned Fiji Hardwood Corporation Ltd (FHCL) had achieved a national total mahogany plantation stocked area of 41,447 ha, of which 25,290.7 ha (61%) is on Viti Levu and 16,156.3 ha (39%) on Vanua Levu<sup>(8)</sup>. FHCL had not undertaken any new plantation establishment during the 1999-2000 period due to funding constraints caused by the current unresolved issues regarding the Company's future strategic direction and participation of the major stakeholders (ie. Government, NLTB/landowners, investors, etc).

FHCL forecasts that the mahogany log requirements for the industry for the next 30 years can be adequately met and sustained from the existing pure mahogany stands (ie. the 1950-1998 plantings or first rotation crop). Based on the average calculated yield of 125 m<sup>3</sup> per ha, the consequent yield and national wood flow forecast for the existing first rotation

(7) Fiji Pine Ltd: 'Annual Report 2001'

(8) Fiji Hardwood Corporation Ltd: 'Internal Report by Survey & Mapping Section', April 2003

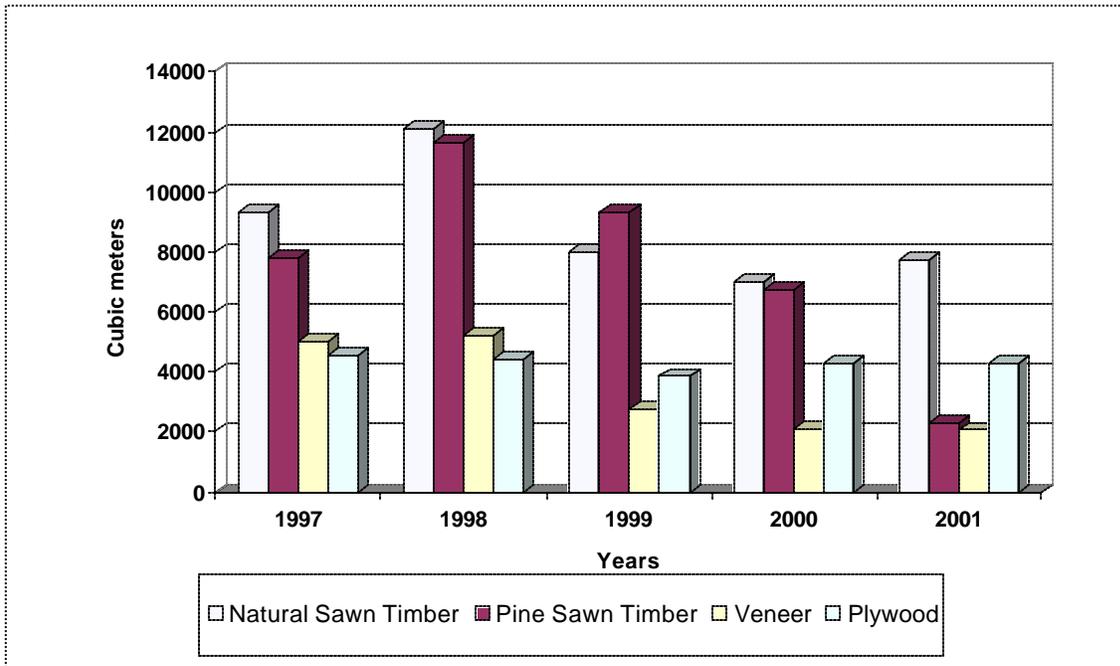
REPORT: "Forest Conservation in Fiji - Assessing the Efficacy of Landscape Forest Certification for Strengthening Fiji's Forest Reserve Network" Prepared for the Wildlife Conservation Society - South Pacific Program; June 2003

**Table 3: Fiji Timber Products Export & Import Statistics, 1997-2001**

YEAR	Unit	1997		1998		1999		2000		Quantity
		Quantity	FOB value (SF)							
<b>Export of Timber Products</b>	<b>m<sup>3</sup></b>	<b>265,790</b>	<b>37,627,092</b>	<b>336,564</b>	<b>62,254,825</b>	<b>196,389</b>	<b>35,760,385</b>	<b>242,389</b>	<b>41,556,175</b>	<b>222,984</b>
Sawn timber	m <sup>3</sup>	17,270	10,414,742	23,835	15,691,040	17,402	11,816,474	13,841	9,746,543	10,117
- Indigenous	m <sup>3</sup>	9,323	6,802,023	12,087	10,313,604	7,980	6,824,134	7,007	6,240,883	7,718
- Pine	m <sup>3</sup>	7,798	3,484,184	11,617	5,220,958	9,318	4,880,735	6,711	3,369,880	2,307
- Mahogany	m <sup>3</sup>	149	128,535	131	156,478	104	111,605	123	135,780	92
Veneer	m <sup>3</sup>	5,032	4,647,450	5,184	6,634,475	2,773	3,180,097	2,113	2,719,851	2,058
Plywood	m <sup>3</sup>	4,523	4,774,620	4,514	5,325,828	3,850	4,256,753	4,260	4,292,195	4,307
Blockboard	m <sup>3</sup>	129	107,920	148	142,000	115	113,797	257	275,989	168
Post & Poles	m <sup>3</sup>	14	3,890	35	14,048	10	4,870	42	12,521	15
Pine woodchips	Tones	238,773	17,634,240	302,957	34,447,434	171,896	15,955,676	221,790	24,417,581	203,135
Mouldings	m <sup>3</sup>	-	-	-	-	n/a	n/a	48	45,737	3,026
Raintree slabs	m <sup>3</sup>	49	44,230	-	-	343	432,718	38	45,758	35
<b>Import of Timber Products</b>	<b>m<sup>3</sup></b>	<b>209,607</b>	<b>334,680</b>	<b>1,222</b>	<b>873,792</b>	<b>817</b>	<b>625,552</b>	<b>7,559</b>	<b>n/a</b>	<b>595</b>
Sawn Timber	m <sup>3</sup>	95	64,180	215	238,377	97	45,730	5,805	n/a	197
Aust. H/wood cross-arm	m <sup>3</sup>	-	-	-	-	170	245,685	-	-	97
Malaysian Redwood P/Wood	m <sup>3</sup>	355	100,620	-	-	84	75,464	1,754	n/a	146
<i>Endospermum</i> Match splints	m <sup>3</sup>	208,600	35,500	15	11,956	46	24,276	-	-	114
Others	m <sup>3</sup>	557	223,380	992	623,459	420	234,397	-	-	41

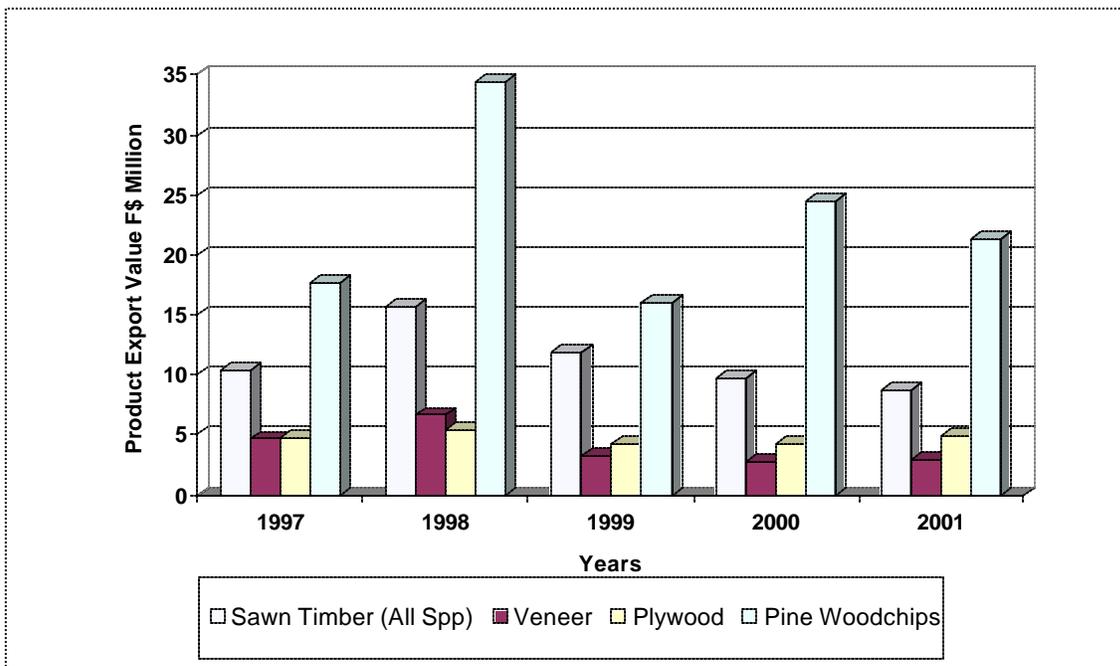
- SOURCE :**
- 1) Fiji Islands Bureau of Statistics, *Key Statistics Jan-Dec 2001*
  - 2) Fiji Forestry Department (FD) Annual Reports 1997
  - 3) Fiji FD Utilisation Division Annual Reports 1998-2001
  - 4) Fiji Minister for Finance & National Planning, *2002 & 2003 Budget Address*

**Figure 4: Fiji Timber Export Volume by Products, 1997-2001**



Source: Dept of Forestry and Utilisation Division Annual Reports; and Fiji Islands Bureau of Statistics

**Figure 5: Fiji Timber Export Value by Products, 1997-2001**



Source: Dept of Forestry and Utilisation Division Annual Reports; and Fiji Islands Bureau of Statistics

## 2.2.2 Timber Products - Export Markets & Prices

Tables 4a and 4b shows Fiji's main timber export markets and products value for 2001 and 1998 respectively. Table 5 shows the average export unit prices for the main timber products during 1997-2002. Main markets and average prices for each of the major products for 2001 are summarised below.

### For 2001 –

- Sawn Timber
  - ✓ Main export market destination in decreasing volume and average unit prices (for all species and specifications): New Zealand \$920/m<sup>3</sup>; Australia \$750/m<sup>3</sup>; Tahiti \$1,058/m<sup>3</sup>; New Caledonia \$714/m<sup>3</sup> and Tuvalu \$602/m<sup>3</sup>. In terms of market share, NZ and Australia purchased 64% of the total sawn timber exported and 33% to the various Pacific Island Countries (PICs).
- Veneer
  - ✓ Main export market destination in decreasing volume and average unit prices (for all species and specifications): USA \$1,357/m<sup>3</sup>; Australia \$1,493/m<sup>3</sup>; NZ \$1,355/m<sup>3</sup>; and Japan \$1,601/m<sup>3</sup>. The USA is the predominant veneer market with 78% and Australia/NZ with 21% market share.
- Plywood
  - ✓ Main export market destination in decreasing volume and average unit prices (for all species and specifications): Australia \$1,027/m<sup>3</sup>; NZ \$1,068/m<sup>3</sup>; Tahiti \$1,296/m<sup>3</sup>; Cook Islands \$1,126/m<sup>3</sup>; and Western Samoa \$1,169/m<sup>3</sup>.
  - ✓ Australia is the main plywood market absorbing 48% of the total export followed by NZ with 13% of the market share; combined they constitute 61% of the total plywood market. Plywood exports to the PICs make up 38% of export, the main markets being Tahiti, Cook Is, Western Samoa and Kiribati.
- Mouldings
  - ✓ Main export market destination in decreasing volume and average unit prices (for all species and specifications): Australia \$527/m<sup>3</sup>; Tuvalu \$636/m<sup>3</sup>; and NZ \$952/m<sup>3</sup>. Australia is the predominant market taking 95% of total moulding exported.
- Blockboard
  - ✓ Main export market destination in decreasing volume and average unit prices (for all species and specifications): Tahiti \$857/m<sup>3</sup> and Tonga \$1,058/m<sup>3</sup>. The PICs is the predominant market for blockboard purchasing 93% of total exports; the main markets being Tahiti and Tonga.
- Pine Woodchips
  - ✓ Only export market destination: A total of 203,135 tonnes of pine woodchips was exported to Japan fetching \$21.2 million, compared to 259,218 tonnes (2000) and 302,961 tonnes (1998). Woodchips is the major product of the FPL/TWIL Group and represented 57% of its total sales revenue<sup>(7)</sup> for 2001. Woodchip demand is expected to reduce following the continued weakening of the Japanese economy. This will have an impact on both the volume and price resulting in a significant exposure of the Group's product and market risk.

