APPENDICES

Appendix 1 Written Evidence Ministry of Forestry 2016-2017, 2017-2018 and 2018-2019



Ministry of Forestry Responses to the Standing Committee on Natural Resources

Questions on the Ministry of Forestry's 2016 - 2017 Annual Report

No.	Question	Ministry of Forestry's Response
1.	Page 7 – Report on Performance Can the Ministry please inform the Committee on the status of the "Planted Forests Policy", what does this policy cover	The Planted Forest Policy is still a draft which needs to be reviewed to include current forest sector priorities, both national and international. The scale of plantations can only be determined following a National Forest Inventory to gauge domestic needs and economic performance expected from the sector. This will determine the extent of plantations required to substitute removals from native forest for timber needs.
	of this policy?	plantation enterprises involving teak and sandalwood, existing commercial-scale plantation forests within both Fiji Pine Limited (FPL) and Fiji Hardwood Corporation Limited (FHCL) lease areas, new plantation development for the production of fuel wood, fibre, bio-fuels as well as carbon forests, community forests, small scale tree planting schemes, agroforestry including food forests, urban forestry and private woodlots. This will ease the burden on native forests, allowing them to provide services such as sequestrating carbon, improving biodiversity values and the maintenance of other environmental services, with timber being a lesser by-product.
		The potential for a considerable increase in the extent and area of planted forest management is significant and there is sufficient under-utilised land in Fiji that can accommodate these new developments. However, there is a need for a clear and coherent national policy framework to guide strategic actions and investments in these planted forests to reposition forestry as a desirable and sustainable land use.
		The beneficiaries include current and developing plantation industries, landowners with idle land and willing to develop plantations, woodlots, Agroforestry and sandalwood farms, etc. Without formal leasing of land, these landowners can attract investors to partner with for long term economic development. The investors, forest sector, government and the nation will also benefit from this Policy.
2.	Page 17 – Development of REDD+Readiness and BeductionEmissionReductionProgramThe annual report states that "Fiji had secured ECEP	Fiji's REDD+ work began in 2009 with support of the Secretariat of the Pacific Community (SPC) and the German-funded GIZ Regional Program: "Coping with Climate Change in the Pacific Island Region" (CCCPIR). Through this partnership arrangement, Fiji developed its 2011 REDD+ Policy, which guided the REDD+ work in the following years. In 2013, Fiji submitted its Readiness Plan Idea Note (R-PIN) to the World Bank managed Forest Carbon Partnership Eacility (ECPE) for consideration. In 2015, the Fiji Government entered into a

No.	Question	Ministry of Forestry's Response			
	funding of US\$3.8m to implement its R-PP from 2015 – 2019, with co-funding from the Fiji Government and the SPC/GIZ Regional Programme Coping with Climate Change in the Pacific Island Region".	contractual agreement with the WB-FCPF to develop its Readiness Preparation Plan (R-PP) and a grant (TF 019024) of USD 3.8 million was approved. In 2017, an additional funding request of USD 2 million was approved, taking the total grant fund under the WB-FCPF to USD 5.8 million. The co-funding from SPC- GIZ ended in 2019. The Fijian Government continues to contribute around \$400,000 annually to the REDD+ Program.			
	the Committee on this?	development of Fiji's Monitoring, Reporting and Verification (MRV) system to support the Emission Reductions Program and facilitate the MRV obligations and requirements during carbon trade. This includes:			
		 a) The establishment of a REDD+ Unit – currently a 9-member team under the Ministry of Forestry's Forest Resource Assessment & Conservation (FRAC) Division, which is responsible for the daily operations and management of the readiness grant and the rolling out of the Emission Reductions Program; b) The development and enhancement of an integrated National Forest Monitoring System (NFMS), which also includes the updating of information on Fiji's forests through the national forest inventory and allometric work that will be completed by December 2022. Through this work, Fiji will be able to calculate, update and report each year on the level of Green House Gas (GHG) emissions that have been reduced or removed; c) Establishment of the Safeguards and Feedback and Grievance Redress Mechanism (FGRM) monitoring systems, which are both operational. This is an important and mandatory requirement, which ensures that the rights, aspirations and interests of all are protected and respected; d) Development of a Benefit Sharing Plan, which will govern and ensure the fair and equitable sharing of the carbon payments received after the level of emission reduction has been independently verified; e) Capacity building through training, education and awareness raising – this activity has begun through the Readiness phase and will continue over the duration of the 5-year emission reduction program. 			
		The readiness grant (TF 019024) agreement was expected to end in 2019 and was extended to December 2020. However given the challenges and difficulties brought on by the spate of tropical cyclones and the COVID-19 restrictions, the grant closing date has been extended again and will now end on the 31 st December 2022.			
3.	Page 26 – Seed Production				
	a) According to the annual report it states that " <i>There was</i> a great decline on the volume of seeds being collected compared to previous years.	The Ministry has upgraded its Seed Laboratory facilities to improve seed germination rates and quality, improvise technology to propagate plants vegetatively from cuttings rather than seeds only, established projects with SPC and FAO to invest in more tree climbing equipment, training tree climbers and decentralising seed collection to divisions to include more manpower.			
	The quantity of native seeds have been reduced to as low as	More recently, the Ministry has to a certain extent outsourced procurement of seedlings from communities and private nurseries as well as tenders for large scale seedling purchases. These community arrangements also enable rural			

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	50% deficit due to many factors". Please advise what strategies has the Ministry taken to deal with this?	communities to participate in an area of forestry that has increasing social, environmental and economic benefits. It has outsourced seedling production partly to accommodate the volumes required in any given year.			
	b) Furthermore it also states that "One of the greatest challenges in this work is to have the required volume of seeds to cater for all the demand on any forest activities". Was the Ministry able to overcome this challenge, if yes, what has been done?	The above has not only allowed the Ministry to achieve its yearly targets, but also support income generating initiatives for communities and forest based micro small medium enterprises through the collection and sale of seeds and seedlings.			
4.	Page 29 – Tree Improvement What is the progress for Private Wood Lots and whether the LOU are in support of the programme?	Research Trial plots In terms of research trial plots, the support that the Ministry received from the LOU has been very positive as they have taken ownership of the programme by conducting monthly maintenance and weeding of Research plots and the Silviculture Research Officers only come in for assessment of the mixed species planted in the 0.23 Ha of land.			
		After 7 years of conducting studies, the team is in a position to produce a status report on the growth performance of the different tree species planted.			
		Plantation forests			
		For plantation forest, the establishment of Private Wood Lots is normally undertaken by the Fiji Pine Trust under the provisions in the Fiji Pine Decree.			
		It confirms the following activities: (a) providing assistance to forestry industry and any components thereof including the development of landowners related thereto and extension forest schemes; such assistance being in the form of advisory, financial, managerial, marketing and any other assistance as it relates to investigating possible plantation areas, establishing such forests, planting, growing, maintenance, logging, transportation and end use production and ancillary industries associated with forests and products therefrom and to employ any third parties for the purposes thereof; and In the above activities, the LOU are actively involved in the whole process.			
		Apart from the above, the Ministry of Forestry through the Reforestation of Degraded Forest (RDF) project is also working with communities to establish their own plantation forests. The 30MT15Y tree planting initiatives supports the RDF activities through the planting of trees in other areas.			
5.	Page 33 – Way Forward for the Silviculture Research Division	Improvement – the Ministry has ongoing discussions with the Pacific Community on capacity building for tissue culture and is seeking funding opportunities to support research in this area.			
		Capacity Building			

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6.	Areas that needs improvement includes capacity building, research publication and in- depth analysis. Have resources been provided to the Ministry to make improvements to these areas? What were some of the challenges faced by the Ministry especially when transiting into a single portfolio (from Department to Ministry) and how have these been overcome?	 The Ministry is committed to elevating the standard of research which has resulted in the employment of university graduates to lead research sections and is addressing capacity gaps through the submissions of Training Needs Assessment and nominating staff for this. Research publications The Ministry now has a specific allocation for publication of books and periodicals with a funding of \$1,500.00 The Research Division together with the Australian Centre for International Agricultural Research (ACIAR) has published four (4) scientific papers and 2 are currently under peer review. For the 2021-2022 Annual Operation plan, the following are the key performance indicators (KPIs) that the Research Division has to achieve in the Ministry's efforts of advancing forestry research: Partnership established with local and international organisations to fund research; Collaborative research with local and international partners such as International Bamboo and Rattan Organisation (INBAR), Asia Pacific Association of Forestry Research Institutions (APAFRI) and the International Union of Forest Research Organisations (IUFRO). The transiting of the then Department of Forestry to a single portfolio, a Ministry on its own, presented more opportunities for the Ministry and allowed more focus to its core role of sustainably managing Fiji's forests. 			
7.	Can the Ministry please provide targets and achievements on the Ministry's contribution to GDP in 2016-2017 financial year?	The Ministry's contribution to GDP is mainly driven by log production, timber processing and exports. For the 2016-2017 financial year, the target for log production as per the Ministry's Annual Corporate Plan was 131,000 cubic meters for both native and plantation species. The Ministry surpassed this target with the total log production of 251,222.8 cubic meters. This of course positively impacted the timber processing industries and other community forest-based companies boosting local products generating a total revenue of \$33.0 million. Compared to previous years, this \$33.0 million is relatively low as the country and community forest-based companies were still recovering from the devastating impacts of TC Winston. However, from 2017 onwards, production and exports of forest products slowly recovered and positively contributed to Fiji's GDP.			
	clarify what are the training programmes in Nasinu and how effective are these	Ministry of Forestry also deliversshort-term training courses at the Timber Industry Training Center which are supported by the Timber Utilisation and Research Division in terms of the provision of the training facility and resource personnel. These training courses although tailor made to the timber industry needs, are also offered to interested forest resource owners who may be			

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	courses?	 considering processing logs from their forests. The short-term training courses include; Basic Sawmilling (2 weeks) Basic Saw Doctoring (2 weeks) Timber Grading (2 weeks) Timber Seasoning (1 weeks) Timber Preservation (1 week) Timber Machining (1 week) 				
		The aim of the Timber Industry Training Center at Nasinu is to build community and industry capacity to improve the efficiency and effectiveness of timber processing and manufacturing to ensure the best use of timber with minimum wastage, and contributing to the sustainable management of the country's forest resources.				
9.	Page 51 and 52 – Financial Statement a) Can the Ministry please explain the large variances in the TMA account?	 The variances were caused by: 1. As per FMIS record \$301,452 was recorded as expenditure from \$2.5m that was received for the purpose of salvaging of logs. The balance of \$2,198,459 is recorded as differed income. 2. The Ministry has a balance of \$1,425,227.54 in TMA bank account which will be transferred to CFA account during the closure of TMA. 3. The balance of \$773,231.46 was used for other expenses related to TMA operations. After consulting Assets management unit (MOE) for posting of these expenses. The Ministry was advised that the remaining entry will be posted during the closure of TMA which is by 31st of July 2022. 				
	b) There were 6 Qualified Opinions stated by the Office of the Auditor General. Please advice on the status of these Qualified Opinions?	 <u>Operating fund Account (RFA)</u> 1. The issue of understated balance of \$276,181 has been sorted with the Ministry of Economy which has approved that the adjustment will be done in financial year 2021/2022 based on the evidence. <u>Trading and manufacturing Account</u> 2. Un-reconciled balance between bank statement and GL of \$104,597 was cleared in the last financial year 2020/2021 3. As per FMIS record \$301,452 was recorded as expenditure from \$2.5m that was received for the purpose of salvaging of logs. The balance of \$2,198,459 is due to incomplete entries processed in FMIS. After consulting Assets management unit (MOE). The Ministry is advised that the remaining entry will be processed during the closure of TMA which is by 31st of July 2022. 4. The TMA Profit and Loss issues have been amended and verified to date as the Ministry is working closely with the Assets Management & Monitoring Unit Ministry at Ministry of Economy in resolving all the issues pertaining to the Profit and Loss and all the remaining entry and posting will be cleared before the closure of TMA before 31st July. The Ministry of Economy is on the verge of closing down the TMA at Nasinu before close of this financial 				

No.	Question	Ministry of Forestry's Response
		 year2021 - 2022. 5. This recorded sales has been amended and has been resolved and verified to date as the Ministry is working closely with the Assets Management & Monitoring Unit Ministry at Ministry of Economy to resolve all pending issues and all recorded sales postings will be done before the closure of TMA in this financial year 201 -2022 . The Ministry of Economy is on the verge of closing down the TMA at Nasinu before close of this financial year 2021 - 2022. Trust Fund Account 6. The Ministry of Fisheries is s working closely with the Ministry of Forestry on trust fund account beneficiaries listing clearance before the third quarter of this financial year 2021 - 2022.