**TABLE 4a: Fiji Timber Products Export Markets & Values, 2001**

Market	Sawn Timber		Veneer		Mouldings		Plywood		Blockboard		Wood Chips	
	Vol (m <sup>3</sup> )	Val (F\$)	Vol (m <sup>3</sup> )	Val (F\$)	Vol (t)	Val (F\$)						
Australia	2,580	1,936,010	388	579,266	2,892	1,524,970	2,093	2,150,311	7	5,426	-	-
New Zealand	3,871	3,560,749	35	47,408	43	40,944	543	580,098	5	4,287	-	-
<b>Sub-Total*</b>	<b>6,451 m<sup>3</sup> / 64%</b>		<b>423 m<sup>3</sup> / 21%</b>		<b>2,935 m<sup>3</sup> / 97%</b>		<b>2,636 m<sup>3</sup> / 61%</b>		<b>12 m<sup>3</sup> / 7%</b>		-	
American Samoa	0.7	1,071	-	-	-	-	-	-	-	-	-	-
Cook Islands	4	3,101	-	-	-	-	252	283,727	-	-	-	-
Kiribati	87	80,047	-	-	3	2,594	213	338,298	-	-	-	-
Marshall Islands	1.4	570	-	-	-	-	6	4,028	-	-	-	-
Nauru	-	-	-	-	-	-	6	8,825	-	-	-	-
New Caledonia	863	616,598	-	-	-	-	25	30,519	-	-	-	-
Solomon Islands	4	2,160	-	-	-	-	93	109,362	-	-	-	-
Tonga	42	31,669	-	-	8	8,404	188	216,409	65	68,787	-	-
Tahiti	1,630	1,724,420	-	-	-	-	306	396,540	89	76,282	-	-
Tuvalu	564	339,378	-	-	76	48,373	126	172,320	-	-	-	-
Vanuatu	86	41,320	-	-	-	-	192	255,636	-	-	-	-
Futuna	8	8,996	-	-	-	-	-	-	-	-	-	-
Wallis Islands	17	17,313	-	-	-	-	3	4,984	-	-	-	-
Western Samoa	66	35,585	-	-	4	3,228	235	274,802	2	1,630	-	-
<b>Sub-Total*</b>	<b>3,373 m<sup>3</sup> / 33%</b>		-		<b>91 m<sup>3</sup> / 3%</b>		<b>1,645 m<sup>3</sup> / 38%</b>		<b>156 m<sup>3</sup> / 93%</b>		-	
Hong Kong	16	11,045	-	-	-	-	-	-	-	-	-	-
Japan	28	38,719	26	41,627	-	-	-	-	-	-	203,135	21,211,760
Malaysia	37	29,566	-	-	-	-	-	-	-	-	-	-
China	126	77,135	-	-	-	-	-	-	-	-	-	-
Taiwan	42	28,173	-	-	-	-	-	-	-	-	-	-
Thailand	-	-	1.3	5,066	-	-	-	-	-	-	-	-
<b>Sub-Total*</b>	<b>249 m<sup>3</sup> / 2%</b>		<b>27.3 m<sup>3</sup> / 1%</b>		-		-		-		<b>203,135 t / 100%</b>	
Hawaii	31	67,681	-	-	-	-	-	-	-	-	-	-
United States	15	17,388	1,607	2,180,711	-	-	26	27,252	-	-	-	-
<b>Sub-Total*</b>	<b>46 m<sup>3</sup> / 1%</b>		<b>1,607 m<sup>3</sup> / 78%</b>		-		<b>26 m<sup>3</sup> / 1%</b>		-		-	
<b>TOTAL</b>	<b>10,117</b>	<b>8,668,693</b>	<b>2,058</b>	<b>2,854,078</b>	<b>3,026</b>	<b>1,628,513</b>	<b>4,307</b>	<b>4,853,110</b>	<b>168</b>	<b>156,412</b>	<b>203,135</b>	<b>21,211,760</b>

Source: MFF/Forestry Dept and Utilisation Division Annual Reports; \* = % export volume market share

**Table 4b: Fiji Timber Products Export Markets & Values, 1998**

Market	Sawn Timber		Veneer		Mouldings		Plywood		Blockboard		Wood Chips	
	Vol (m <sup>3</sup> )	Val (F\$)	Vol (m <sup>3</sup> )	Val (F\$)	Vol (m <sup>3</sup> )	Val (F\$)	Vol (m <sup>3</sup> )	Val (F\$)	Vol (m <sup>3</sup> )	Val (F\$)	Vol (t)	Val (F\$)
Australia	10,977	5,705,520	605	816,682	-	-	1,376	2,024,368	-	-	-	-
New Zealand	5,448	4,830,540	18	26,416	-	-	882	1,072,761	1	22	-	-
<b>Sub-Total*</b>	<b>16,425 m<sup>3</sup> / 69%</b>		<b>623 m<sup>3</sup> / 11%</b>		<b>-</b>		<b>2,258 m<sup>3</sup> / 51%</b>		<b>1 m<sup>3</sup> / 1%</b>		<b>-</b>	
American Samoa	4	3,800	-	-	-	-	105	123,087	3	2,582	-	-
Cook Islands	4	2,400	-	-	-	-	21	21,320	2	1,374	-	-
Kiribati	568	300,410	-	-	0.1	117	157	231,534	-	-	-	-
Marshall Islands	14	16,400	-	-	-	-	7	9,630	-	-	-	-
New Caledonia	742	594,370	1	1,270	-	-	178	234,132	-	-	-	-
Solomon Islands	-	-	-	-	-	-	326	433,477	13	7,719	-	-
Tonga	468	230,800	-	-	-	-	105	122,469	56	57,448	-	-
Tahiti	1,781	1,801,660	-	-	0.2	308	731	693,821	62	63,479	-	-
Tuvalu	690	387,930	-	-	2	2,050	129	196,007	-	-	-	-
Vanuatu	52	23,200	-	-	-	-	269	265,047	7	5,888	-	-
Futuna	140	120,720	-	-	-	-	-	-	-	-	-	-
Wallis Islands	-	-	-	-	-	-	1	540	-	-	-	-
Western Samoa	1,061	538,380	-	-	3	5,091	227	266,323	9	7,143	-	-
<b>Sub-Total*</b>	<b>5,524 m<sup>3</sup> / 23%</b>		<b>1 m<sup>3</sup> / -</b>		<b>5.3 m<sup>3</sup> / 100%</b>		<b>2,256 m<sup>3</sup> / 51%</b>		<b>152 m<sup>3</sup> / 99%</b>		<b>-</b>	
Hong Kong	1,113	590,960	-	-	-	-	-	-	-	-	-	-
Japan	151	153,640	1,288	1,590,234	-	-	-	-	-	-	269,165	30,505,896
Malaysia	22	22,300	-	-	-	-	-	-	-	-	-	-
Taiwan	102	60,430	-	-	-	-	-	-	-	-	-	-
Indonesia	458	278,000	-	-	-	-	-	-	-	-	-	-
Thailand	-	-	13	50,583	-	-	-	-	-	-	-	-
<b>Sub-Total*</b>	<b>1,846 m<sup>3</sup> / 8%</b>		<b>1,301 m<sup>3</sup> / 24%</b>		<b>-</b>		<b>-</b>		<b>-</b>		<b>269,165 t / 100%</b>	
United States	2	2,500	3,360	4,219,122	-	-	-	-	-	-	-	-
Belgium	38	26,500	-	-	-	-	-	-	-	-	-	-
<b>Sub-Total*</b>	<b>40 m<sup>3</sup> / -</b>		<b>3,360 m<sup>3</sup> / 65%</b>		<b>-</b>		<b>-</b>		<b>-</b>		<b>-</b>	
<b>TOTAL</b>	<b>23,835</b>	<b>15,691,040</b>	<b>5,184</b>	<b>6,634,475</b>	<b>5.3</b>	<b>7,566</b>	<b>4,514</b>	<b>5,325,828</b>	<b>153</b>	<b>142,000</b>	<b>302,957</b>	<b>34,447,434</b>

Source: MFF/Forestry Dept and Utilisation Division Annual Reports; \* = % export volume market share

For 2001 (cont'd)

- General
  - ✓ As shown in Table 4a and Figures 4 and 5, export volumes by products in decreasing order: pine woodchips, sawn timber, plywood, mouldings, veneer, and blockboard.
  - ✓ Products total export value in decreasing order: pine woodchips, sawn timber, plywood, veneer, mouldings and blockboard.
  - ✓ Table 5 shows the average export unit FOB price trend for the main timber products during the 1997-2002 period.

**Table 5: Timber Products Average Export Unit Prices, 1997-2002  
(Combined for all Markets & Product Specification) - F\$/m<sup>3</sup> or F\$/tonne FOB**

PRODUCT	1997	1998	1999	2000	2001	2002	Average Price
Sawn Timber (m <sup>3</sup> )							
▪ Natural/Indigenous	730	853	855	891	Not Available	974	861
▪ Pine	447	449	524	502		567	498
▪ Mahogany	863	1,194	1,073	1,104		900	1,027
Veneer (m <sup>3</sup> )	924	1,280	1,147	1,287	1,387	1,345	1,228
Plywood (m <sup>3</sup> )	1,056	1,179	1,106	1,008	1,127	1,109	1,103
Moulding (m <sup>3</sup> )	-	-	n/a	953	538	565	685
Blockboard (m <sup>3</sup> )	837	959	989	1,074	1,023	1,128	1,002
Pine Woodchips (t)	74	114	93	110	104	97	99

\* Figures derived from Table 3 and MFF/FD & Utilisation Division Annual Reports

Except under special circumstances, the export of round logs is banned mainly to encourage development within the local timber industry. The range of timber commodities for export is relatively well diversified. In addition to sawn timber, primary processed commodities include plywood, veneer, moulding and blockboard. Secondary processed commodity production is growing and is likely to contribute to an increasing proportion of export earnings over the next few years.

Fiji has developed a good reputation for meeting export quality criteria for sawn timber, largely as a result of good regulation and adherence to national grading rules. The banning of circular sawmills in 1997, and the subsequent conversion to bandsaws, has helped to improve the quality of sawn timber and achieve higher recovery rates.

### 2.2.3 Fiji Timber Exporters

The FD's Utilisation Division provides timber inspectorate services including grading of sawn timber for exports, inspection for quarantine purposes and recommendation for issuance of export licences by the Conservator of Forests.

Figure 3 shows Fiji's annual timber export value for all products during 1997-2002. Total timber products export for 2002 was \$40,256,785 (\$40.3 million), as shown in Table 6.

**Table 6: Timber Export Values by Products, 2002**

PRODUCT TYPE	QUANTITY	VALUE (F\$)
Wood Chips (mt)	249,606.030	24,266,628.98
Sawn Timber (m <sup>3</sup> )	7,589.937	6,849,629.41
Moulding (m <sup>3</sup> )	2,990.166	1,690,968.07
Plywood (m <sup>3</sup> )	5,064.813	5,618,695.71
Veneer (m <sup>3</sup> )	1,028.854	1,384,339.86
Blockboard (m <sup>3</sup> )	218.018	246,031.10
Timber Slabs (m <sup>3</sup> )	116.602	89,683.34
Round Logs (m <sup>3</sup> )	93.789	83,552.80
Poles & Post (m <sup>3</sup> )	53.143	27,256.20
<b>TOTAL</b>	<b>249,606.030 mt/ 17,155.322 m<sup>3</sup></b>	<b>\$40,256,785.47</b>

Source: FD Utilisation Division, 2002 Annual Report

Government support for international marketing in the forestry sector is limited although a number of assistance schemes are available to assist enterprises in general to develop export markets and increase competitiveness. A range of tax incentives also exist including tax free concessions on the export of timber and timber products, duty concessions on machinery imports and incentives for foreign companies investing in Fiji.

The 2002 timber export statistics by product, exporter, and destination are shown in Tables 7-12 which are self-explanatory.

**Table 7: Sawn Timber Export by Exporter & Destination, 2002**

EXPORTER	VOLUME (m <sup>3</sup> )	VALUE (F\$)	DESTINATION	VOLUME (m <sup>3</sup> )	VALUE (F\$)
Waiqele Sawmill Ltd	1,326.690	1,426,792.77	New Zealand	3,115.168	3,024,442.86
Southern Forest Products (Fiji) Ltd	784.290	684,439.09	Tahiti	1,370.196	1,404,365.73
Dayals Sawmillers Ltd	678.241	735,468.47	Tuvalu	969.808	579,272.26
Fiji Forest Industries Ltd	587.702	520,473.34	Australia	852.290	789,342.70
Valebasoga Tropikboard	464.897	437,510.00	Kiribati	345.824	227,282.94
South Seas Timber Traders	432.766	439,562.73	New Caledonia	219.237	233,567.31
GMR Muhammad & Sons	404.012	254,568.44	Taiwan	185.675	138,733.30
R C Manubhai & Co Ltd	381.115	242,835.49	Dominican Repub	119.901	88,106.59
Forest Supplies Ltd	341.081	336,292.01	China	94.194	61,126.80
Vinod Patel & Co Ltd	392.270	229,369.74	USA	91.566	82,018.91
Arula Investment Co Ltd	278.247	266,803.45	Tonga	55.118	55,846.87
Hanshine Enterprises Ltd	276.815	248,959.53	Wallis & Futuna	60.804	57,358.15
Taiwan Timber Co Ltd	240.858	166,209.20	Malaysia	29.270	19,025.50
Nur Ahmed & Co Ltd	186.712	195,936.21	Japan	27.702	60,724.94
Carpenters Builders Merch	171.424	104,909.59	Nauru	25.000	13,375.00
Sustainable Forest Ind.	145.605	113,234.19	Vanuatu	20.048	7,813.95
Lumber Processors Ltd	121.814	110,777.55	Marshall Islands	3.516	2,137.60
Fenning Pacific (Fiji) Ltd	90.419	81,415.40	American Samoa	3.000	3,150.00
KK's Hardware Ltd	86.809	75,192.23	Cook Islands	0.900	738.00
Minsheng Group (Fiji) Ltd	58.654	49,522.30	Hawaii	0.720	1,200.00
Suncourt Hardware	45.815	27,426.61			
Tropik Wood Industries	35.790	19,382.45			

G P Reddy & Co Ltd	20.330	18,687.70			
Price Point	15.661	51,369.99			
Lindora (Fiji) Ltd	15.200	8,360.00			
Shantilal Brothers Ltd	6.000	2,930.93			
Peter Lee	0.720	1,200.00			
<b>TOTAL</b>	<b>7,589.937</b>	<b>6,849,629.41</b>	<b>TOTAL</b>	<b>7,589.937</b>	<b>6,849,629.41</b>

Source: FD Utilisation Division, 2002 Annual Report

The main species comprising sawn timber exports are Dakua Makadre (*Agathis vitiensis*), Fiji Pine (*Pinus caribaea*), Dakua Salusalu (*Decussocarpus vitiensis*), Kaudamu (*Myristica spp*), Damanu (*Calophyllum spp*), Yaka (*Dacrydium nidulum*), Mahogany (*Swietenia macrophylla*), Vesi (*Intsia bijuga*), Kauvula (*Endospermum macrophyllum*) and Buabua (*Fagraea gracilipes*).

Large scale harvesting of Mahogany plantations by the FHCL joint venture partner envisaged to start in 2004-05, is expected to at least double the total volume of hardwood timber exported and also flood the local market with second grade timber.

The main species for veneer exports are Kaudamu (*Myristica spp*), Dakua Makadre (*Agathis vitiensis*), Damanu (*Calophyllum spp*), Anita/Waciwaci (*Sterculia vitiensis*), Mahogany (*S macrophylla*), and Vusavusa/Kaunicina (*Canarium spp*).

**Table 8: Veneer Export by Exporter & Destination, 2002**

EXPORTER	VOLUME (m <sup>3</sup> )	VALUE (F\$)	DESTINATION	VOLUME (m <sup>3</sup> )	VALUE (F\$)
Fiji Forest Industries Ltd	932.720	1,232,734	Australia	463.962	697,708.72
Valebasoga Tropikboard	96.134	151,605	USA	459.385	524,935.99
			New Zealand	77.509	120,326.36
			Japan	26.202	33,151.02
			Thailand	1.796	8,217.77
<b>TOTAL</b>	<b>1,028.854</b>	<b>1,384,339</b>	<b>TOTAL</b>	<b>1,028.854</b>	<b>1,384,339.86</b>

Source: FD Utilisation Division, 2002 Annual Report

**Table 9: Plywood Export by Exporter & Destination, 2002**

EXPORTER	VOLUME (m <sup>3</sup> )	VALUE (F\$)	DESTINATION	VOLUME (m <sup>3</sup> )	VALUE (F\$)
Fiji Forest Industries Ltd	2,750.314	2,611,878.28	Australia	1,638.795	1,707,402.94
Valebasoga Tropikboard	1,698.716	2,086,352.68	New Zealand	1,376.961	1,445,344.59
R C Manubhai & Co Ltd	212.294	321,550.28	Tahiti	441.386	538,176.43
GMR Muhammad & Sons	159.055	244,475.75	Kiribati	292.439	433,089.20
Carpenters Builders Merch	138.312	195,639.32	Vanuatu	235.151	260,515.20
Vinod Patel & Co Ltd	80.501	124,730.00	W Samoa	341.996	275,952.59
Poly Products (Fiji) Ltd	18.144	19,487.50	Tuvalu	214.095	322,286.93
Suncourt Hardware	6.808	11,800.00	Tonga	173.287	232,576.97
South Seas Timber Traders	2.282	4,794.40	Solomon Islands	82.739	77,641.35
			New Caledonia	70.436	98,270.55
			A Samoa	64.059	67,398.17
			Cook Islands	53.855	55,723.76
			Wallis & Futuna	31.081	44,474.64
			Nauru	28.109	40,721.50
			USA	22.037	21,133.39
<b>TOTAL</b>	<b>5,066.426</b>	<b>5,620,708.21</b>	<b>TOTAL</b>	<b>5,066.426</b>	<b>5,620,708.21</b>

Source: FD Utilisation Division, 2002 Annual Report

The main plywood export grades are interior, exterior, marine and structural. The main moulding export species are Fiji Pine (*Pinus caribaea*), Damanu (*Calophyllum spp*) and mix hardwoods.

**Table 10: Moulding Export by Exporter & Destination, 2002**

EXPORTER	VOLUME (m <sup>3</sup> )	VALUE (F\$)	DESTINATION	VOLUME (m <sup>3</sup> )	VALUE (F\$)
Tropik Wood Industries	2,688.405	1,413,017.04	Australia	2,424.885	1,302,971.34
South Seas Timb Traders	175.399	182,649.28	New Caledonia	402.924	242,534.85
R C Manubhai & Co Ltd	24.653	18,020.68	Tuvalu	58.404	40,935.46
Vinod Patel & Co Ltd	28.218	14,779.75	New Zealand	47.363	53,458.44
GMR Muhammad & Sons	21.615	14,904.93	Tonga	30.144	19,426.98
Aust Pacific AIL	17.500	10,700.00	Tahiti	18.530	24,946.00
Arula Investment Co Ltd	15.814	23,721.00	Kiribati	3.448	2,606.00
Carpenters Builders Merch	15.562	10,558.85	Hawaii	3.000	2,661.00
Nur Ahmed & Co Ltd	3.000	2,616.54	Wallis & Futuna	1.488	1,428.00
<b>TOTAL</b>	<b>2,990.166</b>	<b>1,690,968.07</b>	<b>TOTAL</b>	<b>2,990.186</b>	<b>1,690,968.07</b>

Source: FD Utilisation Division, 2002 Annual Report

**Table 11: Blockboard Export by Exporter & Destination, 2002**

EXPORTER	VOLUME (m <sup>3</sup> )	VALUE (F\$)	DESTINATION	VOLUME (m <sup>3</sup> )	VALUE (F\$)
Valebasoga Tropikboard	181.907	206,362.41	Tonga	163.378	171,185.20
Vinod Patel & Co Ltd	29.449	33,634.00	Tahiti	46.550	62,315.15
Fiji Forest Industries Ltd	6.602	6,034.69	New Caledonia	5.472	10,000.00
			W Samoa	2.558	2,530.75
<b>TOTAL</b>	<b>217.958</b>	<b>246,031.10</b>	<b>TOTAL</b>	<b>217.958</b>	<b>246,031.10</b>

Source: FD Utilisation Division, 2002 Annual Report

Fiji's export markets for all timber products are within the Pacific-rim countries which currently have little or no requirement for certified forest products.

## **2.3 Timber Workers Unions**

### **2.3.1 Building Construction, Timber & Allied Workers Union**

The timber industry workers are gradually being organized by the Building Construction, Timber & Allied Workers Union of Fiji (BCT&AWU) with membership and merger affiliation with a number of the larger companies including FFI, Valebasoga Tropikboard Ltd (VTL), Tropik Wood Industries Ltd (TWIL), Fenning Pacific (Fiji) Ltd and Sustainable Forest Industries (SFI). FPL workers are covered by their own in-house staff/workers association; and FHCL personnel are members of either the Viti National Union of Taukei Workers or the Fiji Public Service Association, and unestablished workers are members of the Public Employees Union.

The main contact for the BCT&AWU is its General Secretary - Mr John Paul (tel-work: 666 6353, mobile: 925 4522).

### **2.3.2 International Federation of Building & Wood Workers**

The BCT&AWU is affiliated to the International Federation of Building and Wood Workers (IFBWW) including other workers unions from the region (PNG, Samoa, Vanuatu & Solomon Islands). The IFBWW has been instrumental in promoting forest certification as a tool that can be used by workers unions to further their social, economic and environmental agenda. The IFBWW organises 280 trade unions with over 11 million members in 124 countries; refer to website: [www.ifbww.org](http://www.ifbww.org) for further information.

The IFBWW continues to support certification efforts at the local, regional and international levels. IFBWW with the Australian affiliate, Forest & Forest Products Division of the Construction, Forestry, Mining & Energy Union (CFMEU) co-sponsored a major international conference of forest certification during October 2000 in Tasmania, Australia. Delegates from the region attended this conference.

## **3.0 FIJIAN LANDOWNERSHIP, FOREST RESERVE SYSTEM & LANDOWNER INVOLVEMENT**

### **3.1 Landownership in Fiji**

The Native Land Trust Act (NLTA) of 1940 established the Native Land Trust Board (NLTB) vesting in it, the control of all native land and its administration for the benefit of the Fijian owners. In exercising this control, the NLTB must ensure that native owners benefit not only from the commercial utilisation of their land but also from the commercial exploitation of resources on their land. The NLTB is an independent body and outside the control of Government. Its vision specifies "to be a dynamic and efficient organisation that provides quality services in partnership with stakeholders to create wealth for the benefit of the Fijian landowners and the nation as a whole". The NLTB is the landlord in all official dealings over all native land.

There are 3 types of land ownership classification in Fiji, namely: (i) Native land; (ii) Crown grants commonly known as freeholds, and (iii) State lands.

The Figure 6 text box provides an explanation of the Fijian native land by way of definition, ownership, interests and the rights of owners.

As custodian of Fijian owned land, NLTB recognises its responsibility to the indigenous landowners and the nation to ensure that land and natural resources are used and managed in a wise and sustainable manner. The Board must also ensure that unique and important features of the Fijians natural and cultural heritage are set aside and protected for the benefit of the current and future generations.

Native land comprises either native reserve or non-reserve land. Reserve land has been specifically set aside for the use, maintenance or support of the indigenous landowner. Native land outside reserve may be dealt with by way of lease or licence. However, the Board must first satisfy itself that the land that is to be the subject of the lease will not be required by the indigenous landowner during the currency of the lease.

Native land comprises 1,487,581 million hectares which is 84 per cent (84%) of the landmass in Fiji. The Board currently administers 28,701 leases covering 669,997 hectares (as at 1 February, 2002) with a potential annual income of \$20 million<sup>(17)</sup>. Under NLTA, leases can be issued up to a term of term of 99 years depending on the needs of Native users and the proposed use of the land.

(17) NLTB Website: [www.nltb.com.fj](http://www.nltb.com.fj)

**Figure 6: Fijian Native Land - Definition, Ownership, Interests & Rights of Owners**

***Native Land***

The term "native land" is defined as land above high-water mark, not being freehold nor owned by the State in accordance with the provisions of the Crown Lands Act. It comprises approximately 84 per cent (84%) of the total landmass in Fiji.

***Ownership Structure***

The Fijian owns native land in their collective groupings according to custom and tradition as follows:

- i. Land owned by titular heads of tribes e.g. Chief who for the time being holds the hereditary title of Ka Levu;
- ii. Land owned by agnate descendants of a member of a tribe - qele ni kawa;
- iii. Land owned by a tokatoka (family unit). This ownership style is widely used in the province of Ba;
- iv. Land owned by the mataqali (clan);
- v. Land owned by the Yavusa (tribe); and,
- vi. Land jointly owned by several yavusa.

The various Native Land Commissions (NLC) appointed under the provisions of the Native Land Act (NLA) have defined ownership boundaries on the ground. In most cases, these boundaries have been surveyed.

***Ownership Records***

A record of the members of each of these landowning units is kept by the NLC in accordance with the provisions of the Native Land Act.

***Interests of Owners of Fijian Land***

The interests of each member of the landowning unit is similar but not equal to the interests of individual freeholders in as far as ownership is concerned. While rights associated with ownership is enjoyed by members, any members of the landowning unit cannot dispose of, transfer or assign such right to anyone of his choice. A member's right of ownership is in reality a collective life interest rather than an individual interest in perpetuity as enjoyed by freeholders. However, as a collective group, the landowning unit has interests in perpetuity subject only to the unit becoming extinct.

***Rights of Owners of Fijian Land***

The rights of owners of Fijian land over the parcels of native land allocated to the members are equal to rights of owners of freeholders. These include the following, to name a few important points:

- a. the right to occupy their land;
- b. the right to use their own land for their maintenance or support;
- c. the right to lease land to others and determine the terms and conditions of such leases acceptable to willing lessee;
- d. the right of reversion, after the lease is determined at the end of its term.

In summary, the members of the landowning unit have the right to control and administer their own land. The Fijian landowner enjoyed these rights until 1940 when the Native Land Trust Act was enacted.

Source: NLTB Website - [www.nltb.com.fj](http://www.nltb.com.fj)

## 3.2 Forest Reserves & Protected Areas

Fiji has a rudimentary system of protected areas, however, none of the areas have been selected on the basis of ecological knowledge or biodiversity values and all terrestrial protected areas are passively rather than actively managed. Nonetheless, these sites in combination with other priority sites which have been identified for their biodiversity values, have the potential to provide the basis of a representative system of protected areas. The intention is for the representative system of protected areas to be augmented by a large number and variety of protected areas which are important at the provincial or local level<sup>(18)</sup>.

The National Environment Strategy (GOF 1993) introduced a Preliminary List of Sites of National Significance, as shown in Annex 1. As yet this has no legislative support, but planning agencies do use it to identify sites which require careful management.

The Forestry Department compiled the 'Register of Nature, Forest Reserves and Protected Forests in Fiji'<sup>(19)</sup> in 1991, as summarized in Figure 7.

There has been no new addition to the current register of existing forest reserves, nature reserves and protected forests<sup>(20)</sup> listed in Figure 7 totaling 43,633.7 ha and comprised of - nine forest reserves 22,145.6 ha (50.8%); eight nature reserves 5,738.0 ha (13.1%); and one protected forests 15,750.1 ha (36.1%).

Definitions of 'Forest Reserves', 'Nature Reserves' and 'Protected Forest' are as follows<sup>(19)</sup>:

**Forest Reserves** - Areas declared to be reserved forests under Section 6 of the Forest Act.

**Nature Reserves** - These are reserved forests either proclaimed by the Governor or declared by the Minister for conservation purposes, under Section 7 of the Forest Act as reserved forests may be declared as nature reserves.

**Protected Forest** - Areas declared by the Minister under Section 8 of the Forest Act.

Annex 3 shows the general location map of Fiji's forest and nature reserves.

(18) Dept of Environment (Oct 1999): 'Fiji Biodiversity Strategy and Action Plan (FBSAP)' - Final draft for consideration by Cabinet.

(19) Tabunakawai, K M & Chang, A (1991): 'Register of Nature, Forest Reserve and Protected Forests in Fiji'; Forestry Dept publication.

(20) Pers. Comm. Deputy Conservator of Forests (Services) Susana Tuisese, Forestry Dept, June 2003.