Ministry of Forestry Responses to the Standing Committee on Natural Resources

Questions on the Ministry of Forestry's 2017 - 2018 Annual Report

No.	Question	Ministry of Forestry	y's Response						
1.	Page 8 – Legislative Framework	Forest Certification is about auditing Forest adherence to best management practices that economic interest.	Forest Certification is about auditing Forest Management to a Standard to show adherence to best management practices that balances social, environmental, and economic interest.						
	explain, what is the progress on certification of Native Forest and Mahogany plantation?	a) Fiji's native forests is not currently managed framework is in need of development, which collaboration of all forest stakeholders with a dif now. Realigning fundamental values across competing and/or conflicting issues requires a selectively harvested and allowed to regenerate r) Fiji's native forests is not currently managed and hence the supportive governance ramework is in need of development, which is currently underway. It involves the ollaboration of all forest stakeholders with a different mind-set to what has existed until ow. Realigning fundamental values across all the stakeholders that often have ompeting and/or conflicting issues requires some time. Licensed areas have been electively harvested and allowed to regenerate naturally.						
		b) Mahogany plantations of Fiji Hardwood management, which is currently forging ahea protocols after having paid off all debts for the fi been evaluated, streamlined, and the superfluou develop its management to the high standard re This also requires some time, especially with th work practices to include and the distractions nat cyclones that are happening more frequently.	b) Mahogany plantations of Fiji Hardwood Corporation Ltd are now under new nanagement, which is currently forging ahead with establishing best management protocols after having paid off all debts for the first time in existence. All their staff have been evaluated, streamlined, and the superfluous let go. FHCL is now well placed to levelop its management to the high standard required to pass the Certification audits. This also requires some time, especially with the new COVID—19 protocol compliant work practices to include and the distractions natural disasters like the worsening tropical cyclones that are happening more frequently.						
2.	Page 10 - Gender								
	Equality Opportunity	Male Fe	emale	Total					
		Established 84	55	139					
	Can the Ministry please	GWE 62	10	72					
	provide a Gender	Project 26	5	31					
	within the Ministry?	Total 172	70	242					
	within the withistry?	Ratio 71%	Ratio 71% 29%						
3.	Page 11 - Review of and	The 1992 Forest Act does not have Emiss	sion Reduction	on processes,	procedures,				
	development of Forest	regulations and legislation to be guided by.							
	Legislations and								
	Regulations	Bill No. 13 of 2016 was completed and went the	through 2 read	dings in parli	ament before				
		Parliament reconvened and the Ministry was adv	arliament reconvened and the Ministry was advised to resubmit this.						

No.	Question	Ministry of Forestry's Response			
	Can the Ministry please explain the delay in re- introducing the Forest Bill No: 13 of 2016 to Parliament?	Further edits were undertaken except in the area of Carbon trade. This required the enactment of the Climate Change Act 2021 (CC Act). Having the CC Act in place, the Forest Act was reviewed accordingly and the emission reduction component added to include the responsibility of the Ministry under the CC Act. The Review of the 1992 Act has now been finalised and awaiting vetting by the SGs Office.			
4.	Can the Ministry please clarify as to who is regulating the Mahogany operations?	Mahogany operation is regulated by the Fiji Hardwood Corporation Limited (FHCL) under their own Harvesting Code. Under the Mahogany Industry Development Decree 2010, it is the function of the Fiji Hardwood Corporation Ltd acting on the direction of the Mahogany Council to manage all operations in connection with the planting, growing, harvesting and sale of mahogany on mahogany plantation land. Mahogany plantations on private land or individually owned land are regulated by the Ministry of Forestry.			
5.	Page 14 a) Can the Ministry explain why there was a reduction in the log production of native timber from about 60,000m ³ in 2009 to 39,000m ³ in 2018?	With the availability of mahogany logs through Licensing by FHCL, most companies opted to process this instead of investing in Natural Forest logging which required investment in road accesses, harvesting crews, carting of logs and other planning operations unlike with mahogany logs which were delivered to the Company's sawmill. Additionally, it is expected that native log production will decline further due to high costs and limited accessibility as well as awareness on maintaining forests for carbon sequestration and incentives through carbon trade in future.			
	b) Can the Ministry explain why there was a reduction in the log production of mahogany from about 92,000m ³ in 2010 to 11,285 m ³ in 2018?	FHCL had procedural and licensing issues, as expected of all newly established companies. The high value grade 1 logs were exclusively licensed to the company Sustainable Mahogany Industries (SMI) which had very high sawmill inputs to supply their markets and when this company left, there was a period of adjustment to accommodate further licensing changes including costing and changes in management. This is now expected to change positively with new management at the helm.			
	c) Sawmill Production: What is the ideal benchmark for the rate of recovery and what are some of the challenges that sawmills are faced with so that this could be improved?	 The ideal benchmark for the rate of recovery is 50 percent. The sawmill recovery is determined by a number of factors including the sawmill set up and capacity. The following were identified as the major contributing factors to the loss of production recovery. 1. Incompetent sawmill machinery operators; 2. Condition of machines and lack of maintenance knowledge; 3. Sawing defect due to the inexperience of saw doctors; and 4. Some managers are production driven. 5. Log geometry 			
		the provision of training, technical advice and assistance. We have noted huge			

No.	Question		Ministry	of Forest	ry's Res	ponse				
		improvement in sawmill hygiene, Health & Safety and recovery (i.e. Aug 2019 – Jul 2020 Financial Year, recovery – 48% average and Aug 2020 – Jul 2021 Financial Year, recovery – 49% average). Sawmill recovery is calculated based on conversion of logs to sawn timber only as a primary product. Internationally, average recovery of log to sawn timber is 57% on average since converting round logs into rectangular sawn timber results in wastage. Some sawmills maximise use of whole logs by processing waste after sawn timber into shorts for furniture, bark and rounder parts into hog fuel for biomass powered plants, sawdust for farms and bark-less waste into chips.								
6.	Page 15			Aug 16 - Ju	ly 17					
	a) Referring to Graph 7	Species	-	Volu	ne		Value (EID)			
	on Export and Imports.	Species	m3	mt	kg	Pieces	Value (FJD)			
	can the Ministry provide	Austrocalidor	nicum		3000		354,385.80			
	data for export by	Dakua Makad	re 544.881				1,097,394.98			
	species?	Dakua Salusa	lu 271.451				472,010.82			
	species?	Damanu	39.553				76,309.60			
		Fiji Pine	48.697	117,000			16,884,938.54			
		Kaudamu	359.746				586,368.62			
		Kauvula	7.38				15,048.53			
		Mahogany	7208.244				11,638,052.92			
		Mango			3700		25,257.00			
		Mix	18.455			3148	50,616.88			
		Radiata Pine	2.05				3,678.50			
		Raintree	1043.598				1,356,840.13			
		Rosawa	27.618				44,717.21			
		Santalum Yas	i		2071.03		107,252.36			
		Uko	1.512				2,864.40			
		Vesi	5.66				13,584.00			
		Vusavusa	52.928				132,366.90			
		Waciwaci	22.871				49,567.26			
		Yaka	32.08				71,579.51			
		TOTAL	9,686.72	117,000.00	8,771.03	3,148.00	32,982,833.96			

. Question]	Ministry	of Forest	ry's Res	sponse	
				Aug 17 - Ju	ly 19		
			Aug 17 - July 18				
		Species	m3	mt	kg	Pieces	Value (FJD)
		African Tulip	0.148			500	7,200.00
		Austrocalidonicum			135.15		29,519.00
		Coconut	0.059				1,080.00
		Dakua Makadre	242.61				461,930.98
		Dakua Salusalu	276.36				520,834.05
		Damanu	2.574				4,118.40
		Fiji Pine	108.459	231,980			37,335,213.24
		Kaudamu	121.525				217,809.30
		Kauvula	1.936				3,634.40
		Manga	377.914		2564		5,855,274.30
		Mix	27 /20		2004	2172	14,318.00
		Radiata Dine	100 185			5172	245 220 22
		Raintree	2852 225				245,525.55
		Rosawa	30 742				55 649 87
		Santalum Yasi	30.742		1200		14,400.00
		Vesi	16.049				3.116.23
		Vusavusa	9.805				25,645.30
		Waciwaci	28.642				54,419.80
		Yaka	23.305				13,076.57
		TOTAL	4,311.08	231,980.00	3,899.15	3,672.00	48,443,819.01
logging plans?	"(2 The la (a) han (b) (c) (d) to a (e) (3) The i licence a (4) Comp licence".	ogging plan sha specify the anni vesting shall be specify any tree specify any min indicate the layo construct; specify any refo licensing officer t intervals of not	ll: ual cut ar maintain s to be le imum uti out of roo restation may rea contents o	nd any perioned; It in place lizable size ads and ski or other p quire revis n one year of the logg	iodic lim ; es of tim idding tr idding tr sion of t sion of t	its within ber to be ails whic vest oper the loggi shall be	t which the r felled; h the license ations. ing plan rela a condition o
c) Does	the The Minist	rv fully concurs	with the	e Governn	nent's ai	m of red	ucing impor
Ministry have future plans replace impo products with locally avail	to also producer the producer the bur approval by	a. Our strategy n ced and availab nat they cannot the Conservato	ow is for le locally produce or of Fore	r all impor y to submi e before a ests.	rters app it a lette timber	lying for r of con import p	firmation from firmation from from from from from from from from
products and would be strategy?	hat Products th our 1.Pine saw: E.g. 2.Pine post	at we are curren n timber and pro and poles	tly target ofile prod	ting now w lucts	hich are	e readily a	available loc

No.	Question	Ministry of Forestry's Response			
	Increase value added products and reduce sawn timber/exports and at the same time	3. Mahogany sawn timber and profile products4. Veneer5. Plywood and6. Blockboard			
	reduce sawn timber imports by import substitution?	There are other panel products such as hardboard, Masonite board, Chip board, etc. that are also imported but are not produced locally. This will require huge investment and availability of raw materials to consistently produce and supply the markets. Feasibility studies needs to be conducted and the sustainable management of our forest resources will always be priority for the Ministry.			
7.	Page 18 a) Can the Ministry elaborate on the MOUs and its progress?	The MOUs in question are MOUs with the Ministry of Employment, Productivity and Industrial Relations (MEPIR) and Land Transport Authority (LTA). The MOU with MEPIR was signed in 13 December 2018 to strengthen compliance in forest based operations and ensure the health and safety of all workers in the forestry sector. This MOU also requires joint monitoring of harvesting operations and this is done biannually with the Monitoring, Control, Surveillance (MCS) project officers of the Ministry.			
		The MOU with LTA is under review and yet to be finalised with LTA.			
8.	Page 25 Can the Ministry provide the result or progress of the Forestry training school in Nasinu since its inception?	The training had assisted the resource owners and those that requested for government assistance with a programme, Cottage Industry, whereby it provides machines and materials for up to a year for candidates to train themselves and at the same time earn income to buy their own machines until they are well established. Woodcraft Technology also trained candidates that are interested in Furniture and Joinery work. Most of them have been employed in the private and public sector. Also, the Forest Subsidy is utilised for Processing and Woodcraft. For Processing, applicants have been given exemption to buy machineries and start their businesses and Woodcraft applicants have been given small portable machines to start or extend their businesses.			
9.	Page 32 What has been the result of Sentinel plants trial at Kings Wharf? Can the Ministry please provide a brief to the Committee?	 Sentinel plants are defined as plants/potted plants present in the vicinity of high-risk sites such as Ports of Entry. These are inspected at regular intervals for signs and symptoms of pest/disease attack The Forest Health team had set up 5 sentinel plants comprising of the following species along the peripheries of the Kings Wharf: Mahogany Pine Guava Teak Sandalwood. The choice of these species is part of the early detection approach that the Ministry is undertaking to curb the establishment and spread of exotic forest pests and diseases whereby the selected tree species would attract insects and pests that may have gone undetected on cargo vessels and shipping containers. 			