**Figure 7: List of Forest Reserves, Nature Reserves & Protected Forest**

<b>(A) FOREST RESERVES</b>	<b>Tikina</b>	<b>Province</b>	<b>Proclamation No. Legal Notice No.</b>	<b>Area (Hectares)</b>
<b>Central/Southern Division</b>				
1. COLO-I-SUVA	Naitasiri	Naitasiri	PN 24 of 1963	369.5
2. MARANISAQA	Naitasiri	Naitasiri	PN 19 of 1955	77.3
3. NABORO	Suva	Rewa	LNN 138 of 1969	19.0
4. NAITASIRI	Naitasiri	Naitasiri	PN 11 of 1955	30.4
5. QOYA	Suva	Rewa	PN 28 of 1955	67.2
6. SAVURA	Naitasiri	Naitasiri	PN 23 of 1963	447.6
7. SUVA & NAMUKA HARBOURS	Suva	Rewa	PN 27 of 1913 PN 8 of 1955	Area bounded by high water mark
8. VAGO	Naitasiri	Naitasiri	PN 5 of 1959	24.7
9. YARAWA	Nuku	Serua	CG 359 & CT 1719	161.8
<b>Sub-Total</b>				<b>1,197.5 Ha</b>
<b>Western Division</b>				
1. BURETOLU, BA	Tavua	Ba	PN 5 of 1926	1,197.9
2. LOLOLO	Vuda	Ba	PN 22 of 1968 LNN 145 of 1980	8.3
3. NADARIVATU NADALA	Tavua	Ba	PN 12 of 1954	7,400.7
4. SARU CREEK	Vuda	Ba	PN 16 of 1973 LNN 121 of 1980	3.2
5. TAVUA, BA	Tavua	Ba	PN 7 of 1958	2 roods
<b>Sub-Total</b>				<b>8,610.1 Ha</b>
<b>Northern Division</b>				
1. KOROTARI	Vaturova	Cakaudrove	PN 2 of 1961	1,046.9
2. TAVEUNI	Cakaudrove & Wainikeli	Cakaudrove	PN 27 of 1914	11,291.1
<b>Sub-Total</b>				<b>12,338.0 Ha</b>
<b>Total Forest Reserves</b>				<b>22,145.6 Ha</b>
<b>(B) NATURE RESERVES</b>				
<b>Central/Southern Division</b>				
1. DRAUNIBOTA & LABIKO	Suva	Rewa	PN 26 of 1959	Draunibota 1.9 Labiko 0.3
2. VUO	Suva	Rewa	PN 10 of 1960	1.2
<b>Sub-Total</b>				<b>3.4 Ha</b>
<b>Western Division</b>				
1. NADARIVATU	Tavua	Ba	PN 18 of 1956	93.1
2. NAQARANIBULUTI	Tavua	Ba	PN 18 of 1958	279.2
3. TOMANIIVI	Tavua	Ba	PN 18 of 1958	1,323.4
<b>Sub-Total</b>				<b>1,695.7 Ha</b>
<b>Northern Division</b>				
1. TAVEUNI	Cakaudrove	Cakaudrove	PN 25 of 1959	4,018.7
2. VUNIMOLI	Vaturova	Cakaudrove	PN 8 of 1968	20.2
<b>Sub-Total</b>				<b>4,038.9 Ha</b>

<b>Total Nature Reserves</b>				<b>5,738.0 Ha</b>
<b>(C) PROTECTED FORESTS</b>				
<b>Southern Division</b>				
BATIWAI	Nuku	Serua	???	15,750.1
<b>Total Protected Forests</b>				<b>15,750.1 Ha</b>
<b>TOTAL ALL CATEGORIES</b>				<b>43,633.7 Ha</b>

Source: Adapted from 'Register of Nature, Forest Reserves & Protected Forests in Fiji' by K M Tabunakawai & A Chang (1991), FD.

### **Environmental Legislation**

Fiji's environmental legislation is little changed from 1992 when the State of the Environment Report was published (GOF-IUCN 1992), it stated: " Fiji's laws are many and varied, a relic of the colonial period when environmental problems were limited and addressed on a sectoral basis. At least 54 acts have some important role in what is today perceived as environmental management, and they are administered by 14 different ministries, statutory bodies or other agencies. Most of the laws are ineffective in a modern environmental management context or suffer from lack of enforcement regulations through inadequate staffing, lack of technical resources and funding, or through administrative failure."

In an effort to introduce a comprehensive and integrated environmental legislation, the Government, with the assistance of the Asian Development Bank, drafted the Sustainable Development Bill 1996. This enormous piece of legislation which ran to nearly 300 pages, with 19 Parts and 291 Sections has not proved possible to enact and has been steadily reduced in scope. The current Sustainable Development Bill (2002) comprises 6 Parts with 64 sections and it is planned to table it in Parliament this year but it is by no means certain that it will be enacted. The only legislation for biodiversity-oriented Protected Areas is contained within the Forestry Decree 1992 which has provisions for the establishment of Nature Reserves. There are seven nature reserves in the country totaling 5,740 ha - all established in the colonial period, and none are actively managed. There are a variety of other 'Protected Areas' established through agreements, lease arrangements or in one case Cabinet Decision. The Government has no wildlife conservation service or wildlife conservation management ability, the National Trust for Fiji undertakes this to a very limited extent<sup>(21)</sup>.

#### **3.2.1 Compensation for Reserves & Protected Areas**

With nearly all natural forest areas on native land, opportunities for forest protection depend largely on the provision of monetary compensation to landowners for income foregone from logging, or on providing them with more viable alternative development opportunities. Both these methods of establishing reserves have been used in Fiji.

Being a critical player in the reserve leasing process on native land, the NLTB on behalf of landowners, has and continues to support the above methods<sup>(22)</sup>.

(21) Watling, D & Lenoa, L (2003): 'SmartWood Certification Scoping Report for Fiji Hardwoods Corporation Ltd'

(22) Pers. Comm. Board Secretary Emosi Toga, NLTB, Suva, June 2003.

The Forestry Department is responsible for those 'Protected Areas' established through lease agreements. In 2000, the FD effected a total payment of \$50,237-66 VIP being the compensation and lease payments for such areas to the NLTB, as shown in Figure 8. Payments for 2001 was on similar level at \$48,969-13 (re: FD D/W No. HQ 39/2001 dated 23/05/01 to the Director of Lands for onward payment to NLTB).

**Figure 8: Compensation & Lease Payments for Protected Areas/ Forest Reserves (Jan-Dec 2000)**

RESERVE NAME	AREA (Ha)	COMPENSATION (\$)	LEASE (\$)	TOTAL (\$)
WABU	1,102.1	9,752.44	1,822.00	11,574.44
SAVURA	336.8	9,552.44	-	9,522.44
TAVEUNI	10,080.0	9,472.19	18,653.54	28,125.73
Value Added Tax (VAT)				985.05
<b>TOTAL</b>	<b>11,518.9 Ha</b>	<b>\$28,777.07</b>	<b>\$20,475.54</b>	<b>\$50,207.66</b>

Source: Forest Park & Reserves Office File - EF. 031; Forestry Extension, FD, Colo-i-Suva.

### 3.2.2 Leasing & Compensation System

The basis of compensation for the leasing of forest reserves and protected forests undertaken by the FD is based on the following<sup>(23)</sup>:

- 1) NLTB lease issued under ALTA legislation for a period/duration of 99 years.
- 2) Lease payments covers all areas under all forest types including non forested areas.
- 3) Lease 'premium', 'goodwill' or 'commission' money is paid once only on approval of lease.
- 4) Annual compensation covers standing value of merchantable timber on both 'production' and 'non-commercial' forest only at the rate of 3% of the value per year, as per the timber compensation formula shown below. Standing volume of merchantable timber estimated from forest inventory of the subject area with log royalty owed calculated from inventory results.

$$X = \frac{x^0 + i}{1 - (1+i)^{-n}} \quad \text{where} \quad \begin{array}{l} X = \text{annual compensation payment} \\ x^0 = \text{amount of log royalty owed} \\ i = \text{interest rate, 3\% is used} \\ n = \text{No. of years over which compensation is} \\ \text{to be received.} \end{array}$$

Above formula basing on perpetuity as 'n' (time) and 3% as 'i' (interest rate) can be reduced to:  $X = (x^0) (0.03)$

- 5) Merchantable tree species on 'protection' forests category within reserves are not subject to compensation payment, as these trees will not be harvested. However, 'protection' forest areas are considered in the calculation of lease premium and annual rental payments.
- 6) Annual compensation and lease payments are paid annually.

(23) Forest Park & Reserves Office File: EF/6131; Extension Forestry, FD, Colo-i-Suva

### **3.2.3 Establishment - Practical & Legal Hurdles**

Major practical problems faced during the process of acquiring the landowners' consent for setting aside or reserving part of their forests as conservation areas or 'Protected Areas' includes:

- 1) Assessing potential development opportunities for the subject area and comparing these against the value of protecting the forests. Securing the necessary support and consent of the majority of landowners (and NLTB) against competing development opportunities, particularly, those that promise immediate and large financial pay-outs in the short term.
- 2) Provision of adequate funding source to cater for the annual lease and compensation payments for the entire duration of the lease (in perpetuity). Such funding should be secured by Government and immediately made available when landowners decide to proceed with the formal leasing process of their forests as conservation area. Recent cases (eg. the Vunivia Catchment in Dogotuki, Macuata) show that delays in implementing the formal lease after the landowners agreement due to lack of funding, is counter productive and fosters landowners' negative perception of forest conservation and authorities in general.
- 3) The need to educate and make landowners aware of the long term implications of forest conservation and harvesting of their forest resources, and minimize differing or opposing views on their part.
- 4) The presence of a valid lease, licence or other legal right(s) by a third party precluding the landowners' rights to freely decide on the future use of their forest resources. In such cases, there will be a need for landowners to advise NLTB of their changing interest/desire and request for a re-negotiation of the current lease between the lessee and NLTB.

## **3.3 Landowners Development & Involvement in the Timber Industry**

Forestry development represents an area where Fijian landowners can widely and meaningfully participate in commercial business activities. There is now a strong desire by landowners to increase their involvement in the timber industry in a meaningful manner and maximize the potential benefits accruable to them. In fact, the immense potential of forestry in Fiji, including that of the pine sector, may be effectively harnessed only by successfully dealing with landowners' desires and expectations.

Landowner involvement in the indigenous timber industry in Fiji has been limited. The industry has been dominated by Indo-Fijian family businesses concerns which operate a number of small to medium size sawmilling operations and a large scale veneer/plywood processing mill (Valebasoga Tropikboard Ltd). This is apart from Fiji Forest Industries Ltd and its other subsidiary companies (eg. Pacific Lumber Co, Timbers of Fiji Ltd, etc) that operated up to the mid 1990s, and which involved equity shareholding by landowners.

However, in March 2002 and as a result of the political coup and upheavals of May 2000, the Government announced its 'Affirmative Action Plan for Indigenous Fijians and Rotumans',

sometimes referred to as the 'Blueprint for Fijians and Rotumans'. This programme is justified on the basis of indigenous peoples' right to self-determination. On the forestry sector, one of the strategies identified by Government includes "...assist in the establishment of community-owned and managed forestry processing and value-adding facilities based on indigenous forests and community-owned plantations"<sup>(24)</sup>. To facilitate this, the sum of \$2.0 million was allocated in the Government's 2002 budget as the 'Seed Capital Revolving Fund' to assist indigenous Fijians and Rotumans to participate in the forest industry.

### ***Pine Industry***

The involvement of landowners in the pine industry is much more structured and more developed. Various models have been used to enable landowner participation in the pine industry. The Forest Base model developed by Fiji Pine Ltd (FPL), is exhibiting some element of success. It can be considered for other land-based developments given the nature of communal land ownership in Fiji. There are also some underlying success factors, which landowners will need to address if their own companies and the forest industry are to be successful and viable in the future. These include change in attitudes and perception, differentiation between ownership and management, competition, transparency and accountability, and capacity building and strengthening.

The total value of contract opportunities available to landowner companies from the pine industry (FPL/Tropik Wood Industries Ltd Group) in 2001 was \$11.9 million; and total revenue of landowners companies in 2001 increased by 14% to around \$12.8 million<sup>(7)</sup>. The Forest Based Trusts and Companies is designed to develop the capabilities and capacity of pine landowners to undertake as much silvicultural, harvesting and processing activities of the pine industry, as possible. It is anticipated that these will have a potential combined total contract value of \$15-18 million per year.

### ***Mahogany Industry***

Landowner participation in Fiji's Mahogany industry, through the Fiji Hardwood Corporation Ltd (FHCL), is going through a transition mode. The current Government had recently finalized its policies on the utilization of mahogany and landowner participation through its '*Policy on the Utilisation of Fiji Mahogany*'<sup>(25)</sup>. The central theme of this Government policy is to "maximize the benefits to Fiji and, within that, to optimize the participation of Fijian landowners in order to secure for them and their future generations, fair and equitable returns and benefits from the Government mahogany plantations on their land". Government, through FHCL, is laying the groundwork to enable the industrial phase of the mahogany utilization plan to commence in 2004.

(24) MFF/Forestry Dept (Nov 2001): '*2002 Budget Speech in Parliament by Minister for Fisheries & Forest*'

(25) FHCL Internal Report (Aug 2002): 'Government Policy on the Utilisation of Fiji Mahogany' - Motion tabled by the Prime Minister in Parliament on 2<sup>nd</sup> April, 2002.