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		 The species chosen are of high economic value to Fiji and which needs to be protected from potential pests and diseases which could wipe out these industries. The type and degree of infestation on the sentinel plants will be indicative of the presence of the exotic species which will warrant a swift eradication response from the Biosecurity Authority of Fiji and the Ministry. The incursion will only be technically feasible if incursion is detected while still contained within a very small area and any delays may be critical in allowing further spread. The presence and spread of the exotic species will have detrimental impacts on the native biodiversity, commercial operations on plantation forests (which make up 12% of our Fiji's Forested area but 90% of revenue from exports), Trade and associated operations i.e. nursery operations, domestic transfer of seedlings as well as adversely impacting on urban streetscapes and gardens. 								
		For the 2017-20 all were showin parts of the so incursions.	For the 2017-2018 fiscal year, there were no detection records from the sentinel plants as all were showing healthy growth. Assessment on the species includes observations on the parts of the seedling and physically detecting symptoms or actual insect/pathogen incursions.							
10.	Can the Ministry please explain more on the minimum felling girth of forest trees?	Forest trees naturally grow to different sizes and the minimum felling girth listed for each species in the Diameter Limit Table (DLT) specifies the minimum sizes that should be extracted. This removes the biggest trees of each species while maintaining the natural biodiversity composition and structure of the native forest. The forest ecosystem services such as water and air purification is also well maintained and there are also more resources such as light, water, and space left for the remaining trees to grow up. These are the next generation trees that can be felled in 20 years' time, so that there is significant wood materials supplied from the native forest in a sustainable manner.								
		DIT 2010		DBH (cm) >	_					
		DL1 2019	(F		-	40				
		95 Ai Masi	05 Aumunu 1	55	45 African Tulin	40 Dahi 2				
		Dakua		Dau		Dubi 2				
		makadre 1	Anita 2	Bauvudi 2	Bati Tabua	Dilo 2				
		Dakua salusalu 1	Bako (all spec) Bo nakavu Bausomi Dogo 3							
		Vuga	Bauloa Buabua 1 Bulu (all spec) a 2							
		V ugu	Baumika	Cibicibi	Cevua 4	Sagali				
			Bausa Dalovoci Doi 3							
		Bausawa Damabi Doidamu								
			Damanu (all * ALL							
			Bo/Boloa	species) 1	Doko ni sau	Others				
			Bosawa Dava Drausasa Corikula Degedege Drautolu							
			LOTIKUIa Degedege Drautolu Daura Division Dulaura							
			Dawa	(K) Didi	Gadoa					
			Duvula	Kaunicina 2	Kadi	1				
			Ivi	Kaunisiga	Kauceuti 2					
			Kabi	Kautoa	Kaudamu (all spec)1					

No.	Question	Ministry of Forestry's Response				
			Kauvula 1	Kuasi 1	Kaukaro	
			Koka 4	Lolo	Kaumakita	
			nonu i	Mako (all species)	Kaumakita	
			Manawi	4	Kaunigai 2	
			Manui	Mala (all spec)	Kavika	
			Manui Mago ni voikau	Maria (all spec)	Lauhu 3	
			Mayo III velkau Marasa	Maxida	Lauci	
			Магаза	Maviua	Lauci	
			(Raintree) 2	Mavota 2	Lidi/Kasiga 4	
			Okeoke	Midra	Macou	
			OREORE	initia	Makosoi (all	
			Sacau 2	Moivi (all spec) 4	spec)	
			Salato	Nokonoko	Mago	
			Sasagilu	Nuga	Mariko	
			Sasaqiiu	Oumu 2	Malaca	
			Sivia	Quinu 5	Molaca	
				ROLO	Masimasi	
			Tabadamu	Rosarosa 2	Molaca	
			Tabulina —	Rosawa 1	Nunu	
			Tarawau	Sa 4	Sama loa	
			Tivi 3	Sarosaro 4	Selavo	
			Tivi vula 3	Sasawira 3	Sole (all spec)	
			Totowiwi	Sikeci	Sorua (all spec)	
			Ucaca	Tavola (all spec) 3	Soso ni ura	
			Vacea	Tomanu	Tadalo	
			Vaivai (all species)	Van anna	Tivi nanna	
			J Voci 1	Valu ceva	Tiri vanua	
			vesi 1	Velau 4	Vaca / Powa (all	
			Vesida	Vesiwai	spec)	
			Waciwaci 2	Vure	Vota	
				Varo	Vutu (all spac) 4	
			Wiriwiri	Vacivaci 2	Vutu (an spec) 4	
			Vala 1	1 asiyasi 5		
			Vaturu			
			Varue			
			rawe			
			K	byalty classes 1 to 4		
		The Ministry is Regulation 198 A standardized the regular fore	s currently implement 5. The regulations sp tree selection accord st harvesting licensing	ting the provisions the cifically prescribed ling to the legally reading preparations.	under the Native L species specific dia quired DLT is offic	and (Forest) ameter limit. cially part of
11.	On the logging of forests - Can the Ministry please identify the reforestation on logged areas done by licensees and contractors?	Any activity of landowners. W confirmed their the respective I the term of the Contractors ass labourers for th	carried out after log hile some opted for intention while appl Beat officers supervis license. sist the licensee thro e tree planting.	gging operations is agriculture use, the ying for the license to ses the harvesting and ough the purchase o	normally determines of that opted for the harvest. The Mini- d reforestation activity f seedlings as we	ned by the reforestation stry through vities during Il as paying

No.	Question	Ministry of Forestry's Response
12.	Landowner Participation – How can the Ministry improve landowner participation in forest business activities?	Through the provision of skills training and capacity building through the Forestry Training Centre and community based trainings on-site. Having resource owners undertake Certificate in Forest management to better understand and contribute to the development of forest resources in their respective communities.
13.	Page 54 - Forest Parks, RecreationRecreationandReservesCan the Ministry please confirm whether Drawa and Abaca are also included as Natural and Forest Reserves?	No, they are not, but both are managed by communities.
14.	Has the Ministry held a symposium for its stakeholders in the timber industry to improve its performance – production, value added and export, and is the Ministry intending holding such a symposium in future?	The Ministry through the Timber Utilisation Research and Training Division monitors the operations of sawmills and treatment plants in the West, North and Central/Eastern Divisions on a quarterly basis. A day is allocated at the end of the monitoring exercise in each division to meet and discuss issues, and how we can improve performance. This is our commitment to improving the efficiency and effectiveness of timber processing and timber use in Fiji, contributing to the sustainable management of the country's forest resources. Additionally, the Ministry provides training to industries in areas such as preservative treatment and timber scaling for quality control, sawmilling for improved recovery and use of waste wood for saleable products.
	FINA	ANCIAL STATEMENTS FOR THE YEAR ENDED 31st JULY 2018
15.	Can the Ministry elaborate on the progress and improvements on the issues raised under the Audited financial statements referring to the Emphasis of Matter?	 The Trade and Manufacturing Account (TMA) operation has continuously operated at a loss as the aging sawmill equipment requires constant repair leading to a low production and escalating maintenance cost over the past 10 years. In line with this it has been recommended to the Ministry of Economy for the closure of the TMA in Financial year 2021-2022. It is also proposed that all the assets and inventory are to be transferred to the operating fund to cater for the division's core functions of assisting resource owners with log sawing service, wood product manufacturing and wood product research and analysis. Revenue generated from these services will then be deposited to the Consolidated Fund Account (CFA). The excess of liability in the balance sheet is due to the deferred income of \$2,198,548.This will be cleared during the closure of accounts, when the bank balance of \$1,428,961 will be transferred to the CFA. The Ministry Drawing account has now been separated.
16.	Referring to the Basis for Qualified Opinion under the Audit Report/Opinion as stipulated in the Ministry's financial	 The Ministry has rectified the balances in the revolving fund account and approval has been sought from the Ministry of Economy for posting of these balances in this financial year 2021 -2022. The Ministry is reconciling the variance between payroll and FMIS on a weekly and fortnightly basis and any variance noted is cleared accordingly. A copy of the reconciliation is submitted to MOE for checking and recording purposes.

No.	Question	Ministry of Forestry's Response
	statement, please provide explanations on the steps the entity has taken to resolve the issues?	 3) The unreconciled variance of \$105,769 has been rectified and posted. 4) This will be cleared during the closure of accounts, when the bank balance of \$1,428,961 will be transferred to CFA account and the difference of \$301,452 will be recognised as operating expenditure for 2018.
17.	During the year reviewed were there any capital works in progress? How much was used? Is the physical progress in accordance with the targets in the project schedule? Did the ministry require additional funding?	 Ongoing Capital Projects were in progress and most of the projects exceeded 60% in actual expenditure at the end of the financial year 2017 – 2018. For the Capital Constructions – Purchasing of Harvesting Machine Project under SEG 9 amounting to \$722,000.00 was not utilised as the company awarded the tender was not able to supply both the machines and the procurement was terminated. Yes Capital Purchases were done in accordance with the procurement regulation and the targets in the project schedule. No additional funding was sought.



Ministry of Forestry Responses to the Standing Committee on Natural Resources

Questions on the Ministry of Forestry's 2018 - 2019 Annual Report

No.	Question	Ministry of Forestry's Response
1.	Can the Ministry clarify the Ministry's role on forest within the buffer zones of the catchment areas?	Under the Fiji Forest Harvesting Code of Practice (FFHCOP), the issue on Buffer zones has been covered. The role of the Ministry is to ensure that all provisions in the FFHCOP are adhered to by logging contractors licensed to carry out forest harvesting operations. The FFHCOP outlines the following:
		• It states that Buffer strips are required for the protection of designated streams and may also be applied to protect special management zones such as protection forests, catchment areas, reserves, historic and archaeological sites and infrastructure for water, sewage, electricity, and telecommunications.
		• Buffer strips should be marked in the field and on the Harvesting Plan. Buffer strips must remain undisturbed except at approved crossing points where clearing widths should be minimised. The minimum widths of buffers are prescribed in the FFHCOP. The widths specified are horizontal distances and must be applied to both sides of the streams. A Forest Practices Officer may prescribe wider buffer widths in a Harvesting Plan where necessary to protect sensitive streams or catchments.
		 The following protection applies to buffers- Trees must not be felled in buffers (except in plantations where planted trees may be harvested providing that debris does not enter streams and disturbance to indigenous trees and understorey is minimised). Trees in forest adjacent to buffers must be directionally felled or retained where necessary to avoid damage to buffers. Machines must not enter any buffer or stream (except at approved crossing points). Skid tracks should be kept at least 40 m away from streams except at approved crossing points. Tree crowns are not to be felled into streams. Debris increases water turbulence resulting in erosion and increased turbidity, which adversely affects water quality and stream biodiversity. Any debris in streams is therefore to be removed immediately, whilst ensuring that machines do not enter the buffer.
		• Floating of logs along rivers/large streams can be carried out only with the written consent of a Forest Practices Officer.

No.	Question	Ministry of Forestry's Response
2.	How does the LOU benefit?	Some of the benefits of having buffer zones maintained are as follows:
	benefit ?	 the tree canopies provide shade to keep the river cool during hot summers. trees act as a barrier to prevent wind-blown agricultural pesticide and herbicide sprays from reaching the river. woody material that falls in the river has multiple benefits: scour pools, trapping sediment, food and habitat for invertebrates, increased channel roughness to slow the flow. buffers improve water quality by creating a physical barrier of rough vegetation that slows the flow of overland runoff and increases infiltration into the soil, helping to trap and retain pollutants before they reach the watercourse. increased infiltration of water through the diverse root systems within the buffer zone reduces the amount and rate at which heavy rain reaches the river. Prevents soil erosion and sedimentation of rivers and streams which can affect fish and prawn sources for LoUs Buffers also protect water quality by stabilising the banks of the stream, which helps secure sediments and decrease turbidity. When natural vegetation buffers around streams are removed, erosion occurs. Stream erosion is problematic for many reasons, erosion causes sedimentation and siltation downstream, erosion degrades wildlife habitat, and eroded banks are unable to control flooding.
3.	Gender Composition of the	The Ministry workforce strength was 242 employees which included established, wage earning and project employees. Of this 28.10% were women and 71.9% were
	Ministry staff Can the Ministry provide an update on the Gender Composition of Ministry staff for the year under review, by providing percentage of women in leadership and women in forest technical fields?	male. MOF Workforce
		From Principal Officer/Manager level (Band H and above) there were 7 women out of 19 employees in this group which is 37%.

No.	Question		Ministr	y of Forestry	's Respons	e		
		Fron in th	From Director level (Band J) and above there were 4 women out of the 12 employees in this group which is 33%.					
		Wor Out tech	nen in Forestry Technical of the 242 employees in the nical work. Of this 15.70% y	fields ne Ministry th were women, c	ere were 1 or 38 out of	61 employe 161 employ	ees in for yees.	estry
4.	Page 5 Can the Ministry provide an explanation to the continuous reduction of the GDP from 1.9% to 1.4% under the Forestry Sector Contribution?	The and I This 2018 facto Prod than costs ecos carbo	contributing factor to the re- ogging industry which fell f is due to the reduction in lo agh mahogany has begun t 3-2019 financial year, nativ- ors such as access to native f uction from native forests i production from plantation s. Also the opportunities that ystem services, and for ca on trading, will impact the p	duction in con rom \$43.4 mill g production o o recover and re log production orests and the s expected to forests as pla come with co rbon sequestra roduction volu	tribution to lion in 2015 of native and increase in ion continu high cost of continue to ntation for nserving th ation and in ume from na	GDP is fro to \$26.1 m d mahogany ts production to decline to decline or ests have lo e natural fo ncentives to ative forests	m the for illion in 2 v tree spector on again e due to r g operation will be la ower oper- rests for the hrough for s.	restry 2018. cies. from many n. ower ation petter uture
5.	5. Page 6 The report only highlights export details. Can the Ministry please		exports figures provided are stics. Using the same Harm d products are as follows:	e extracts from onised System	n the data s n (HS) class	upplied by sification, t	Fiji Burea he import	au of ts for
	provide details on the		Imports o	f Wood Produ	icts 2015-2	018		
	imports as well for		Products	2015	2016	2017	2018	
	the year under				/alue FJ\$ I	Million		
	eview?		Wood & articles of wood	22.84	53.29	30.15	28.76	_
	D 15		Source: FBOS					
0.	a) National Plywood Standard – Can the Ministry provide the Committee with a copy of the feasibility study for processing local plywood and its outcome?	The Stan Mini proc	The major outcome of the feasibility study was to adopt the Australian Plywood Standard which is currently used by our plywood local manufacturers as a guideline. Ministry of Commerce Industry Trade and Tourism is currently overseeing the process of adopting the Australian standards. Copy of the feasibility study report is attached as Annex 1.					

No.	Question	Ministry of Forestry's Response
	b) Can the Ministry provide the committee with	The Ministry currently uses the Timber Export Procedures and the Timber Import Guideline when undertaking inspection of timber export and import respectively.
	a copy of the Timber Export	Copy of guideline is attached as Annex 2.
	and Import Guideline?	The information from the guideline are also incorporated in the Ministry's "Forestry Business Guide" which are updated and printed on an annual basis.
	c) Can the Ministry explain on how successful is the implementation	The Ministry continues to implement the components of the Fiji Forest Policy 2007 through the implementation of its 13 year Strategic Development Plan and Annual Operational Plans.
	of the Fiji Forest Policy 2007?	The review of the Forest Act 1992 and relevant regulations will also enable the full implementation of the Policy which are currently limited.
		The Policy promotes the shift to a sustainable forest management regime which is what the Ministry aspires to on a daily basis with its vision and mission statements. (Vision: Sustainable Forests, Our Future; Mission: To be a leader in sustainable forestry).
		The last audit of the 2007 Forest Policy was carried out in 2019. 77% of the recommendations have been implemented/partially implemented and the Ministry continues to work towards addressing the recommendations provided as the result of the Audit.
7.	Page 32The Ministry toplease clarify theoutcome of thebenefitsharing	The development a Benefit Sharing Mechanism (BSM) is a mandatory requirement of all REDD+ country participants that are engaged in REDD+ and wish to enter into carbon trade with the Carbon Fund of the Forest Carbon Partnership Facility (FCPF).
	mechanisms of REDD PLUS workshops.	The BSM study recognizes the need for a robust and legally based mechanism to guide the fair share and equitable distribution of carbon (result-based) payments to all beneficiaries, based on Fiji's existing tenure system and customary owned land. The BSM is an Annex to the Emission Reduction Program Document that was accepted by the FCPF in July 2019 and allowed Fiji (Government) to enter into a carbon trade agreement with the FCPF-Carbon Fund.
		The Emission Reduction Payment Agreement (ERPA) or carbon trade agreement document has made the development of a Benefit Sharing Plan as one of two conditions of effectiveness under Schedule 1 of the agreement.
		In 2020, a Benefit Sharing Plan (BSP) was developed and has been cleared by the FCPF-Carbon Fund. The BSP is now being presented to Cabinet for endorsement and adoption.
	FINANC	IAL STATEMENTS FOR THE YEAR ENDED 31st JULY 2019
8.	Page 42-43 Referring to the Basis for Qualified	The Ministry has rectified and cleared the following basis of Qualified opinion:

No.	Question	Ministry of Forestry's Response
	Opinion under the Audit Report/Opinion as stipulated in the	1. The Ministry has rectified the balances in the revolving fund account, and approval was sought from the Ministry of Economy for posting of these balances within this financial year.
	Ministry's financial statement, please	2. The variance in payroll has been rectified and the Ministry is submitting its variance report on a monthly basis to the Ministry of Economy with adjustments.
	on the steps the entity has taken to	3. The Ministry has implemented the Timber Revenue System (TRS) database to reconcile the General ledger with timber revenue statements and any variance is
	qualified issues raised?	4. The Accounts receivables of \$677,339 for Operations is now resolved.
		5. The unreconciled variance in TMA cash at bank has been resolved
		6. The excess of liability in the balance sheet is due to the deferred Income of \$2,198,548. This will be cleared during the closure of accounts, when the bank balance of \$1,428,961 will be transferred to CFA account.
		7. The TMA operation has continuously operated as a loss as the aging sawmill equipment requires constant repair leading to a low production and escalating maintenance cost over the past 10 years. In line with this it is recommended to Ministry of Economy for the closure of TMA in Financial year 2021-2022. It is also proposed that all the assets and inventory are to be transferred to operating fund 1 to cater for the division's core functions of providing services and assistance to resource owners for log sawing, wood product manufacturing and wood product research and analysis. Revenue generated from these services will be deposited to the consolidated fund account.
		8. The accounts receivable of \$73,857 for TMA account has been resolved.
9.	Can the Ministry elaborate on the progress and improvements on the issues raised under the Audited financial statements referring to the Emphasis of Matter?	The TMA operation has continuously operated at a loss as the aging sawmill equipment requires constant repair leading to low production and escalating maintenance costs over the past 10 years. In line with this it has been recommended to the Ministry of Economy for the closure of TMA in Financial year 2021-2022.
10.	On the Other Matter as stipulated in the Auditor General's	• The Ministry has improved its compliance with the requirements stipulated in the Ministry's Finance Manual.
	opinion there were non-compliance with the requirements of the Finance Manual, how has the Ministry resolved and improved this issue?	• The Ministry has been providing training to officers on the importance of compliance to the Finance Manual and procurement guidelines. Awareness is conducted for FMIS users and Payroll users for accurate posting in General ledgers, proper recording of revenue in the TRS database and proper record keeping so that complete and accurate information is available for management decision making.

No.	Question	Ministry of Forestry's Response
		• The Ministry has also developed standard operating procedures that outline the step-by-step processes that must be taken to properly perform an activity.
		• Internal control is implemented by the Ministry to ensure the integrity of financial and accounting information and reports are submitted monthly.
		• Internal audit of the Ministry's divisional work units is conducted on a quarterly basis to ensure compliance with the Finance Manual and accurate and timely financial reporting. This helps to maintain operational efficiency by identifying problems and correcting lapses.

FEASIBILITY STUDY on

DEVELOPMENT OF

NATIONAL PLYWOOD STANDARD

in FIJI

Prepared by: Maika Tabukovu, 2019

Executive Summary

- This report was facilitated by the Nasinu Utilization Division under the Ministry of Forests to carry-out a study on the current performance of EWPAA plywood standard and the need for Fiji to develop its' own "National Plywood Standard";
- The Engineered Wood Products Association of Australia" (EWPAA) plywood standard has been voluntary used in Fiji for the past three decades by the local plywood manufacturers resulting in Fijian plywood and other wood products (Fijian hardwoods) being well received in the international market. Therefore, urgent action needed in regulating the standard as more imported plywood entering the country and the quality is questionable;
- Increased in housing demand locally in the past three years has resulted in the sharp increase in plywood demand. Local plywood manufacturers cannot cope with the demand, forcing retailers and individuals to import plywood. There were only 10 importers in 2010 and by 2018, it reaches 102 importers (retailers and individuals) with China and New Zealand were the main importing countries. The volume imported in 2010 was 139 m³ and in 2018 was 10 343 m³;
- Manufacturers are now tree-oriented than product-oriented due to the depleting forest resource needed to manufacture plywood. They are now heavily investing on value-adding machineries to maximize the use of veneer sheets. In doing so; their plywood products are not qualified for EWPAA standard. They are very much interested in a "National Plywood Standard" and the EWPAA staffs in Australia are willing to assist in establishing a local standard;
- Fiji is losing lucrative plywood markets in Australia and New Zealand and the government and local manufacturers' needs to work together in trying to strengthen the export of the commodity, contributing to foreign earnings. Exported plywood value in the past 8 years was FJD8.7 million compared to import value of FJD28 million. Fiji is losing its' revenue and receiving poor quality plywood in return;
- Plywood is an engineered wood product with stability, high impact resistance and high strength and cost effective when used in structural application. Allowing low grade plywood into the country can jeopardize both the plywood industry and the housing industry.
- Currently, there are gaps in the local plywood industry. The government (Ministry of Forests) should provide capacity building to staffs to be specialized in plywood manufacturing processes including testing, monitoring and recording of local species suitable for the product. Also, plywood testing facilities to be available in the ministry to test both local and imported plywood whether they are meeting the required standard recommended by the ministry. EWPAA staffs could assists in the establishment of the facilities and learn staffs.

Acronym

AS/NZS 2270	Australian/New Zealand Standards 2270
AS/NZS 2271	Australian/New Zealand Standards 2271
EWPAA	Engineered Wood Products Associations of Australia
FFI	Fiji Forest Industry Limited
MITT	Ministry of Industry, Trade and Tourism
VTBL	Valebasoga Tropikboard Limited

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1.0 Introduction

The Fiji Forest Policy 2007 (Goal 4.3) stated that, the Government (Ministry of Forests) will review the current export and import procedures to strengthen biosecurity control in compliance to domestic and international standards¹. The policy also stated that, the government will work with forest industries to improve coordination of planning, development, and optimization of the wood flow from the forest to the export markets, and on expansion, upgrading of harvesting and production facilities and marketing². The housing boom in Fiji in the past four years has forced a huge decline in plywood export from and sharp increase in imported plywood.

The Ministry of Forests is concerned with the quality of imported plywood entering the markets has resulted in an urgent need to review the plywood standard for the country. Currently, local plywood manufacturers are processing plywood using the Australian/New Zealand Standards (AS/NZS 2270 and AS/NZS 2271) and the regulator is the EWPAA. This standard has produced positive impact to both export and local markets with satisfactory quality plywood products.

The plywood industry has been exporting in the past three decades and contributed a lot in the economic development maximizing the utilization of native logs especially in Vanua Levu where three plywood mills are located and one in Viti Levu. These mills are producing interior, exterior and marine plywood both to local and international markets. In the past three years the demand for plywood has increased dramatically in the local market with imported plywood reaching Ministry of Forests is concerned with the quality of the plywood being supplied in the local market from local manufacturers and imported plywood.

Currently, there is no plywood standard being legally adopted in the country; and was hired (as a consultant) to carry out a feasibility study to develop a National Plywood Standard.

The assignment is intended to focus on key areas:³

- Assess and analyse the need to develop a local standard for the manufacturing of plywood;
- Evaluate stakeholder views and needs in regards to certification of plywood;
- On the basis of the above findings, determine future trends, identify gaps and suggest how these could be effectively dealt with;
- Develop, compile and submit a report to the Ministry of Forests.

¹ Fiji Forest Policy 2007 Summary ...page 22

² Fiji Forest Policy Summary Goal 4.1 (Action)...page 22

³ Term of Reference ...page 2

2.0 Fiji Forest Industry

The strategic goal of the forest sector is sustainable management and development of forest resources. It will support export earnings, investment for jobs and growth. The involvement of rural indigenous community in the sector will reduce poverty and urban migration. The economic future of Fiji's forest sector is bright. Fiji is blessed with a large indigenous or natural forest cover totaling approximately 956 860 hectares.



in the last seven years (See Figure 1). However, this contribution can change should the focus shifts to maximize harvested logs targeting veneer and value addition products. There is tremendous growth in the Fiji forest product industry for the past decade due to the pine and mahogany industry. Fijian native species contributed a lot to the

growth due to their recognition in the international market in the form of lumber; veneer and plywood (See Figure 2).

Softwood plantations, mainly of pine (*Pinus caribaea*), representing 2.5 percent (46 379 hectares) of the land area, have been established on the leeward and grasslands areas and there is



great potential for further plantation expansion. Hardwood plantations of mainly mahogany (Swietania macrophylla), representing 2.9 percent of the land area, have been established on logged over rainforests, mainly on the eastern and central parts of the larger islands. The estimate is based on the

anticipated increase in production of indigenous and pine logs as well as harvesting of mahogany

plantations. At present, wood products ranks as Fiji's fifth most important domestic export community after sugar, fish, mineral water and garments.

Earnings from forestry products are greatly influenced by the price of exports and weather patterns. Fiji has been self-sufficient in most timber products through utilization of its natural forests and plantation resources for more than ten years. The outlook, however, continues to be



heavily reliant on the commencement of large-scale utilization of Fiji's mahogany plantation resource (See Figure 3). Fiji has extensive coconut palm plantations and more than 30 years of experience in processing and utilizing coconut palm

wood from over- aged palms as other forestry resources.