## **4.0 FOREST CERTIFICATION (FC) EFFORTS IN FIJI**

### **4.1 Forest Certification - General**

#### ***Background***

The concept of forest certification first arose in the late 1980s as an idea of some environmental groups to encourage markets to give preference to timber derived from sustainably managed tropical forests. Early proposals called upon governments to implement certification but the implications of the General Agreement on Tariffs and Trade, now the World Trade Organization, among other things, have made this difficult. Certification can now be characterized as a voluntary, market-driven phenomenon orchestrated by a range of interested parties, including non-governmental environmental organizations, trade associations and governments. Not all the certification systems now in existence (Figure 9) have started certifying forests.

There are four processes involved in forest certification<sup>(26)</sup>:

- 1) *Certification of Forest Management* -  
Independent certifiers belonging to a certification body compare a forest management to established standards (desired result: certificate for the forest owners/managers).
- 2) *Accreditation* -  
A responsible body approves that a certification body is independent and professional (desired result: independent certifiers).
- 3) *Standard Setting* -  
The stakeholders define and agree on the economic, ecological and social standards which will be used (desired result: clear and objective standards).
- 4) *Certification of Chain of Custody* -  
Independent certifiers verify that timber from certified forest is not mixed up with uncertified timber in processing and transport (desired result: certificate/label on timber product).

The different steps involved in the 'Certification of Forest Management' includes:

- |  |  |
|--|--|
| i) Contact with the certifier            | ii) Scoping visit                        |
| iii) Scoping report with recommendations | iv) Preparation for full assessment      |
| v) Contract for certification assessment | vi) Consultation before field assessment |
| vii) Field assessment                    | viii) Assessment report                  |
| ix) Consultation after field assessment  | x) Specialists' peer review              |
| xi) Certification decision               | xii) Labelling                           |
| xiii) Periodic review                    |  |

(26) GTZ/IAC (2001): 'Forest Certification - A Brief Introduction for Stakeholders'. Handbook prepared by the German Agency for Technical Cooperation (GTZ) in collaboration with the International Agricultural Centre (IAC).

Typically, certification systems are categorized according to whether they are based on performance or process standards. Performance standards specify performance levels for various aspects of forest management (the FSC scheme is of this nature). Schemes that use process standards based on environmental management systems (EMS) provide a systematic approach to developing, implementing, monitoring and reviewing environmental policies but they do not prescribe environmental performance standards. According to Kanowski et al. (1999)<sup>(27)</sup>, process-based schemes are beginning to incorporate performance targets while performance-based schemes acknowledge the benefits of EMS and there is now a clear trend towards convergence of many of the elements of various certification schemes.

'Certification' of sustainable forest management and product 'labelling' (ie. providing assurance as to the source of forest products by establishing their 'chain of custody' from forest to retail outlets) continues to be the subject of debate around the world. However, timber consumers, merchants and processors globally are seeking greater assurances that timber products are from well-managed, or sustainably managed forests.

Non-government international organisations such as the Forest Stewardship Council (FSC) have developed systems for the accreditation of individuals and organisations as assessors of the certification of 'good' forest management and the certification of the 'source' of individual manufactured timber products from certified forests.

To date, the impact of certification on trade has been very small and very country specific. Although Western European countries and (to a much more limited extent) the United States have shown interest in certification, major Asian timber importers such as Japan, the Republic of Korea and China have not. From the producer side, major exporting countries such as Indonesia, Malaysia, Sweden, Finland, Canada and Ghana are moving towards development of certification schemes, partly as a means of encouraging improved forestry practices, but largely to avoid future trade difficulties or to gain a market advantage<sup>(28)</sup>.

**Figure 9: Some Existing Certification Schemes**

<b>GEOGRAPHICAL COVERAGE</b>	<b>GLOBAL</b>	<b>REGIONAL*</b>	<b>NATIONAL*</b>
<b>Schemes</b>	Forest Stewardship Council (FSC), International Standards Organization (ISO)	PEFC, SFI	CSA, LEI, MTCC, ATFS, CERFLOR

Source: Leslie, A & ITTO Secretariat (2002): 'Forest Certification and Biodiversity : Opposites or Complements?'; discussion paper for the Global Environment Facility (GEF) and UNFF II, New York (March 2002).

NOTE:

\* PEFC = Pan European Forest Certification (note that this scheme currently endorses eight national (European) schemes), CSA = Canadian Standards Association (Canada), SFI = Sustainable Forestry Initiative (USA and Canada), LEI = Indonesian Ecolabelling Institute (Indonesia), MTCC = Malaysian Timber Certification Council (Malaysia), ATFS = American Tree Farm System (USA), CERFLOR = a scheme developed by the Brazilian National Standards Organization.

- (27) Kanowski, P., Sinclair, D and Freeman, B (1999): *International Approaches to Forest Management Certification & Labelling of Forest Products: A Review*; Agriculture, Fisheries & Forestry - Australia.  
 (28) FAO Website: [www.fao.org/forestry/foris/webview/forestry2](http://www.fao.org/forestry/foris/webview/forestry2)

### **Extent of Certification**

Forest certification has expanded at a rapid pace from its beginnings in the early 1990s. In October 2001, at least 118 million hectares had been certified (Table 12). The only data that could be obtained on the volume of certified timber being traded comes from PEFC, which estimates that about 76 million m<sup>3</sup> were being traded annually from forests certified under the PEFC umbrella.

Certification in the tropical forests remains at the margins: by October 2001, 3.15 million hectares of forest had been certified in tropical countries under the auspices the FSC (by far the most active certification body in the tropics). The Indonesian Ecolabelling Institute also issued its first certificate of good forest management in April 2001 for 91,000 hectares of forest managed by a company operating in central Sumatra (this forest may also be counted in the FSC data). Data are not currently available on how much of the forests certified under the FSC actually occurs in the tropics (Brazil, for example, has a significant forest resource outside the tropics) and how much is natural forest or plantation. Even if the 3.15 million hectares were composed entirely of natural tropical forests, the amount is still less than 0.2 per cent of the 1.7 billion hectares of extant natural tropical forest (FAO 2001)<sup>(29)</sup> and less than 3% of the total area of forest currently certified<sup>(30)</sup>.

**Table 12: Area of Certified Forests (millions of hectares)**

SCHEME	AREA	COMMENTS	SOURCE
ATFS	11.3		
CSA	5.4	As of August 2001	Canadian Sustainable Forestry Certification Coalition (2001)
FSC	23.9	As of October 2001	FSC
ISO 14001	-	No comprehensive listing of forests certified under ISO 14001 could be obtained. In Canada, however, some 67.7 million hectares of forests are reported to be certified under this scheme; this figure 'double counts' much of the forest certified under the CSA and FSC schemes inside Canada.	Canadian Sustainable Forestry Certification Coalition (2001)
PEFCC	39.4	As of October 2001	PEFC
SFI	38.0	As of end 2001	6 <sup>th</sup> Annual Sustainable Forestry Initiative Program
<b>TOTAL</b>	<b>118.0</b>	Total does not include ISO-certified forests	

Source: Leslie, A & ITTO Secretariat (2002): *Forest Certification and Biodiversity: Opposites or Complements?*; discussion paper for the Global Environment Facility (GEF) and UNFF II, New York (March 2002).

While there is little or no pressure from Fiji's current timber export markets for certification and labelling of forest products generally, access to certain offshore markets (eg. in Europe and the USA) is becoming dependent on having FSC or other certification. For certain

(29) FAO (2001): *State of the World's Forests 2001*; Food and Agriculture Organisation of the United Nations, Rome.

(30) Leslie, A and ITTO Secretariat (2002): *Forest Certification and Biodiversity: Opposites or Complements?*; discussion paper for the Global Environment Facility (GEF) and UNFF II, New York (March 2002).

exporters of both natural and plantation timbers in the region (eg. Kolombangara Forest Products Ltd, Solomon Is), forest certification and product labelling have facilitated access to markets. The international experience has been that price premiums may not result from certification and labelling; rather the prime motivation for undergoing what can be an expensive process is to obtain/protect market access.

#### **4.1.1 Forest Stewardship Council (FSC) Certification**

The FSC is an independent membership organisation that sets standards for good forest management. It is one of the growing number of certification schemes being assessed in developed and developing countries.

The FSC originated from the 1987 Brundtland Commission Report on the notions of sustainable development, and elements of Agenda 21 from the United Nations Conference on Environmental Development in Rio, 1992. In 1993, a FSC International Board of Directors was elected. FSC is a member organization in which members must belong to one of the three chambers: social, economic, and environmental. Internationally, each chamber is divided into 'Northern' and 'Southern', representing developed and developing countries and having fifty percent voting power within a chamber. Each of the three chambers has one third of the voting power and the FSC International Board of Directors has ultimate authority. FSC members represent by 25 countries, representing environmental institutions, timber trades, forestry producers, indigenous peoples' organizations, community forest groups, and forest certification bodies. The FSC is governed democratically through a system that requires public participation from its three chambers. Regional standards are developed based on a global set of Principles and Criteria.

FSC standards emerged as a market driven process that rewards operators who manage their forests in a manner that meets stringent Principles and Criteria with an on-product label. This label distinguishes the products from others that have not been based on acceptable management practices. In order to use the FSC logo on a product, a separate chain of custody certification is required. Each body that handles the certified wood along the production line must be certified for chain of custody. This certification follows a separate standard of six Principles consisting of 25 Criteria that must be met.

The FSC standards structure consists of the following:

- 10 Principles
- 56 Criteria embedded within the Principles
- 138 National Indicators embedded within the principles and criteria
- Interim standards used by FSC accredited certification bodies in the US

The 10 mandatory principles and criteria address the following issues:

1. Compliance Laws and FSC Principles
2. Tenure and Use Rights and Responsibilities
3. Indigenous Peoples' Rights

4. Community Relations and Worker's Rights
5. Benefits from the Forest
6. Environmental Impacts
7. Management Plan
8. Monitoring and Assessment
9. Maintenance of High Conservation Value Forests (HCVFS)
10. Plantations

## **4.2 Sustainable Forest Management (SFM)**

Whilst the basic technical knowledge on what constitutes sustainable forest management (SFM) in the context of Fiji's forests has been developed jointly by the Forestry Department/GTZ-Pacific German Regional Forestry Project under research conditions since 1994<sup>(31)</sup>, the fine-tuning of the SFM silvicultural procedures through trial implementation under large scale operational/commercial conditions is still pending. This is an important step that will be essential in allaying the fears of timber industry members. Government support to this effort, particularly at this later stage involving trial under large scale and commercial conditions, has been lacking and half-hearted due to funding constraints, and lack of focus and direction.

However, Leslie et al (2000)<sup>(30)</sup> argues that 'if it is to happen on a large scale, SFM must be in the interest of everybody involved in its design or implementation or affected by its consequences, all along the chain. In other words, the answer to the question - what is in it for me or us - must be positive for everyone concerned. That cannot be if natural forests under SFM become uncompetitive as a source of industrial timber and as a land use. Improving the financial viability of SFM (whether or not that includes timber production) becomes, therefore, the most urgent issue in the way ahead for the conservation of biodiversity associated with the tropical forests'.

Nevertheless, landowners are becoming more knowledgeable on the need for good forest management and concerned about bad practice. For example, the FD is reviewing both the National Code of Logging Practice and measures to be taken to strengthen its enforcement.

There is increasing desire by landowners to become more involved in decision making over their resources but many lack the experience in dealing with the commercial sector. Tensions and disputes have often ensued when expectations between landowners and commercial operators have not been met.

(31) Jaap de Vletter (March 1995): 'Natural Forest Management Pilot Project - Final Report'; Technical Report No. 27, FD/GTZ-Pacific German Regional Forestry Project.

## **4.3 Current Status of FC in the Pacific Islands Countries (PICs) and Fiji**

### **4.3.1 Status of FC in the PICs**

Forest certification in the PICs - particularly within the four larger forested island states: Papua New Guinea, Solomon Islands, Vanuatu and Fiji - is still in its infancy. The emergence of FC and its potential as a tool to promote SFM in the region was first formally discussed by the Pacific Islands Heads of Forestry (HoF) during its meeting in Fiji in 1998 under the auspices of the SPC/Pacific Islands Forests & Trees Support Programme<sup>(32)</sup>.

#### ***Issues & Challenges to Development of FC***

A number of constraints to the further development of FC in the PIC region have been identified and summarised as follows:

- a) The lack of political will, and in certain cases outright corruption, is a major constraint to improve forest management.
- b) The generally small scale of operations may be a problem in competing with bigger countries.
- c) The predominant communal land ownership is seen by the industry as difficult and can be a problem to achieve certification. For example, in the Solomon Islands the lack of clarity of landownership and land tenure is perceived as a basic problem.
- d) Although many countries have amended their forest policies recently, it is felt that these are hardly implemented yet for a variety of reasons. An example is Vanuatu which has good and updated legislation and policies but the industry does not follow the rules, enforcement by the authorities is minimal, and the industry contends that the provisions for long term resource security are inadequate.
- e) The high cost of certification including a general lack of access to up-to-date market information, coupled with distance from markets and insecurity of regular supply.
- f) A lack of information about FC leading to low levels of awareness amongst stakeholders.
- g) Low level of technical knowledge and lack of training in forestry professional and technical staff. Although training facilities exist in the region (eg. PNG: Unitech, Timber & Forestry Training College, Community Forestry Training Centre; Solomon Islands: SICHE, National Forestry Training Institute; Fiji: Forestry & Logging Schools), the present capacity for training in FC and forest management is considered inadequate and there is still the need to involve other countries (eg. NZ, Australia and UK).
- h) Absence of 'premium' prices and no market advantage perceived by timber producers.

The status of FC in the PICs varies between countries. PNG is considered the most advanced with the development of its own national standards together with a number of FSC-certified operations focussed on small scale community-based forestry projects.