2.1 Resource Availability

The national annual natural forest log production is strongly moving away from the natural forest towards pine and mahogany plantations. The production log average from 2007-2016 stands for 48 782m³ (native forests), 318 706 m³ (Caribbean pine) and 60 762 m³ (mahogany) (See Appendix 1) There are four (excluding FFI) veneer mills operating in Fiji where three located in Vanua Levu_(Northern Division) and one in Viti Levu. Sixty Five percent (65%) of the annual



native log production comes from Northern Division, (a reflection of demand of the number of veneer and plywood mills), followed by Central/Eastern division (27%) and Western Division (8%) (See Figure 4). Ten major native species were extracted namely; Kaudamu (*Myristica_castaneifolia*) (26%), Damanu (*Calophyllum vitiense*) (12%), DakuaMakadre (*Agathis macrophylla*) (11%), Kauvula (*Endospermum macrophyllum*) (10%),

DakuaSalusalu (*Retrophyllum_vitiense*) (5%), Kaunicina (*Canariumharveyi*) (5%), Vesi (*Intsiabijuga*) (3%), Yasiyasi ((3%), Waciwaci/Anita (2%) and other Mixed Light Hardwoods (8%) (See Appendix 2)

3.0 Stakeholder Consultation

The main condition of this assignment is to undertake consultation with key stakeholders in the



industry, government ministries and other relevant partners⁴ (See Figure 5), and the list of participants (See Appendix 3). These key stakeholders play vital role in the success of the plywood industry in Fiji serving both local and international markets. FFI has closed, which started manufacturing plywood in the early 70s, paving the way for new players to contribute in the industry today.

Government

Ministry of Forests: Timber Utilization Division in Nasinu under the Ministry of Forests staffs is undertaking the following:

- Monitoring and inspecting the plywood standard both export and import following the EWPAA standard⁵, which is voluntary and NOT regulated in Fiji for the past three decades;
- Ministry forestry staffs are facing difficulties in justifying their decisions with regards to the quality of imported plywood due to no proper standard being enforced;
- Liaising closely with EWPAA staffs in Australian regarding the plywood activities and developments with regards to the standards;
- The Division inspects imported plywood whether meeting the Fiji Building Code and attend plywood complaints when needed;
- The Division will need facilities locally to test and monitor the quality of plywood —if there is a need to "develop a national plywood standard";
- Further training needed for local staffs in testing and monitoring plywood in developing local plywood standard.

Ministry of Industry, Trade and Tourism: The Ministry of Industrial Trade's interest regarding the Adaption of Standard for Marine Plywood in Fiji⁶. Fiji needs to gazette the "Australian Standard/EWPAA) which is voluntary used in the past three decades. According to Ajeshni⁷, the process is, a request letter from Permanent Secretary Forestry to the Permanent Secretary of Ministry of Industry, Trade and Tourism for the adoption of EWPAA standard in

⁴ Terms of Reference,... page 2.

⁵ The Timber Utilization Division, Department of Forestry and Sawmillers' Association (1989). A Guide to the Specification of Local Timbers for Building Applications...page 24

⁶ Memorandum dated...

⁷ MITT Standard Officer, 2019

Fiji. The Ministry of Forests will be the REGULATOR as required of the "standard" to be implemented.

Statutory Body

Consumer Council: According to Seema⁸, most of the complaints from customers; is whether the plywood is meeting the local plywood standard and if there is a standard? If there is no standard, then Fiji needs to establish a plywood standard. The natures of the complaints are listed

Box 1: Natures of complaints

- Ply board has become wary;
- Fungus visible on ply board purchased from respondent even after it was painted;
- Bubble formation noted on board when it was delivered;
- Complaint of defective ply board supplied by respondent;
- Mold developing on ply board, the Ministry has inspected and refund has been agreed but not issued yet;
- Complaint that respondent supplied exterior ply instead of interior ply
- Complaint that white ants appearing on the ply board every morning
- Poor quality ply board supplied to complainant, different from what was shown to him at the shop;
- Ply board has become infested with worms;
- Complaint that marine ply wood was not supplied as requested;
- Complaint that ply wood supplied started to rot after 6 months.

complaints and compensation (See Table 1).

Table 1: Monetary value on registered complaint	omplaints	registered	e on	value	Monetary	1:	Table
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Voor	No. of registered complaints					
rear	ADR (all modes)	ADR (NCH)	TOTAL	Monetary Value		
2015	0	n/a	0	\$-		
2016	1	0	1	\$ 800.00		
2017	4	2	6	\$ 8,621.79		
2018	6	3	9	\$ 8,953.45		
2019	1	2	3	\$ 932.50		
TOTAL	12	7	19	\$ 19,307.74		

Source: Consumer Council data, 2019.

Accredited Institution EWPAA/Australian and New Zealand Standard

EWPAA CEO: Dave Gover of EWPAA Standard Australian Office stated that;

• Fiji needs to urgently adopt the Australian standard and already there was an agreement between Australian government and Fiji government to adopt the standard;

in (Box 1). The Council suggested that to reduce complaints on plywood then; the plywood industry should have standard at all levels; manufacturers, transport, retailers and final consumers. There is a need of thorough inspection of imported plywood into the country to reduce

⁸ CEO Consumer council, 2019

- The way the products are used in Fiji is different in Australia and New Zealand. For example, interior plywood is used in the furniture markets in Fiji. In Australia, the product is used as interior wall which is *then* coated with decorative wall papers therefore; the beautiful natural colour of the plywood is not seen;
- The Australian plywood standard does not fit well in the Fijian market. For example, the structural plywood grade has a different application in Australian and no structural grade in Fiji;
- Fiji needs to put together a "Local Plywood Standard" based on common uses of plywood in the country which also suit Fijian manufacturers and forest resources.
- EWPPA can support the Manufacturers, Government (Ministry of Forests) and Consumer Council in determining whether plywood conforms to a standard that works for Fiji;
- Visual grading rule is unreasonably restricted and needed some flexibility. Fiji should adopt a local grade like:
 - Painted grade (low durability glue line)
 - Clear grade
 - Utility grade (low grades)
 - Marine grade (Fiji could come up with a name).
- Fiji needs to setup facilities for plywood testing and monitoring the quality of plywood used in the local market.
- EWPAA staffs could assists in setting up the facilities and train local staffs.

Plywood Manufacturers

There are three plywood mills operating in Vanua Levu, which include VTBL, Long Investment, Taiwan Timber and one in Viti Levu (Plywood Fiji). They suggest the following:

- They will still use the EWPAA standard but, the fall-down veneer grades to be utilized using a "Local Plywood Standard Grade". This will maximized the use of raw materials as most logs entering the mills are from 2nd and 3rd rotation forests having small diameters;
- Training on plywood standard processes to be strengthen by the Ministry of Forests;
- VTBL commented that, it is very expensive to be a member of EWPAA with a total fee of FJD15 000 annually and no longer using the standard. They are using their own standard and supplying the local market;
- High plywood demand in the local market and they are concerned regarding illegal and cheaper plywood entering the country;
- They support the idea of forming the "Fiji Plywood Association", to bring together all the partners in the plywood industry and discuss issues and the future of the industry.

Retailers

The retailers in all the three Divisions (Norther, Western and Central) almost having similar issues regarding plywood sales in the country which include the following:

- They are all importing plywood because the local plywood demand is very high and local manufacturers unable to supply;
- Training/awareness needed for final consumers where to use different plywood grades. For example, some customers are using interior plywood grade in areas where exterior plywood to be used; and after a year or two, the plywood is damaged;
- Recently, increased number of complaints are coming from customers, and they believe that one of the reasons is the processing time for plywood being manufactured is not followed;
- Support for a "National Plywood Standard" but proper consultation and processes needed to be carried out in adopting a local standard.

4.0 Plywood Market

The Plywood market in Fiji is witnessing a substantial growth in the past 10 years. This is due to growing demand from housing market and retail sector forcing the export volume to fall dramatically resulting to reduced foreign earnings (see figure 5). Already, the local manufacturers are unable to meet the local demand and retailers have to import plywood products from abroad (See figure 6). The current boom in the housing market will drive the demand of plywood and increasing benefits of plywood over traditional materials such as metal and plastic are expected to fuel the growth of plywood market in upcoming years. The closure of Fiji Forest Industry⁹ complex in Vanua Levu will force the price of plywood to increase due to high demand and shortage of supply. This will no



doubt hampered the market growth of plywood as consumers' looks for substituted product like masonite, chipboard, particleboard, etc.. Application of plywood includes building & construction industry, housing market, marine industry, interior design industry, and furniture industry. These wide range applications of plywood and its byproducts are expected to amplify growth of plywood industry in upcoming years. This should provide some insights and challenges to both the government and private sector in reviewing the manufacturing of plywood

⁹ Fiji Forest Industry Limited was a major producer of plywood in the country and the Pacific Region.

in the country in trying to fulfill both local and international demand. The current manufacturing standard in Fiji is following the Australian and New Zealand Standard (EWPAA). The standard allows Fiji to export plywood internationally, and the product is well received by international consumers.

4.1 Technical Feasibility

4.1.1 Benefits

Plywood is an engineered sheet timber product that is widely used for construction purpose in Fiji due to its' properties like:¹⁰

- *Increased Stability:* plywood offers all the advantages of the parent wood plus has additional strength and stability because of its laminated structure;
- *High Impact Resistance*: has high tensile strength, derived from the cross lamination of panels. This distributes force over a larger area and reduces tensile stress. Therefore able to withstand overloading by up to twice its designated load;
- *High Strength:* combines the structural strength of the timber from which it is manufactured. This is in addition to the plywood properties obtained from its laminated design. Cross-graining allows the plywood sheets to resist splitting and provides uniform plywood strength for increased stability. It is cost effective when used in structural applications such as flooring, formwork, shear walls, etc..

4.1.2 Resource Requirements

Currently, the forest resources in Vanua Levu is depleting mainly due to the two plywood mills operating in the past few decades resulting, to small diameter logs entering the mill. Years have passed and so has the giant trees, and the forest resource is changing. There are certain inherent advantages in utilizing small logs which include; uniform in form and have other homogenous physical characteristics and readily available. The disadvantage is the mill becomes increasingly volume sensitive as the diameter shrinks.

Therefore, effective utilization and accurate measurement of the log—and a carefully negotiated price based on these two considerations—are essential for survival. Logs entering the mill will be manufactured into variety of products, and products chosen are those that yield most profitable return. Plywood manufacturers must no longer think as a singular-product converter but will manufacture any product that will provide the highest net return from the log. The manufacturers are becoming tree-oriented rather than product-oriented.

This is evidently, witnessed in Valebasoga plywood mill operations. The company is investing in veneer mill machineries to increase recovery like a modern lathe that produce very small diameter core material. Fall-down veneer materials in *photo 1*, are stitched together using machines in *photo 2*, and *photo 3* shows the stitched veneer sheets ready to be used. *Photo 4* shows laminated blockboard using wood residues in the mill.

¹⁰ EWPAA-Facts about Plywood & LVL


Source: photo taken during the consultation

This proven, that materials that are not qualified for EWPAA standard manufactured at local level will need to adopt a local "National Plywood Standard".

Table 2, shows the quantity (volume in m³) of different species consumed in the veneer/plywood mills in the past five years (2014-2018), pine (25%), Kaudamu (17%), Mixed Light Hardwoods (9%), others (2% or less) and native species (32%). It is important that the ministry identifies all the individual native species that makes up 32% of native species as shown from 2014-2015. This will assists in the Ministry's decision-making on the types of native species to be recommended for afforestation and reforestation. Also, mahogany should be playing a vital role in the production of both veneer and plywood materials as mahogany plantations now ready for harvesting especially in Vanua Levu.

Species	2014	2015	2016	2017	2018	Total	%
Anita	410	300				710	0.4%
Bauvudi	945	1481	1397			3823	2.3%
Dakua Makadre	1437	290	803			2530	1.5%
Damanu	1368	951	1038			3357	2.0%
Kaudamu	9393	7676	10914	785	700	29468	17.4%
Kaunicina	839	275	1255			2369	1.4%
Kauvula	664	1234	605			2503	1.5%
Mahogany	18	211	208			437	0.3%
Makosoi	886	364				1250	0.7%
Malawaci	272	457	84			813	0.5%
Mixed Light Hardwoods	1668	248	10541	2558		15015	8.9%
Pine	6977	4581	5603	12577	12829	42567	25.2%
Tarawau	153	178	58			389	0.2%
Tivi	54	148	18			220	0.1%
Uko	142	9	41			192	0.1%
Vaivai ni Veikau	96	22				118	0.1%
Vusavusa	1360	1909	475	51		3795	2.2%
Waciwaci	1173	1501	1781			4455	2.6%
Yaka	31	70	34			135	0.1%
Raintree	29					29	0.0%
Native			5502	22151	27175	54828	32.4%
Total	27915	21905	40357	38122	40704	169003	

 Table 2: Veneer/Plywood Log Production in m³ (period 2014-2018)

Source: Ministry of Forests/Utilization Division, 2018

4.1.3 Regulatory requirements

Tariffs and Licenses

There are licenses requirements for imported plywood into the country but no standard adopted for imported plywood to meet.

• Import tariff for plywood is around 32 percent depends on the sizes and whether the product is manufactured in Fiji. (*see: <u>https://www.frcs.org.fj/wp-</u>content/uploads/2012/11/HS-2012-Tariff.pdf, chapter 44*)

Ministry of Forests Requirements

All imported/exported plywood is inspected by the Ministry of Forests officials to ensure it is free of insects and terminates with the assistance of Biosecurity Fiji Officers.

Fiji Building Code

The plywood industry should work in line with the Fiji Building Code in identifying where the material is used meeting the required standards of the code.

4.1.4 Expertise

- Local plywood experts needed as Fiji relay heavily on EWPAA personal for sample testing and monitoring of plywood quality. The Ministry of Forests will also need facilities to test the quality of plywood entering our shores whether meeting a recommended standard like EWPAA standard.
- Currently, less qualified personal to enforce the plywood standards and an urgent need for local forestry staffs to undertake further training in the plywood field overseas to assist the industry in a long term. Also, the industry is growing rapidly and more emphasis on the quality of plywood used in the building industry.

4.1.5 Outcomes

- An urgent need to gazette the EWPAA standard so that it is legally adopted by Fiji. This allows the Ministry of Forests to have legal power in enforcing the plywood standard to any plywood trader exporting and importing plywood. Any plywood trader not meeting the standard should not be allowed to trade plywood to and from Fiji. There is already an agreement between the Australian Government and Fiji Government to use the EWPAA standard. The Ministry of Industry, Trade and Tourism is willing to facilitate the formulation of the standard with the Ministry of Forests to be the REGULATOR;
- Formulation of a local "National Plywood Standard" as the forest resource in Fiji is changing. This will depend entirely between the Ministry of Forests, Plywood Industry in Fiji (Manufacturers) and the Fiji Building Code authorities by:
 - 1. Studying at how products are used and what performance is needed from them. For example, external cladding need to have adequate glue bond durability, durability of the wood, structural performance, and visual quality;
 - 2. In writing the standard; should include how performance is able to be assessed (allowable glue types, bond test, preservative treatment. etc.);
 - 3. Include reference from the Fijian Building Standard to the Local Plywood Standard;
 - 4. Setup a process for independent verification of performance (EWPAA could be part of this activity);
 - 5. Promote to the building products supply chain and community generally.
- Capacity Building
 - *Human Resource capacity*: a need to training local Forestry Staffs on plywood standard processes;
 - *Institutional capacity:* plywood testing facilities should be available in Nasinu Utilization Division as more and more plywood now imported into the country
 - *Technical capacity:* software to be available in monitoring the plywood standard during adoption
 - *Financial capacity:* the plywood industry and the government should financially support the adoption of both the EWPAA and Local Plywood Standard;

• Formation of the Fiji Plywood Association as an avenue where all plywood stakeholders meet and discuss issues in relation to plywood in the country.

4.2 Market Feasibility

4.2.1 Market

Export markets. Australian (52%) and New Zealand (27%) markets are the main importer of Fiji plywood in the past 10 years (See Figure 6). Other countries include Kiribati (19%), Cook Islands (1%) and Others (Dominican Republic and Christmas Island) (1%). Since, Australia and New Zealand our major business partners; the export volume of plywood has dramatically reduced in the past 8 years from 581 m³ (2010) to 13 m³ (2018) and reduction in value from

FJD1.7 million to FJD38 thousand respectively (see table 3). Total export for the past 8 years amounted to FJD8.7 million compared to FJD28 million worth of imported plywood products.

*Australian market*¹¹ is the best market for Fiji plywood with a population of around 25 million (2017) and GDP per capita is USD 53,799.94 (2017) with a population



growth of 1.23 percent. Fiji plywood could serve only the five major cities; Sydney, Melbourne, Brisbane, Perth and Adelaide. Main plywood grade exported to Australia are exterior plywood (51%), marine plywood (27%) and interior plywood (22%). Major plywood exporters to Australia (period 2010-2018) were Valebasoga Tropikboard Limited (70%), Fiji Forest Industries (20%), Long Investment (9%) and Stud is (2%) (See Appendix 4). Today, Valebasoga is no longer exporting plywood to Australia and Fiji Forest Industries had been closed from operating. This leaves the small plywood manufacturers to meet the demand from overseas markets.

Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Australia	581.157	494.038	265.163	275.784	163.561	150.287	151.192	86.747	12.521	2180.45
New Zealand	164.337	221.319	185.599	120	134.01	191.835	81.187	58.702	0	1156.523
Kiribati	82.024	195.817	213.696	59.156	41.720	81.463	68.924	43.035	5.184	791.019
Cook Islands	24.647	16.516			1.728					42.891
Others	28.088		0.357	3.14						31.585
Total										
Volume/m ³	880.253	927.69	664.815	457.614	341.019	423.585	301.303	188.484	17.705	4202.468

Table 3: Plywood Destination in m³ (period 2010-2018)

¹¹ <u>https://www.google.com/search?rlz=1C1GCEU_enFJ851FJ851&ei=mFkQXYOiPM-</u> <u>2rQGpi78o&q=australian+economy</u>

Total Value										
(FJD)	1,619,581	2,038,576	1,446,212	779,546	805,447	917,687	659,145	372,300	37,760	8,676,253

*New Zealand market*¹², is familiar with the Fijian hardwoods, GDP per capita is USD42, 940.58 with population growth of 2.1 percent. Fijian plywood exporters could concentrate on the six main cities of Auckland, Wellington, Christchurch, Dunedin, Hamilton and Tauranga. The plywood export volume was 164 m³ (2010) and reduced to nil in 2018. There is a need to increase the volume to these lucrative plywood markets. Exporters to the New Zealand markets include: Valebasoga (64%), Fiji Forest Industries (29%) and Long Investment (7%) and the plywood grades are interior plywood (66%), marine plywood 22% and exterior plywood 12% (See Appendix 5).

Other markets, include the Pacific Islands member countries of Kiribati (791 m³), Cook Islands (43 m³) Dominican Republic (28 m³) and Christmas Island (3.5 m³). Fijis' geographical location



serves as an advantage in serving the region with plywood and other products. Exporters to these small island nations mainly the main retailers in the country which include; Vinod Patel and Company, R.C. Manubai, Kasabia, Carpenters Hardware Limited, etc..

The forecasted trend of export plywood indicated that there will be no more plywood export at the end of 2019 (See Figure 7). R^2 is 92% which shows, there is a relationship between the coming years and the volume of plywood exported. This gives a challenge to government and manufacturers to work together and change the current trend. Promoting more export plywood for foreign earnings contribution to the nation.

Local Market

Plywood is an extremely versatile product and used for a wide range of structural, interior and exterior applications in Fiji. The booming housing market has resulted in increased plywood demand locally. Local plywood manufactures are unable to meet the local demand forcing

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https://www.google.com/search?q=new+zealand+demographics+2019&oq=new+zealand+demographic &aqs=chrome.

retailers and individuals to buy from overseas suppliers. The advantages of plywood in the local market are:

- High uniform strengthen of the board due to cross grains of wood laminated together;
- Free from shrinking, swelling and warping compared to solid woods;
- Non-split qualities as solid wood splits fairly readily along the grain;
- Economical and effective utilization of wood where 1 m3 of wood can produce 50-100 sheets of veneer;
- Maximum utilization of wood.

4.2.2 Customers

Table 4, are list of customers commonly use plywood in the country.

Table 4: List of customers	s using plywood	products
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	Customers	Description ¹³	Comments
1	Furniture makers	 Interior Plywood Manufactured to AS 2270- 1979 and intended for use in non-structural interior application where a high quality aesthetic finish is required. The plywood could be used in internal wall paneling furniture and fitments, interior door skins and ceiling linings. 	 Interior plywood must not be used in exposed, wet or damp conditions. Bond is type C and not durable under full exposure to weather or wet or damp environment bond is fully protected interior non-structural environments
2	Exterior	 Exterior Plywood Manufactured to AS 2271—1979 and intended for use in non-structural, exterior application where a high quality aesthetic finish is required. The plywood can be used in exterior door skins, hoarding, signs and non-structural claddings 	 Bond is Type A (phenol formaldehyde) and specified for applications involving long-term full exposure. all permanently exposed type A bonded exterior plywood should be treated against fungi attack and the surface should be finished with paint or water repellents to minimize mechanical surface checking.
	Boat Makers	Marine Plywood	Permanent Type A Phenolic bond and is manufactured

¹³ A Guide to the Specification of Local Timbers for Building Applications, page 25 and 26

3	 Manufactured to AS/NZS 2272 Plywood-Marine Plywood can be used in hull of boats and other marine application and also in aircraft construction 	from selected species based on density, bending strength, impact resistance and surface finishing characteristics (Boat makers are promoting marine plywood compared to fiber aluminum boats for environmental reasons)
		Canoe-boat makers like Uto ni Yalo Trust are facing difficulties in getting marine plywood to meet their demand. They are planning to build more canoes for the outer islands.

4.2.3 Competitors

Currently, the local plywood manufacturers in Fiji are competing with imported plywood from other companies like China (50%) and New Zealand (41%). The number of importing countries increase from 4 (four) in 2010 to 9 (nine) in 2018 (See appendix 6). The strength of these competitors are:

- The availability of plywood in their respective countries;
- Easy access of imported plywood to Fiji due to unregulated policy currently in-place;
- They are offering a very competitive price in the local market compared to local plywood manufacturer price;
- Importing countries like Papua New Guinea and New Zealand are member of EWPAA Standard therefore, they are importing high quality plywood;
- Substituted products: Customers are also buying substituted products masonite, particle board and chipboard to replace plywood.

Since, there is no regulation for plywood standard in Fiji—more people are now taking advantage of the housing boom by importing plywood from overseas and selling them locally. The number of importers in 2010 was 10 (ten) which increases to 102 (one hundred and two) in 2018 (See Appendix 7). There is a need to control the importers of plywood there Fiji could be used as a dumping place for low grade plywood as currently faced by some retailers.

4.2.4 Outcomes

• Plywood market offers a huge business opportunity for Fijian plywood manufacturers both locally and internationally with a healthy margin if properly managed and coordinated especially having a regulated plywood standard;

- It is certain that plywood manufacturing maximizes log recovery compared to sawn timber and all stakeholders should work together in supporting the industry to increase productivity creating employment opportunity;
- Plywood export has dropped dramatically in the past ten years where Fiji is losing a huge financial opportunity. Plywood manufacturers should be engaged in to export plywood contributing to foreign earning;
- Urgently needed to adopt a local plywood standard to safeguard the customers from buying imported low grade plywood. Fiji lost FJD 28 million in the past nine years for imported plywood.

4.3 Commercial Feasibility

4.3.1 Key Success Factors

- The plywood industry in Fiji has been operating for the past 30 years promoting decorative Fijian hardwoods in the international markets like; Australia, New Zealand, United States of America and the South Pacific region;
- The industry is contributing economical to foreign earnings with healthy economic returns to manufacturers and retailers;
- This assignment indicated the support from government, private sectors and international accredited institutions like EWPAA in strengthening its' contribution nationally provide quality products to consumers.

4.3.2 SWOT Analysis

Strength:

- 1) Location. Fiji is located in the center of the Pacific Region (especially the Western Pacific Islands) and can supply plywood to all these countries as she used to do in the past;
- 2) Labour Force. The availability of labour force in the plywood industry in Fiji with years of experience will boast the production meeting both international and local demand.
- 3) EWPAA Standard
 - EWPAA Standard is voluntarily used in Fiji and Fiji plywood products are well received in Australia and New Zealand markets also promoting other forest products like native Fijian Hardwoods;
 - Availability of professional advice from qualified EWPAA technical staffs;
 - Deemed to satisfy product certification requirements of the Building Code of Fiji and Australia.
- 4) Forest Resources
 - Availability of matured pine and mahogany resources in the market provides raw materials for plywood. They are fast growing species and can be used as core

materials and native species to be used in face and backs in plywood manufacturing. This will reduce lots of pressure on our native species and pressure from environment will surely one day ban the harvesting of native forests.