Solomon Islands follows with the FSC-backed certified operations of SWIFT in 1996 and Kolombangara Forest Products Ltd (KFPL) in 1998. However, there has been little progress

(32) Lenoa Forestry Consulting Services (April 2002): 'Development of Capacity Building Strategies in Forest Certification in the Pacific Region'; report prepared for BMZ (Germany) and SPC-Pacific Islands Forest & Trees Program..

from 1999 due to the major ethnic conflicts of 2000. In Vanuatu, Fiji and Samoa initial discussions have commenced; and the Fiji Hardwood Corporation Ltd recently completing its initial independent FC scoping in April 2003 under the SmartWood Program, prior to deciding on proceeding with a full certification assessment in the near future.

#### **4.3.2 Status of FC in Fiji**

The status of FC in Fiji is linked to current initiatives being undertaken by regional organisations such as the Secretariat of the Pacific Community (SPC) under its 'Regional Forestry Strategic Plan, 2001-2004'. There are other current regional FC project being implemented through SPC as the focal-point organisation, for example, the European Union funded project 'Development of Capacity Building Strategies in Forest Certification in the Pacific Region', this process has been documented in a separate report<sup>(32)</sup>.

Following recent workshops on forest certification (FC) within Fiji and the region over the past 5 years, there is some awareness on certification and its implications. After two successive workshops (October 2002 and May 2003) on 'Training of Trainers in FC' and 'Mandate, Procedures, Tasks & Duties of National Working Groups on FC', the FD is still trying to form an interim Committee, representing the social/economic/environmental sectors of FC, as a precursor to the formal set-up of the 'National Working Group' (NWG) on forest certification.

Based on this 'slow' progress, much depends on the ability of FD senior managers to encourage, support and lead the industry and other major stakeholders. Discussions with the FD indicate that motivating action at this stage may require external financial support for the set-up and operation of the NWG on FC<sup>(20)</sup>.

Currently, there is some interest in FSC certification from government-owned companies - eg. Fiji Hardwood Corporation Ltd (FHCL) and at one stage by Fiji Forest Industries Ltd (FFI) - but only FHCL had recently undertook (April 2003) its initial independent certification scoping conducted by a team of specialists representing the SmartWood Program of the Rainforest Alliance<sup>(22)</sup>. The purpose of the scoping was to evaluate the ecological, economic and social sustainability of the FHCL forest management. It is expected that FHCL, on consideration of the scoping report, will proceed to a full certification assessment in the near future.

FHCL together with its strategic partner (which will appointed over the next 12 months) is eyeing the European and North American markets for its plantation grown Mahogany during large-scale utilisation anticipated to commence in 2004/05.

## **5.0 IDENTIFICATION OF INTERNATIONAL MARKETS & COMPANIES**

### **5.1 General Trends**

Forest products marketing is a vital element in the sustainable utilisation of forests, and it is becoming a vital tool in linking consumer needs and wants to the possibilities of the producers of forest products. Environmental concern is creating special markets for 'green' and 'natural' products all over the world. In developing countries, rapid population increases, combined with economic growth, are increasing the quantitative needs for various forest products. Urbanisation is changing consumer behaviour and leading to demand for new products.

Markets for forest products have been variable, with considerable variation, volatility and uncertainty. FAO reported<sup>(28)</sup>:

- that much of the trade in forest products takes place within regions or between neighbouring countries;
- developed countries accounted for about 85% of total forest product imports and exports in 1998, with just 5 countries accounting for more than half of global exports and imports;
- Europe and North America dominate as both importers and exporters, and Asia is a major importer;
- trade between developing countries has increased, especially in the Asian region;
- changing trade patterns have been facilitated in part by the reduction of trade restrictions which has part of the global trend towards trade liberalisation;
- tropical wood products represent only a small share of exports - 20% of the industrial roundwood exported (down substantially from 36% in 1980), 10% of sawnwood, less than 10% of pulp/paper/paperboard products, and 39% of wood-based panels;
- environmental pressures will continue to have an important influence on trade, both positive and negative; and
- environmental measures will continue to affect the level of trade, the products traded and the way in which trade is conducted, ie. many of the environment-related measures being initiated are potential impediments to free trade (eg. certification, eco-labelling, processing methods, sub-national and private market actions, etc).

### **5.2 Markets for Certified Forest Products (CFPs)**

#### ***What are CFPs?***

Certified forest products bear labels demonstrating in a verifiable manner by independent bodies that they come from forests that meet standards for sustainable forest management. Consumers might find labels on furniture and wood products, while manufacturers could verify the source of certified products from a system of chain of custody (COC) that identifies the origin of the wood.

### **CFPs Market Highlights**

A recent study by the UNECE/FAO<sup>(33)</sup> provides the following highlights in respect of markets for CFPs:

- The area of certified forests in the world has grown considerably over the last year, reaching about 124 million hectares by mid 2002, mainly driven by the Pan European Forest Certification (PEFC) and the Sustainable Forestry Initiative (SFI) in the United States.
- The potential supply of certified forest products (CFPs) has grown in parallel with area certified and is estimated at 234 million m<sup>3</sup> annually worldwide.
- A minor part of the wood supplied from certified forests is actually traded as (labelled) CFPs, *inter alia*, owing to a lack of chain of custody certificates and low customer and consumer awareness and demand.
- Today only about 2,600 chain of custody certificates exist, mainly in Europe and North America, and issued almost exclusively by the Forest Stewardship Council (FSC).
- Existing markets for CFPs continue to be mainly located in Western Europe, especially the United Kingdom, Germany and the Netherlands, and the United States.
- FSC-certified CFPs are today available across a large range of forest products in the more advanced markets, and PEFC certified CFPs are slowly becoming more visible.
- The CFP market continues to grow exponentially with CFP market share of total wood consumption (paper excluded) estimated at 10% in the United Kingdom, 7% in the Netherlands and 1% or less in Germany. This strong growth is expected to continue across a wide range of product categories, including paper.
- Consumer awareness of CFPs continues to be low, even in the more advanced markets in Western Europe, which is seen as one main impeding factor for market growth.
- Public procurement is an important driver of demand in several key importing countries, including the United Kingdom, the Netherlands and Germany, and is expected to remain so, *inter alia*, owing to the illegal logging issue.

The volume of CFPs entering the market is relatively small because of the limited supply and the lack of demand, and there is therefore little evidence of the positive or negative market impact of certification. It remains unclear whether a strong demand will develop in the future for certified wood, and whether it will command a premium price. A further, critical unanswered question is whether certification will, as it was originally intended to do, significantly contribute to improved forest management in developing countries (where

deforestation is greatest). There are also concerns that certification may intentionally or unintentionally act as a non-tariff barrier to trade and discriminate against those unable or unwilling to become certified. At present, certification seems to be used mainly as a marketing tool, to increase market share and/or to ensure continued or improved market access.

(33) Dr Ewald Rametsteiner: 'Markets for Certified Forest Products'; Chapter 11, UNECE/FAO Forest Products Annual Market Review (2001-2002) - Institute of Forest Sector Policy & Economics, University of Agricultural Sciences, Vienna, AUSTRIA.

Thus, timber certification and labelling (C&L) schemes continue to be implemented in international markets, although the full and final implications for the global forestry community remain to be seen. Firstly, some markets are clearly more environmentally sensitive (eg. Western Europe) than others (China, Japan & India). Secondly, not all timber-producing countries are heavily dependent on exports, so some are hardly influenced at all by the strength of demand for certified wood. In fact, exactly how genuine the customer-driven demand for certified wood products is, remains another unanswered question, and is a marketing area that has been seriously under-researched<sup>(34)</sup>.

Leslie and ITTO (2002)<sup>(30)</sup> reported the identification of eight European countries - the UK, Germany, the Netherlands, Denmark, Belgium, Switzerland and Austria - as the most environmentally sensitive markets for timber products and the ones where certification was likely to have the greatest market impact. In general, however, countries with large areas of tropical forest export a low percentage of their production to these countries: for example, both Indonesia and Brazil (two of the largest tropical sawn timber producers) only export about 10% of their total sawn timber production, of which about 10% (Indonesia) and 40% (Brazil) are shipped to these eight markets.

In the last few years, the supply base of certified wood products has widened and the larger retailers have begun to step up their promotion efforts. It is now common for mega-stores or large retailers in the USA (eg. 'The Home Depot') and the UK (eg. 'B&Q') to feature the percentage of certified items in their product ranges, usually based on number of items sold.

Nevertheless, the largest export markets for tropical timber remain in Asian countries like Japan, China and Thailand, where markets are just beginning to show a fragmented interest in certification. In any case, export markets are dwarfed by domestic markets within the tropical countries themselves, where there has been little evidence to date of demand for certified timber.

### **5.3 Certified Forests & CFP Manufacturers/Suppliers in the Asia-Pacific Region**

Search on the internet through the Forest Certification Resource Centre ([www.certifiedwood.org](http://www.certifiedwood.org)) revealed the following results for the Asia-Pacific region:

#### **1) Certified Forests**

A total of 13 FSC-certified forests (13 companies) in 3 countries exist covering 653,260 hectares -

(34) International Trade Centre UNCTAD/WTO & ITTO (2002): *Tropical Timber Products - Development of Further Processing in ITTO Producer Countries*; Geneva.

COUNTRY	COMPANY	AREA (Ha)	FOREST TYPE
NEW ZEALAND	City Forests Ltd, Dunedin	15,846	Plantation
	Craigpine Timber Ltd, Winton	2,305	✓
	Ernslaw One Ltd, West Otago	29,919	✓
	Fletcher Challenge Forests Ltd, Rotorua	359,859	✓
	Gowan Hills Trust, Southland	551	Natural
	NZ Forest Managers Ltd, Turangi	48,462	Plantation
	Pan Pac Forest Products Ltd, Napier	43,019	✓
	PF Olsen & Co Ltd, Rotorua	5,086	✓
	Timberlands West Coast Ltd, Greymouth	51,226	✓
	Wenita Forest Products Ltd, Mosgiel	29,729	✓
PAPUA NEW GUINEA	Winstone Pulp Intern. Ltd, Ohakune	24,947	Natural
	European Union - IRECDP, West New Britain	4,310	Natural
SOLOMON ISLANDS	Kolombangara Forest Products Ltd, Gizo	38,001	Mixed Natural/ Plantation

## 2) Certified Companies & Suppliers

A total of 67 companies in 5 countries are certified under FSC that could potentially participate in the manufacture and supply CFPs -

COUNTRY	SUPPLY CHAIN POSITION				
	Forest Owner/Manager /Logger	Primary Manufacturer	Secondary Manufacturer	Manufacturing Unspecified	Importer Wholesaler/Distributor
New Zealand	10	23	12	13	1
Papua New Guinea	1	0	0	0	0
Australia	0	0	1	0	1
Solomon Islands	1	0	0	0	0
Japan	0	0	0	0	4
TOTAL	12	23	13	13	6

For the region, NZ has the highest number of companies already certified under FSC. Six companies in 3 countries (NZ, Australia & Japan) are listed as importers/wholesalers/distributors of CFPs, as per following details -

- a) New Zealand - Lignus Corporation Ltd, Christchurch
- b) Australia - The Woodage Cobb Hall (Pty) Ltd, Mitagong, NSW
- c) Japan - Abe Kogwo Co Ltd, Asplund Co Ltd, Nissho Iwai Corporation, all of Tokyo; and Archvision21 Co Ltd, Hokkaido.

For example, The Woodage currently supplies FSC certified sawn timber, furniture/joinery timber, flooring and other manufactured timber products to buyers in Australia and overseas. The Woodage has indicated that it wishes to work with the PNG Eco Forestry Programme, FORCERT and the PNG Forest Authority to develop the trade in eco-timber products from East & West New Britain Provinces in a manner that satisfies the long term needs of all parties<sup>(35)</sup>.

(35) PNG Eco-Forestry Forum (March 2003): *Iko-Foresti Nius, Volume 5, Issue 1.*

## **6.0 LANDSCAPE FOREST CERTIFICATION (LFC)**

### **6.1 Biodiversity and Sustainable Forest Management (SFM)<sup>a</sup>**

#### **6.1.1 Definitions**

##### ***Biodiversity***

The Convention on Biodiversity (CBD; adopted in 1992) defines biodiversity as 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and other ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'. Biodiversity is, by convention, spoken of at three main levels: the species, genetic and ecosystem levels.

##### ***Biodiversity and SFM***

The question of whether or not SFM that includes timber production is compatible with biodiversity conservation is not covered by conventional wisdom: the concept remains controversial, despite the fact that biodiversity conservation is a key element in all the many definitions of SFM. Leslie concludes that a pragmatic way of approaching the issue is to assume that any improvement in forest management practices will have a net positive outcome for biodiversity and should therefore be encouraged.

##### ***Landscape-Level Considerations***

Many ecologists refer to 'landscape-level' processes in assessing the role and conservation of biodiversity, where the landscape is seen to comprise several 'ecosystems'. Theoretically, SFM that includes timber production should be part of any landscape-scale strategy for biodiversity conservation. According to ITTO's *Guidelines on the conservation of biological diversity in tropical production forests*<sup>(35)</sup>, since disturbance is a natural part of forest ecosystems:

'Selective harvesting of timber trees and subsequent protection of the forests constitutes a form of disturbance which might therefore be expected to be compatible with the conservation of much of the biodiversity of the forests'.

The Guidelines qualify this statement:

'The contribution of production forests to the conservation of biodiversity can only be fully realised within an integrated national land use strategy, which assigns appropriate attention to biodiversity conservation in specific areas of forest, in accordance with their composition and location, taking account of the totally protected area (TPA) system'.