Weaknesses

- 1) EWPAA Standard Adoption
 - Not adopting the EWPAA standard has resulted in poor quality plywood entering our shores which can affects the building industry. Currently, more complaints from consumers about the quality of plywood they are using due to imported plywood products.
- 2) Capacity building
 - Human Resource capacity
 - Not enough local staffs having plywood knowledge to test and monitor the quality of plywood produced locally and those imported;
 - Institutional capacity
 - The Ministry of Forests don't have facilities to test plywood locally and had to send all the plywood samples to Australia;
 - Financial capacity
 - Needs financial support from government and private institutions to build testing facilities for plywood locally;

Opportunities

- 1) EWPAA standard promote plywood products international which can be an advantage to other timber products;
- 2) Forest Certification
 - Sourcing plywood from certified forests will increase the value of the plywood sold overseas;
 - Positive image on all forest products sold internationally;
 - More international buyers be attracted not only to plywood but other Fiji products as well.
- 3) Local staffs could have further training in plywood technology overseas whom will serve the industry well;
- 4) Importation of veneer materials from neighboring countries could reduce pressure on native species;

Threats

- 1) Imported plywood
 - Currently, the major threat is the quality of imported plywood entering the country without proper control on the quality (see figure 8).

Figure 8: Poor quality plywood entering the local market



Split and dust in the plywood



Warping found in some of the plywood boards



The forecasted trend of imported plywood indicated that more plywood will be entering our

shores in the next five years (See Figure 9). The R² is 42%, which indicates that there is no relationship between the coming years and volume of imported plywood. There could a sharp increase in the import of plywood in a year and verse versa.

- Image of the housing industry could be badly affected if poor quality plywood used in the construction industry. Consumers could loss all the lifesavings if their homes are attacked by terminates (for example, the Natabua Housing Scheme in Lautoka where terminates attacked the timber and plywood used to build the houses and still unoccupied till today);
- Some retailers are facing complaints from consumers regarding terminate attack on imported plywood and now they are buying from local manufacturers.
- 2) Compensation

Customers will demand huge compression if plywood product does not perform well when installed in their homes due to terminate attacks or splits. Plywood retailers will purchase substituted products (like masonite) and the sale of plywood will be badly affected.

4.3.3 Pricing

The price of plywood in Fiji is determined by the market. Figure 10, shows the average price of



export and imported plywood. The average export price is around FJD2 260 per m³ compared to the average local price of FJD 2 031 per m³ (see appendix 8). Local manufacturers are willing to sell to the local market at a

larger margin with the exclusion of all export relates costs and also costs in trying to meet the EWPAA standard. The imported plywood price is averaging at FJD 944 m³, which is competitive to local price. Most retailers are currently importing plywood and adding a markup price of 15%, which is still lower than the local price (See Table 5). Retailers were not willing to give re-export price of plywood during the interview at their hardwares.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Average price of										
Imported plywood										944
(FJD/m ³)	745.12	653.43	865.53	1022.78	961.33	1090.84	966.14	1726.58	840.99	
Average price of										
Exported plywood										2260
(FJD/m ³)	1433.59	1349.99	1317.02	1332.58	1504.46	993.55	1076.93	955.01	697.61	
Average Local Price										
(FJD/m ³) ¹⁴										2031

Table 5: Average traded plywood price in m³

4.3.4 Capital investment

The success in adopting the EWPAA standard and also the National Plywood Standard rely main to the availability of funds. The first funding initiative is to legally adopt the EWPAA standard, and the second part is to establish a National Plywood Standard which will need overseas experts to put together the processes. There may be some interested companies or donors apart from government to fund the project.

¹⁴ Price given by a Retail Sales Representative during the interview for this assignment on 4th July, 2019

5. Gaps

There are gaps in the exciting plywood operations that needed to be addressed especially in capacity (See Table 6).

Table 6: Capacity gaps

Components	Capacity	Capacity	Capacity Gap/Capacity Development Needed
	Required	Exciting	
	Knowledge in testing plywood samples for quality	Little knowledge	 Need overseas training where plywood testing facilities are available Training conducted by EWPAA staffs at Nasinu Utilization Division
Human Resource Capacity	Knowledge of species required in plywood manufacturing	Little knowledge	 Need overseas training in identifying Fijian hardwood species suitable for plywood manufacturing Need to fully utilized Fijian hardwood species and increased recovery Need local training on species identification
	Knowledge in Plywood standard processes	Little knowledge	 Need overseas training Training conducted by EWPAA staffs
Institutional capacity	Testing plywood facilities	No facilities	 Ministry of Forests to build testing plywood facilities for testing the quality of local and imported plywood Needs support from EWPAA regarding the required equipments
capacity	Adoption of EWPAA Standard	Enough knowledge	 Need the Ministry of MITT to carry out the adoption process Need the Ministry of Forests to support the standard as the REGULATOR
	Consumer awareness on how and where different plywood grades be used	Not enough knowledge	 Needs the Ministry of Forests to provide workshops/training and information (through brochures) to final consumers Needs retailers to have to provide similar brochures to final consumers
	Technical knowledge in plywood	Little knowledge	 Need overseas training Training conducted by EWPAA staffs

Technical capacity	manufacturing with bonding and species used		
	Technical resources (Hard/Software	Little knowledge	 Need to identify software suitable to store data on plywood operations Need training for softwood
Financial capacity	Financial resources	Not enough	 Need financial support from government, private sector and international donors

Conclusion

To conclude:

- There is an urgent need to adopt the EWPAA standard in Fiji to safeguard the plywood industry as more and more imported plywood entering our shores and the quality is questionable;
- The EWPAA standard is suitable to Australia and New Zealand markets therefore; a need to establish a National Plywood Standard as logs entering the plywood mills is getting smaller and smaller in diameter;
- Ministry of Forests staffs currently facing a challenge in trying to inspect and verify all the imported plywood entering the country without proper legal guidelines to justify the quality of plywood;

Forest Resource

- There are 20 species used in processing veneer and plywood with; Pine (25%), Kaudamu (17%), mixed light hardwoods (9%), others (2% and less) and native species (32%). It is important to identify individual species that make up the 32% of native species. This will assists the Ministry of Forests to prioritized species to be raised in the nursery for afforestation and reforestation projects;
- Mahogany and Pine plantations are now matured and they should be the main species in the production of plywood to reduce pressure on the native species. These two species could be used as cores and backs while native species be used as face due to their beautiful decorative colors;

Technical Feasibility

• Plywood is an engineered sheet timber product that is widely used for construction purpose in Fiji with increased stability, high impact resistance and high strength suitable to interior, exterior and marine environment;

- Capacity building is important to successfully implement the 'National Plywood Standard" in the country from human resource, institutional, technical and financial capacity. The Ministry of Forests is currently facing difficulties in testing the quality of plywood entering our shores due to no plywood testing machines.
- Plywood manufacturers are now tree-oriented rather than product oriented Therefore, effective utilization and accurate measurement of the log—and a carefully negotiated price based on these two considerations—are essential for survival. Manufacturers are now investing on new machineries to utilized veneer residues and increase recovery;

Market Feasibility

- Plywood demand locally has dramatically increased in recent years and still increasing due to high housing demand. This has forced the decrease in the plywood export from 880 m³ (2010) to 18m³ (2018). It is forecasted, that the demand will be negative in the next five years. It is important that the Ministry of Forests to work closely with the plywood manufacturers encouraging plywood export for foreign earnings contribution to the nation;
- The value of export plywood in the past nine(9) years was FJD8.7 million and imported plywood valued at FJD 28 million respectively. This clearly indicate that more effort is needed in trying to produce more plywood locally and also strict guideline regarding imported plywood;
- Local plywood manufacturers should continue to supply the lucrative plywood markets in Australia and New Zealand to reduce their business risk and no one predicts when will the local housing boom ends;

Commercial Feasibility

- Fiji's geographical location has been providing an excellent plywood business opportunity in the past years supplying to neighboring Pacific Islands and contributing to employment for local citizen;
- The poor quality of some of the imported plywood could affect the plywood industry and the consumers will prefer substituted products like masonite, and chipboard. Also, the price of imported plywood is very competitive in the local market;
- Currently, the average price of export plywood is FJD2 260 per m³ and the average local price is FJD2031 per m³ in the past 9 years. The imported plywood price is FJD944 per m³.
- Plywood industry needs financial support from government (Ministry of Forests), private sector and international donors for capacity building; driving the industry to a positive economic contribution.

References

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- The Timber Utilization Division, Department of Forestry. (1989). A guide to the Specification of Local Timbers for Building Applications.
- Ministry of Fisheries and Forests for the Republic of the Fiji Islands. (2007). Fiji Forest Policy Statement.

Appendix 1: Total log production in m ³ (2007)

	Year	Indigenous	Fiji Pine	Mahogany
	1999	83030	370206	88
	2000	106572	361630	169
	2001	113847	352384	2624
	2002	103951	310948	11201
	2003	132293	284121	15753
	2004	101859	227239	16910
	2005	104484	292218	17406
	2006	79480	282102	37216
	2007	45122	294685	50092
	2008	81706	265046	79869
	2009	59614	259769	63758
	2010	49814	256040	92283
	2011	34349	311001	93748
	2012	30516	266844	53202
	2013	38052	382673	61513
	2014	46731	576687	58542
	2015	51091	668853	63251
	2016	50825	544902	58542
		1313336	6307348	776167
Average		72,963	350,408	43,120
Average years (20	(past 10 07-2016)	48,782	318,706	60,762

(Source: Ministry of Forests/Statistic Unit)

Appendix 2: Species extracted from (1999-2015)

Species Code	Species Name	Species ID	Scientific Name	Species Class	Total vol. (m ³)	%
101	Amunu	AMN	Dacrycarpusimbricatus	1	271	0%
102	DakuaMakadre	DKM	Agathis macrophylla	1	15674	11%
103	DakuaSalusalu	DKS	Retrophyllumvitinesis	1	8039	5%
104	Kuasi	KUA	Podocarpus neriifolius	1	43	0%
105	Yaka	YAK	Dacrydiumnidulum	1	878	1%
106	Buabua	BUA	Fagraeagracilipes	1	42	0%
107	Rosawa	ROS	Gmeliavitinesis	1	955	1%
108	Vesi	VES	Intsia bijuga	1	4973	3%
201	Damanu	DMN	Calophyllumvitinense	2	17533	12%
202	Dabi	DAB	Xylocarpus	2	21	0%
203	Dilo	DIL	Calophylluminophyllum	2	16	0%
204	Nawanawa	NAW	Cordiasubcordata	2	374	0%
205	Raintree	RAN	Samaneasaman	2	3253	2%
206	Bauvudi	BVD	Palaquiumvitilevuense	2	5128	3%
207	Kaudamu	KDM	Myristicacastaneifolia	2	39024	26%
208	Kauvula	KVL	Endospermummacrophyllum	2	14447	10%
209	Mavota	MVT	Gonystyluspunctatus	2	1226	1%

210	Kaunicina	KCN	Canarium harveyi	2	7890	5%
211	Kauceuti	КСТ	Turrillia vitiensis	2	187	0%
212	Sagali	SAG	Lumnitzeralittorea	2	1	0%
301	Dogo	DOG	Bruguieragymnorrhiza	3	20	0%
302	Laubu	LBU	Garcinia myrtifolia	3	362	0%
303	Rosarosa	RRS	Heritiera ornithocephala	3	2351	2%
304	Sacau	SAC	Palaquium hornei	3	1323	1%
305	Sausauira	SSR	Dysoxylumrichii	3	1897	1%
306	Tivi	TIV	Terminalia capitanea	3	296	0%
307	Vaivai-ni-veikau	VNV	Amaroriasoulameoides	3	363	0%
308	Yasiyasi	YSS	Syzygium decussatum	3	4824	3%
309	Qumu	QUM	Acacia richii	3	4	0%
310	Doi	DOI	Alphitoniazizyphoides	3	215	0%
401	Vuga	VUG	Metrosideroscollina	4	28	0%
402	Koka	KOK	Bischofiajavanica	4	52	0%
403	Mako	MAK	Trichospermumspp	4	12	0%
404	Masiratu	MRT	Degeneria vitiensis	4	2	0%
405	Moivi	MOI	Kingiodendronplatycarpum	4	116	0%
406	Sa	SSA	Parinariinsularum	4	31	0%
407	Sarosaro	SRO	Pouteria vitiensis	4	1062	1%
408	Velau	VEL	Gymnostomavitiensis	4	2	0%
409	Vutu	VUT	Barringtoniaedulis	4	20	0%
410	Waciwaci/Anita	WAC	Sterculiavitiensis	4	3315	2%
411	Others	OTH	mixed light hardwoods	4	11055	8%
412	Yasimoli	YAM	Syzygium decussatum	4	2	0%
413	Lato/Kaukauloa	LAT	Diospyros gillespiei	4	2	0%
414	Kasiga/Lilidi	KAS	Litseamellifera	4	0	0%
415	Totowiwi	TOT	Pleiogyniumspp	4	0	0%
416	Vesida	VSD	Ellattostachysfalcata	4	0	0%
417	Uko/Damanuniyagaga	UKO	Buchanania vitiense	4	0	0%
					15699	
					147326	100%