Thus, under the ITTO guidelines there will be some *allowable* loss of biodiversity in production forests that would be mitigated by a comprehensive and integrated TPA network. The function of production forests in biodiversity conservation would then be two-fold: first, good forest management for timber production (and production of other goods and services) would allow the persistence and flourishing of a large (but unspecified) portion of the original biodiversity; second, the production forest would act as a buffer zone

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<sup>a</sup> The information in this section of the report draws heavily from the GEF discussion paper by Leslie, A & ITTO Secretariat (2002)<sup>(30)</sup>; it is reproduced here with only minor alterations.

around the TPAs and provide corridors that allow the free flow of genetic material between them. Thus, one of the recommended actions in the guidelines, under the principle that connecting areas should 'facilitate the movement of seeds, pollen and animals between the various forest areas and other habitats' is to 'locate production forests to maximise the connectivity between natural forest TPAs at the landscape level'.

### **6.1.2 Measuring Biodiversity for Certification**

The starting point for performance-based certification is a set of principles, criteria and indicators (PC&I) agreed to by stakeholders. This provides a means to assess, monitor and demonstrate progress towards SFM in a given country or forest area over time. It is not sufficient, however, for certification, which is designed to acknowledge the achievement of certain, agreed standards for forest management in a given forest management unit. Thus, two processes are necessary: the development of PC&I and the related development of standards; the latter, it is generally agreed, should be done at a national or regional scale while the former may be done at an international, regional or national scale.

Ghazoul (2001)<sup>(36)</sup> writing about the meek voice of the biologist proponents of timber certification, agrees with the conclusion that 'biodiversity and conservation are poorly represented among the principles and guidelines that define certification schemes'; and that 'certification standards must be expanded to include the effects of logging on forest biodiversity and ecology'. He then proposes two reasons for this: '(i) a lack of confidence in certification as a mechanism for achieving ecologically sustainable production in natural forests, and (ii) the conceptual and practical difficulties of incorporating objective guidelines for assessing biological diversity in a production forest context'.

It seems inevitable that assessing the biodiversity 'performance' of a forest operation against certification standards will be more difficult in the tropics than in the temperate zone, and more difficult in natural forests than in plantations, simply because of higher levels of biodiversity. Thus, the measurement of biodiversity and the effects of management on it are hugely problematic - as reflected in the vagueness of performance standards for biodiversity-related criteria - and therefore provides ample room for argument and controversy.

### **6.1.3 Fiji's Biodiversity Strategy & Action Plan (FBSAP)**

The relevant Guiding Principles of the FBSAP<sup>(37)</sup> which relates to forestry, includes:

- Biodiversity conservation is a collective responsibility of all levels of government, the private sector, resource users and landowners.

- Biodiversity conservation in Fiji is greatly dependent on the manner in which landowners and local user communities choose to manage their landholdings and fishing rights ownership.
- Control of local resources by traditional resource owners and users is critical to the success of biodiversity conservation.

(36) Ghazoul, J (2001): *Barriers to Biodiversity Conservation in Forest Certification*; Conservation Biology, Vol 15, No.2, April 2001.

(37) Dept of Environment (October 1999): *Fiji Biodiversity Strategy & Action Plan (Final Draft)*.

- That although communal land ownership has played, and continues to play a positive role in biodiversity conservation, the increasing commercialisation of natural resource use is threatening this system and constitutes a major challenge to biodiversity conservation.
- The establishment of a comprehensive and representative system of reserves and conservation areas at the national and local levels is critical to successful biodiversity conservation.
- The conservation and sustainable management of Fiji's natural forests is the single most important means of conserving the vast majority of Fiji's endemic fauna and flora.
- Education, public awareness and local knowledge are essential for enabling the conservation of biodiversity.

## **6.2 Implementing Landscape Forest Certification (LFC) in Fiji**

### **6.2.1 The Challenges of Implementing LFC**

While the debate that certification has facilitated has been largely constructive and has moved the international forests agenda forward, there is a danger that it is distracting from the broader search for ways to make SFM financially feasible. Sections 4.2 and 4.3, discussed the status of SFM and certification in Fiji (and the Region) and identified a number of constraints to their development. A number of key issues pose major challenges to the implementation of SFM and landscape forest certification in Fiji:

(1) *Communal Landownership & Compensation for TPAs*

With the majority of natural forest land under Fijian communal landownership, implementing and achieving the 'Guiding Principles' of Fiji's Biodiversity Strategy and Action Plan (refer to Section 6.1.3) will be largely dependent on having the necessary support and approval of landowning units and the NLTB.

However, the opportunities for forest protection and setting up of reserves and protected areas under totally protected areas (TPAs), depend largely on the provision of monetary compensation for landowners for the long term leasing of such areas (refer to Section 3.2.1). Other practical and legal hurdles concerning the establishment of such reserves/protected areas are discussed in Section 3.2.3.

(2) *National Rural Land-Use Policy (NRLUP)*

The establishment of a comprehensive and representative system of reserves and conservation areas at the national and local levels is critical to successful biodiversity conservation. This requires the implementation of a national land-use plan where an adequate network of conservation areas is secured. This process is still pending in Fiji with the submission of the draft 'National Rural Land-Use Policy for Fiji' (NRLUP) awaiting formal Cabinet endorsement.

Further, the implementation of such a plan will enable the identification and proper management of Fiji's 'multiple-use' natural forest estate, ie. where natural forest is to be maintained under forest cover but to be used for timber production, catchment protection, wildlife habitat, recreation and amenity uses and for minor forest products. This will form the 'National Forest Master Plan' which will be formulated as an outcome under the NRLUP process<sup>(38)</sup>.

(3) *Sustainable Forest Management (SFM)*

a) The financial costs of SFM -

In the Fijian context, however, what is needed is not more debate over the conventional wisdom of SFM or its elements but to get on with making a start with the implementation of the 'Nakavu' SFM model in the long pending large scale operational trial under commercial conditions. This will provide further 'testing and adaptation' of the SFM model, particularly its financial viability, which the Fiji timber industry members have been largely sceptical of. This additional issue - the financial viability of SFM - must be reviewed, because it is critical to the entire concept and thus to the role that certification can play in biodiversity conservation.

Given that industrial involvement is a necessity for forest-based development and that the timber industry in Fiji is largely private sector activities (whether privately-, community-owned or Government-owned timber companies), SFM must be profitable to the individual timber companies and stakeholders (including landowners) involved all along the production/marketing chain. The need to determine the financial viability of SFM in the Fijian context, the absence of 'premium' export prices and little or no demand for certified forest products within Fiji's current export markets, provides a gloomy outlook and a disincentive for SFM in Fiji.

b) The cost of improving management -

Leslie<sup>(30)</sup> argues that technically, SFM can be done and reduced impact logging (RIL), accompanied by silvicultural regimes designed to maintain, as far as technically possible, the existing mix of tree species, can do this. But such regimes come at a financial cost that will almost certainly be higher than the cost of normal conventional logging, and the more the impact is reduced the greater the additional cost is likely to be. Even if RIL were universally cheaper than conventional logging, which seems unlikely, it is only one element of SFM: data - and common sense - suggest that there will be further impacts on profitability as timber yields are reduced in line with sustainability.

c) Timber values

SFM for timber production may still be financially viable in some natural tropical forests at the moment, but this viability seems likely to decline over the next couple of decades due to -

- The cost of timber produced from sustainably managed natural forests will reduce the competitiveness of natural forest-grown timber with that grown in plantations.
- The average mean annual increment (MAI) from plantations is higher than that possible in natural forests: in Fiji, the average MAI values for plantation Mahogany 5-7 m<sup>3</sup>/ha/year; plantation Pine 10-12 m<sup>3</sup>/ha/yr; and natural forests 0.5-1.5 m<sup>3</sup>/ha/yr.

(38) Leslie, D (May 2002): *Report on the MASLR-SPC/GTZ Final Consultation Workshop on the Rural Land-Use Policy for Fiji*: Workshop sponsored by the Ministry of Agriculture, Sugar & Land Re-settlement and SPC/GTZ-Pacific German Regional Forestry Project.

- There is a great deal of overlap in the uses for which commodity-grade natural forest timber and plantation-grown timber are put.
- Other factors will also tip the balance in favour of plantations: the economies of scale coming from the locational, managerial and harvesting advantages of much higher concentrations of wood volume increase significantly the relative financial efficiency of plantations.
- The existence of a 'premium' price and increased market access for sustainable timber is still a point of much debate.
- Reduced timber yields permissible under the SFM harvesting regime will mean reduced financial returns to landowners in the immediate term. However, rural forest owners often have a high demand for immediate cash, so that there is the on-going temptation to allow harvesting by commercial operators under conventional methods. There are examples of landowners who support SFM and conservation giving in due to frustrations discussed in Section 3.2.3.

(4) *Forest Certification (FC)*

A number of pertinent issues concerning FC and relevant to the Fiji context includes:

- The high cost of certification and lack of information about FC leading to low levels of awareness amongst stakeholders.
- As evident in Sections 2.2.2 and 2.2.3, Fiji's current main export markets for all timber products are mostly within the Pacific-rim countries including the PICs which currently have little or no requirement for certified forest products.
- Low level of technical knowledge and lack of training in forestry professional and technical staff.
- Absence of 'premium' prices and no market advantage perceived by timber producers.

## 6.2.2 Relevance of Certification to Biodiversity

Leslie et al (2002)<sup>(30)</sup> argued that it is hard to evade the conclusion that forest certification, at least in its role in the eco-labelling of timber, is not much of a tool for the conservation of biodiversity in the longer term, for several reasons:

- a) the role of certification as a driver for the landscape-scale management of biodiversity is likely to be minimal in the tropics, where 50% of the world's terrestrial biodiversity resides;
- b) the bulk of timber harvested from natural tropical forests will continue to be sold into non-certification demanding markets, or used for subsistence purposes; and
- c) the decreasing value of commodity-grade timber will reduce the financial rewards for SFM in natural forests and will therefore discourage efforts to practice SFM for timber production; certification, which does not appear to provide a price premium, does not seem capable of reversing this trend.

Certification could assist in the adoption of SFM where it is financially viable, although how influential it is in this respect is difficult to quantify. But even if it is (or will become) a significant influence, the effect is likely to be a relatively temporary one as far as natural forests are concerned. If the prediction of increasing availability and consumption of plantation timber is realised, more and more natural forests in developed countries are likely to be removed from timber production, with a consequent positive effect on biodiversity conservation. Meanwhile, the biodiversity of the tropical forests will be even more at risk but for reasons that have nothing to do with certification nor for reasons that certification can do anything about. The developed countries can (probably) afford the monetary and opportunity costs of retaining and managing their natural forests for non-revenue purposes. Developing countries, like Fiji, cannot; nor do they have the institutional structures to do it if they could afford it. And since most tropical forests occur in such developing countries, the bulk of the world's biodiversity remains under threat. The loss of income forced on rural populations by the closing down of the uncompetitive tropical timber industries will simply add to the conversion pressure on the land occupied by the forests.

### 6.3 Important Stakeholders for Landscape Forest Certification (LFC)

Identification and active involvement of stakeholders is essential to the success of innovations like forest certification. The current EU-funded project 'Development of Capacity Building Strategies in Forest Certification in the Pacific Region'<sup>(32)</sup>, being promoted through SPC-GTZ/PGRFP as the regional focal-point, had undertaken a survey of the important stakeholders interested in sustainable forest management (SFM), forest conservation and forest certification (FC). The major groupings and contact identified for Fiji are shown in Figure 10 together with additional potential stakeholders who may be involved in LFC.

**Figure 10: Important Stakeholders in Sustainable Forest Management & Forest Certification in Fiji**

MAJOR GROUPINGS ORGANISATIONS/ PARTNERS	CONTACTS
<p><b>Government:</b></p> <ul style="list-style-type: none"> <li>▪ Forestry Dept, MFF</li> <li>▪ Dept. of Environment, LGHSS&amp;E</li> <li>▪ Fijian Affairs Board, MFACH</li> </ul>	<ul style="list-style-type: none"> <li>- Deputy Conservator of Forests/Services</li> <li>- Principal Environment Officer</li> <li>- Deputy Secretary</li> </ul>

<ul style="list-style-type: none"> <li>▪ Land Resources Planning &amp; Dev Unit, MASLR</li> </ul>	- Principal Land Use Planner
<p><b>Non Government Organisations:</b></p> <ul style="list-style-type: none"> <li>▪ Foundation for the Peoples of the South Pacific</li> <li>▪ World Wide Fund for Nature (WWF)</li> <li>▪ Wildlife Conservation Society (WCS)</li> <li>▪ PNG Eco-Forestry Forum</li> </ul>	<ul style="list-style-type: none"> <li>- Country Manager</li> <li>- Country Manager</li> <li>- Program Director</li> <li>- Website: <a href="http://www.ecoforestry.org.pg">www.ecoforestry.org.pg</a></li> </ul>
<p><b>Forest Resource Owners:</b></p> <ul style="list-style-type: none"> <li>▪ Native Land Trust Board (NLTB)</li> <li>▪ Provincial Administration/Councils</li> <li>▪ Interested Communities &amp; Resource Owners (eg. Drawa Landowners Cooperative Ltd, Wailevu West, Vanua Levu; Turagasau Forest Management Cooperative Ltd, Nasautoka, Wainibuka)</li> </ul>	<ul style="list-style-type: none"> <li>- Deputy GM/Operations</li> <li>- Roko Tuis</li> <li>- Head, Community/Landowning Unit/Resource Owners</li> </ul>
<p><b>Timber Industry:</b></p> <ul style="list-style-type: none"> <li>▪ Fiji Sawmillers Association (FSA)</li> <li>▪ Private timber companies (eg. Sustainable Forest Industries, South Seas Timber Traders)</li> <li>▪ Govt-owned timber companies (eg. Fiji Hardwood Corporation Ltd, Fiji Forest Industries Ltd, Fiji Pine Ltd)</li> <li>▪ Pine Landowner Companies</li> </ul>	<ul style="list-style-type: none"> <li>- President &amp; Secretary</li> <li>- Managing Director/CEO</li> <li>- Managing Director/CEO</li> <li>- Executive Officer, Fiji Pine Trust</li> </ul>
<p><b>Workers/Trade Unions:</b></p> <ul style="list-style-type: none"> <li>▪ Building Construction, Timber &amp; Allied Workers Union of Fiji (BCT&amp;AWU)</li> <li>▪ International Federation of Building &amp; Wood Workers (IFBWW)</li> </ul>	<ul style="list-style-type: none"> <li>- General Secretary John Paul E: <a href="mailto:feawu@connect.com">feawu@connect.com</a> T: 666 6353; M: 925 4522</li> <li>- Website: <a href="http://www.ifbww.org">www.ifbww.org</a></li> </ul>
<p><b>International/Regional Timber Markets (CFPs):</b></p> <ul style="list-style-type: none"> <li>▪ The Woodage Cobb Hall (Pty) Ltd, Mitagong, NSW, AUST. P O Box 919, Mitagong, NSW 2575, AUSTRALIA</li> <li>▪ Lignus Corporation Ltd P O Box 39058, Christchurch, NEW ZEALAND</li> </ul>	<ul style="list-style-type: none"> <li>- Peter Mussett E: <a href="mailto:woodage@bigpond.net.au">woodage@bigpond.net.au</a> T: 612 48721618; F: 612 48721323</li> <li>- John McVicar E: <a href="mailto:john.mcvicar@lignus.com">john.mcvicar@lignus.com</a> T: 64 03357 0560; F: 64 0335 0562</li> </ul>
<p><b>Regional/International Organisations/Donors:</b></p> <ul style="list-style-type: none"> <li>▪ SPC Forest &amp; Trees Programme (Suva)</li> <li>▪ SPC/GTZ Pacific-German Regional Forestry Project (Suva)</li> <li>▪ European Union (Suva)</li> <li>▪ PNG Forest Authority &amp; EU-PNG Eco-Forestry Programme</li> </ul>	<ul style="list-style-type: none"> <li>- SPC Forest &amp; Trees Adviser</li> <li>- Team Leader</li> <li>- EU Rural Development Adviser</li> <li>- PNG Forest Authority</li> </ul>
<p><b>Forest Certification Scheme/FSC Certifiers:</b></p> <ul style="list-style-type: none"> <li>▪ Forest Stewardship Council (FSC)</li> <li>▪ FSC Regional Director (PNG)</li> <li>▪ SmartWood Rainforest Alliance, Asia-Pacific Regional Office Website: <a href="http://www.smartwood.org">www.smartwood.org</a></li> </ul>	<ul style="list-style-type: none"> <li>- Website: <a href="http://www.fscoax.org">www.fscoax.org</a></li> <li>- Yati Bun; E: <a href="mailto:yabun@datec.com.pg">yabun@datec.com.pg</a></li> <li>- Jeff Hayward, Asia-Pacific Regional Manager; E: <a href="mailto:jhayward@smartwood">jhayward@smartwood</a></li> </ul>

## 7.0 CONCLUSION

The assignment's TOR required some general and specific insights/recommendations on how to make forest certification an attractive incentive for local landowners in Fiji to log and conserve their forest within the context of an approved landscape conservation plan. How could landowners who are asked to set aside conservation areas, benefit from a landscape forest certification program? How can we best engender support for landscape certification with local landowners, government agencies, timber sector, and international markets?

In assessing the efficacy of landscape-scale forest certification for strengthening Fiji's forest reserve network, at issue are three concepts: biodiversity, sustainable forest management (SFM), and forest certification (FC). There is a need to review the current status and experiences of the concepts and issues affecting them, both at the international level and the Fiji context. These are as follows:

### 1. Current International Experience -

#### *Sustainable Forest Management (SFM) and Certification*

- (a) The feasibility of SFM and the definition and measurement of biodiversity are still being debated.
- (b) Certification as a marketing device for timber produced in 'well managed' forests is handicapped by difficulties over acceptable standards - particularly with respect to biodiversity conservation. Natural tropical forests, with their high levels of biodiversity, are therefore at a disadvantage in the production of certified timber.
- (c) Enough is known to implement SFM based on current best practice, but guidelines for SFM are not set out as clearly as they could be for effective implementation.
- (d) In its marketing role, certification is a driver for improved management practices, although its significance in tropical forests has been low to date.
- (e) Certification is not a driver for the landscape-scale planning and management needed for effective biodiversity conservation. Thus, certification of forests for the purpose of

obtaining an eco-label for the timber produced from such forests will be of limited value in conserving biodiversity. However, certification could play other important role. For example, if alternative schemes for the payments of global services such as biodiversity conservation are to be viable, an auditing system that convinces the payees that such services are actually being performed will be essential.

#### *Markets for Certified Forest Products (CFPs)*

- (f) A minor part of the wood supplied from certified forests is actually traded as (labelled) CFPs, *inter alia*, owing to a lack of chain of custody certificates and low customer and consumer awareness and demand. Today only about 2,600 chain of custody certificates exist, mainly in Europe and North America, and issued almost exclusively by the Forest Stewardship Council (FSC).
- (g) Existing markets for CFPs continue to be mainly located in Western Europe, especially the United Kingdom, Germany and the Netherlands, and the United States. FSC-certified CFPs are today available across a large range of forest products in the more advanced markets, and PEFC-certified CFPs are slowly becoming more visible.
- (h) Consumer awareness of CFPs continues to be low, even in the more advanced markets in Western Europe, which is seen as one main impeding factor for market growth. Public procurement is an important driver of demand in several key importing countries, including the United Kingdom, the Netherlands and Germany, and is expected to remain so, *inter alia*, owing to the illegal logging issue.

## **2. The Fiji Situation -**

### *Sustainable Forest Management and Certification*

- (a) The feasibility of the 'Nakavu' SFM model is still unclear and being debated. The implementation of the next step in the 'testing and adaptation' of the SFM model's financial viability involving large-scale operational trial under commercial condition is long pending. The issue of - financial viability of SFM - which the Fiji timber industry members have been largely sceptical of, must be reviewed because it is critical to the entire concept and thus to the role that certification can play in biodiversity conservation. Thus, it is critical that an immediate start of this long pending trial is made in the designated 6,500 ha Drawa forest block in Vanua Levu by the Forestry Department and the landowner company (Drawa Landowners Cooperative Ltd) with the assistance of the SPC/GTZ-Pacific German Regional Forestry Project.
- (b) Given that industrial involvement is a necessity for forest-based development and that the timber industry in Fiji is largely private sector activities (whether privately-, community-owned or Government-owned timber companies), SFM must be profitable to the individual timber companies and stakeholders (including landowners) involved all along the production/marketing chain. The need to determine the financial viability of SFM in the Fijian context, the absence of 'premium' export prices and little or no demand for certified forest products within Fiji's current export markets, provides a gloomy outlook and a disincentive for SFM in Fiji for the present time.
- (c) A number of pertinent issues concerning forest certification and relevant to the Fiji context includes:

- The high cost of certification and lack of information about it leading to low levels of awareness amongst stakeholders.
  - Fiji's current main export markets for all timber products are mostly within the Pacific-rim countries including the Pacific Island Countries which currently have little or no requirement for certified forest products.
  - Low level of technical knowledge and lack of training in forestry professional and technical staff.
  - Absence of 'premium' prices and no market advantage perceived by timber producers.
- (d) The current move spearheaded by the Forestry Department to establish a formal National Working Group (NWG) on certification, incorporating stakeholders from the 3 chambers of - social, economic and environmental - should be supported.

*Communal Landownership & Compensation Payment for TPAs*

- (e) With the majority of natural forest land under Fijian communal landownership, implementing and achieving the 'Guiding Principles' of Fiji's Biodiversity Strategy and Action Plan will be largely dependent on having the necessary support and approval of landowning units and the NLTB.

However, the opportunities for forest protection and setting up of reserves and protected areas under totally protected areas (TPAs), depend largely on the provision of monetary compensation for landowners for the long term leasing of such areas. This has been highlighted by both the Forestry Department and NLTB as the single most important constraint in implementing a network of forest reserves and protected areas. Other practical and legal hurdles concerning the establishment of such reserves/protected areas are discussed in Section 3.2.3.

*National Rural Land-Use Policy for Fiji*

- (f) The establishment of a comprehensive and representative system of reserves and conservation areas at the national and local levels is critical to successful biodiversity conservation. This requires the implementation of a national land-use plan where an adequate network of conservation areas is secured. This process is still pending in Fiji with the submission of the draft 'National Rural Land-Use Policy for Fiji' (NRLUP) awaiting formal Cabinet endorsement.

Further, the implementation of such a plan will enable the identification and proper management of Fiji's 'multiple-use' natural forest estate, ie. where natural forest is to be maintained under forest cover but to be used for timber production, catchment protection, wildlife habitat, recreation and amenity uses and for minor forest products. This will form the 'National Forest Master Plan' which will be formulated as an outcome under the NRLUP process.

Under the current Fiji scenario, the immediate task will be to make a start on implementing the next step in the 'testing and adaptation' of the 'Nakavu' SFM model through the long pending trial involving large-scale operational trial under commercial condition. This will demonstrate the financial viability of SFM to the timber industry members; the issue is

critical to the entire concept and thus to the role that certification can play in biodiversity conservation.

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## ANNEX 1

### A Preliminary Register of Sites of National Significance

#### ***Includes only Forestry Related Significance***

(Source: Adapted from Attachment 5 - FBSAP, Oct 1999)

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#### SITES OF THE CENTRAL DIVISION

SITE	SITE NO.	SIGNIFICANCE	TENURE
NAQALI	C / 2	<i>Neovetchia storkii</i> palm habitat	
SAVURA CREEK	C / 3	Catchment protection, rainforest	Government (Forestry/Land Depts.)
SOVI GORGE	C / 4	River gorge of high scenic value	Native (NLTB/Landowners)
MT. KOROBABA	C / 5	Rainforest, 5 endemic plant species, recreation	Government (Lands Dept.?)
BATIWAI FOREST	C / 11	<i>Gulubia microcarpa</i> palm habitat, forest reserve	Government (Forestry Dept.)
SOVI BASIN	C / 12	Rainforest, wilderness area, high scenic valley	Native (NLTB/Landowners)

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#### SITES OF THE NORTHERN DIVISION

SITE	SITE NO.	SIGNIFICANCE	TENURE
WAISALI RESERVE	N / 2	Dakua rainforest, Amenity Reserve	Native (National Trust / NLTB / Landowners)
ROKOSALASE	N / 3	Buabua forest [ <i>Fragraea gracipilles</i> ]	Native (NLTB/Landowners)
VUNIVIA	N / 7	Lowland dry zone forest	Native (NLTB/Landowners)

CATCHMENT VUNIVIA MANGROVES	N / 8	Intact mangrove system	Government (Lands Dept.)
RAVILEVU NATURE RESERVE	N / 9	Wet rainforest habitat, mongoose free	Government (Forestry Dept.)
COBIA ISLAND	N / 10	Beach forest, geological formation	Native (NLTB/Landowners)
TUNULOVA FOREST	N / 16	Rainforest, Vanua Levu silktail habitat	Native (NLTB/Landowners)
VUNIMOLI NATURE RESERVE	N / 25	Rainforest, Forestry Reserve	Government (Forestry Dept.)

#### SITES OF THE WESTERN DIVISION

SITE	SITE NO.	SIGNIFICANCE	TENURE
NAUSORI HIGHLANDS	W / 7	Dryzone mountain rainforest	Native (NLTB/Landowners)
RAIRAIMATUKU PLATEAU	W / 10	Mountain Rainforest	Native (NLTB/Landowners)
MONASAVU	W / 11	Dam, hydro catchment protection, rainforest	Government (Lands Dept./)/NLTB
NAKOROTUBU VINE THICKET	W / 12	Unique tropical vine thicket community	Native (NLTB/Landowners)
SITE	SITE NO.	SIGNIFICANCE	TENURE
NAKAUVADRA MOUNTAIN RANGE	W / 13	Dry zone rainforest	Native (NLTB/Landowners)
VATIA VINE THICKET	W / 15	Unique tropical vine thicket community	Native (NLTB/Landowners)
WABU CREEK	W / 16	Intact Fiji <i>Dakua montane</i> rainforest	Native (Forestry Dept. / NLTB)
DREKETI INLET	W / 17	Coastal environment, mangrove	Government (Lands Dept.)
KOROYANITU [MT. EVANS] RANGE	W / 18	Intact dry zone montane rainforest	Native (NLTB/Landowners) /Government (Lands Dept.)
VATURU DAM CATCHMENT	W / 22	Catchment protection, dry zone rain forest	Native (Government (Lands Dept.?) / NLTB)
QARANIBULUTI NATURE RESERVE	W / 29	Rainforest, Forest Reserve	Government (Forestry Dept.)
NADARIVATU NATURE RESERVE	W / 30	<i>Dakua</i> dominated rainforest	Government (Forestry Dept.)
KOROKUNE	W / 35	<i>Veitchia johannis</i> palm forest	Native (NLTB/Landowners)
TOMANIIVI NATURE RESERVE	W / 50	Rainforest, Forestry Reserve	Government (Forestry Department)

## **ANNEX 2**

### **Location - Forest & Nature Reserves**

(Source: Management Services Division, Forestry Dept, MFF)