Appendix 3: List of key stakeholders

1	N	/linistry of Forests; 9 am (T	uesday 5 th of June) at Nasinu U	Itilization Division				
		Participants	Job Title	Phone contact	Email address			
		Mr Tevita Bulai	Director	9966816				
		Tevita Kunadei	Forest Officer Research	9714170				
		Taniela Whippy	Timber Inspector Trade	9308356				
		Ropate Green		9294489				
2	2	linistry of Industry and Tra	ade: 2 pm (Tuesday 4 th of June	at the Ministry's HQ/S	uva)			
		Ajeshni Lata	Standard Officer					
		Asenaca Kevu	Senior Technical Assistants					
		Ropate Green	FO Timber Inspector	9294489				
m	Consumer Counsel 10 am (5 th Wednesday of June) at Consumer council office-Vanua House)							
		Seema N. Shadil	Chief Executive Officer	3305864	ceo@consumersfiji.org			
		Jessica Lal		3300792	mudr@consumersfiji.org			

		Lusia Rabala	Senior Research Officer	3300792	SRO@consumersfiji.org	
		Tevita Vuibau	Information Manager	3300792	CIM@consumersfiji.org	
4	С	EO AWPPA 6 th June Telep	hone Interview			
		Dave				
5	Ρ	lywood Manufacturers an	d Traders: 9 am (Friday 7 th June	e at Labasa Forestry Of	fice	
		Singh Nilend	Long Investment	9335825	ply@threemax.com.fj	
1		Salend Krishna	Waimo Holding	8916924	Skchetty 1992@gmail.com	
2		Imraan Sheir	A Hussain & Co	9313986	labasa@ahussain,com,fj	
2		Chand Prasad Pranil	R,C, Manubai	8496340		
		Chandra Ravind	VTBL	9908785	managersales@vtbl.co	
		Ali Mukhtar	VTBL	9908780		
		Singh Chanan	VTBL	9908787		
3		Chand Dinesh	Vinod Patel	9914474		
		Nath Anned	Vinod Patel	9455008		
6	Ρ	lywood Retailers Consulta	tion: 9 am (Tuesday 11 th June a	at Western Forestry Co	onference room)	
4		Parvin Chand	Metro civil			
		Salim Hassan	Vinod Patel			
		Jone Vuata	RC Manubai			
5		Rajnesh Shadil	Kasabia			
6		Daya NAnd	Sahay Brothers			
		Rahal Prasad	Sahay brothers			
		Ilisapeci Sokidi	FNU attachee			
7		Ahneel Maniu	Lonta Hardware			
		Uwate	Timber Inspector			
7		Plywood Retailers Consu	Itation:10 am (Friday 14 th June	at Nasinu Forestry Co	nference room)	
		Praveen Surendra	RC Manubhai	9999380	Praveen-	
					surendren@rcmanubhai.co	
					m.fj	
		Surend Chand	RC Manubhai	9996051	exportmanager@rcmanubh	
					ai.com.fj	
		Ravind Lal	GMR	9992102	ravind@gmr.com.fj	
8		Rakshna Chand	Chand's plywood supplies	8086654	crakshna@gmail,com	
		Krishneel Kumar	Kasabias Ltd	9991058	krishneel@kasabia.com.fj	
9		Atish Narayan	Carpenters Hardware	9996467	Timber.hw@carpenters.co m.fj	

Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	%
Australia	581.157	494.038	265.163	275.784	163.561	150.287	151.192	86.747	12.521	2180	52%
New Zealand	164.337	221.319	185.599	120	134.01	191.835	81.187	58.702	0	1156	28%
Kiribati	82.024	195.817	213.696	59.156	41.720	81.463	68.924	43.035	5.184	791	19%
Cook Islands	24.647	16.516			1.728					43	1%
Others	28.008		0.357	3.14						32	.8%
Total	880.173	927.69	664.815	457.614	341.019	423.585	301.303	188.484	17.705	4202.5	
Australian ma	rkets										1
Fiji Forest					Exported p	olywood g	rades to A	ustralia (%)		
Industries	400.416										
Valebasoga											
Tropikboard	1461.1										
Long					27%		22%				
Investment					21/0						
Fiji Ltd	184.591							Interior			
Scud	36.925										
								Exterior			
								Marine			
Interior	462.727	22%									
Exterior	1065.787	51%									
Marine	554.065	27%				51%					
	2082.579										

Appendix 4: Export Destination of Fijian Plywood in m³ (2010-2018)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	%
Volume/m3	164.337	221.319	185.599	120	134.01	191.835	81.187	58.702	0	1156.523	
Value	316993.4	467243.8	396453	263566.8	358076.8	472852.7	193574.1	130761.8	0	2599522	
Average											
unit price	1928.923	2111.178	2136.073	2204.953	2672.016	2464.893	2384.299	2227.553	0	2247.705	
Exporters											
Fiji Forest											
Industries	54.027	0	78.42	63.621	57.371	76.719	0	0	0	330.158	
Valebasoga											
Tropikboard	110.31	221.319	107.179	55.913	76.639	115.116	39.813		0	726.289	
Long											
Investment											
Fiji Ltd	0	0	0	0	0	0	41.371	38.554	0	79.925	
										1136.372	
Grades											
Interior	100.613	102.587	135.476	66.289	93.608	144.738	66.874	45.794	0	755.979	67%
Exterior	36.506	58.12	7.874	14.73	5.184	7.171	3.787	0	0	133.372	12%
Marine	27.218	60.612	35.006	38.515	35.218	39.926	10.526	0	0	247.021	22%
										1136.372	

Appendix 5: New Zealand markets

Source: Ministry of Forests/Utilization Division, 2019

Appendix 6: Plywood Import Destinations in m ³ (period 2010-2018)											
Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total	%
Australia	59.036	131.22	402	179.87	11		14.52	50.936	14.4	862.9824	3.0%
Canada	2.08				2.974					5.054	0.0%
China	41.864	2247.671	164	1105.412	1933.556	1951.706	1666.23		5345.514	14455.95	49.6%
New											
Zealand	36.516	1388.89	119	265.895	768.788	1109.553	1904.509	1787.061	4561.403	11941.62	41.0%
India		133.88	136				31.334			301.214	1.0%
Singapore		50	63		160	72.313	93.846	49.409	250.138	738.706	2.5%
USA		9			5.907			3.168	6.336	24.411	0.1%
Taiwan				19.05						19.05	0.1%
Individual		0.7								0.7	0.0%
Hong Kong			14		124		74.87	0.489	50	263.359	0.9%
Papua New											
Guinea				158.69	22.97	29.008		19.008	105.512	335.188	1.2%
Vietnam				1.54				48		49.54	0.2%
Chile					22.5					22.5	0.1%
Vanuatu							1			1	0.0%
Kiribati							5.754			5.754	0.0%
Korea							55	6.915	9.606	71.521	0.2%
Malaysia								39.293		39.293	0.1%
										0	
Total											
volume/m3	139.496	3961.361	898	1730.457	3051.695	3162.58	3847.063	2004.279	10342.910	29137.840	
Value (\$)	103941.9	2588483.5	777242.2	1769884	2933700	3449884	3716787	3460542	8698323	27,498,788	
Average(\$)	745.12	653.43	865.53	1022.78	961.33	1090.84	966.14	1726.58	840.99		

	Companies	Volume (m ³)	%
1	Carpenters Hardware	5023.1	16.96%
2	Fiji Electricity Authority	20	0.07%
3	GMR Muhammad	940	3.17%
4	Mahogany Industries Fiji Ltd	30	0.10%
5	Manohan Aluminium & Glass (Fiji)Ltd	40	0.14%
6	P.A Lal Coachwork	4	0.01%
7	RC Manubhai	2400	8.10%
8	Vinod Patel	5006	16.90%
9	A.Hussain & Co Ltd	203.56	0.69%
10	AMR Company Ltd	42.75	0.14%
11	Andrew Tuke	2.39	0.01%
12	Ashok Prasad	80.38	0.27%
13	Autocare Fiji Ltd	525.709	1.77%
14	Bhan Autoparts	23.57	0.08%
15	BP Prasad & Sons Ltd	373	1.26%
16	CBS Powel Solutions Fiji Ltd	5.754	0.02%
17	China Railway No 5 Engineering	72.06	0.24%
18	Chinese Technical Team	9	0.03%
19	Clyde Equipment	64.32	0.22%
20	Cope Contruction Ltd	0.414	0.00%
21	Dip Chand	14	0.05%
22	Domes of Life	40.374	0.14%
23	Dong-A-Holding(Fiji)Ltd	2.112	0.01%
24	Encompass Pacific(Fiji)Ltd	50.16	0.17%
25	Engineering Works Ltd	46.656	0.16%
26	Faster Development(Fiji)Ltd	1110.954	3.75%
27	Fiji LDS Temple	56.9073	0.19%
28	Fletcher Construction(Fiji)	113.59	0.38%
29	Fortech Construction PTE Ltd	21.6	0.07%
30	Go Advertising Ltd	42.86	0.14%
31	Golden Manufacturers	0.733	0.00%
32	Goundar Shipping Limited	2.979	0.01%
33	Green Oak Holdings	167.16	0.56%
34	Guangdong Namyue Group Company(Fiji)PTE Ltd	10.44	0.04%
35	Hamishm Mclellan	10	0.03%
36	Hans Halal Foods Ltd	43.2	0.15%
37	Hunan Construction Enginering Group	18	0.06%
38	Ideal Trading Ltd	15.2	0.05%

Appendix 7: List of Plywood Importers (2010-2018)

39	Imagination Televion Fiji Ltd	7.98	0.03%
40	Interiors (Fiji) Limited	84	0.28%
41	J.S Hill & Associates Ltd	168.7	0.57%
42	Jacks Manufacturing PTE Ltd	357.96	1.21%
43	Jehovah's Witnesses Of Fiji	22	0.07%
44	Jojis Holdings Ltd	2.68	0.01%
45	JS Hill & Associates	10	0.03%
46	Kapil Nandan	1.024	0.00%
47	Kasabia Limited	5314.829	17.94%
48	Kavanit Kaushal Chand	75	0.25%
49	Kesh Investment Ltd	56.448	0.19%
50	Khans Halal Foods Ltd	56.448	0.19%
51	Kim Haorn Construction	27	0.09%
52	Kinis Allied Industries	1801.211	6.08%
53	KK Hardware	510.7	1.72%
54	Kokomo Resorts Ltd	65.1	0.22%
55	Koorda Ltd	157.17	0.53%
56	Laucala Island	1.6	0.01%
57	Leanne Mitchell	11	0.04%
58	Long Xin International Trade	36.288	0.12%
59	Lonta Manufacturers Ltd	582.7	1.97%
60	Mahijibhai & Co Ltd	1219.366	4.12%
61	Manohan Aluminium & Glass(Fiji)Ltd	117	0.40%
62	Maptco Fasteners Ltd	232.76	0.79%
63	Mapu Bilyato	6	0.02%
64	Marine Solution Ltd	4.666	0.02%
65	Mars Marketing (Fiji)Ltd	2.112	0.01%
66	Masi Naicker	2.08	0.01%
67	Mega Store Hardware Ltd	28	0.09%
68	Modern Holdings Ltd	43.718	0.15%
69	Multi Electronic Technologies	47.178	0.16%
70	Nabou Green Energy	84	0.28%
71	Nirmal Build Mart	21.433	0.07%
72	Others	35	0.12%
73	P.A Lal Coachwork	77.238	0.26%
74	Pacific Building Solution	11.121	0.04%
75	Plantation Island Resort	1.59	0.01%
76	Popular Furniture Ltd	216.2	0.73%
77	Quality Construction	8.3	0.03%
78	Rainbow Trade Investment	0.489	0.00%
79	Red Coat Furniture Joinery Ltd	2	0.01%
80	Roopesh Gift Shop Limited	1.935	0.01%
81	Rotary Club of Taveuni	3.456	0.01%

82	Rups Investment Ltd	165.504	0.56%
83	Rusila Vere	0.768	0.00%
84	Sally Driu	1	0.00%
85	Shangri -las Fijian Resort	9.13	0.03%
86	Singh Invetment Ltd	5.53	0.02%
87	Soham Investment PTE Ltd	14	0.05%
88	Solander (Pacific)Limited	5.4	0.02%
89	Subril Furniture	5.34	0.02%
90	Superior Roofing Ltd	65	0.22%
91	Sustainable Mahogany Ltd	542	1.83%
92	Tacirua Transport Company Ltd	1.294	0.00%
93	Technicool Refrigeration & Air Conditioning	301.824	1.02%
94	The Vuda Marina Point	3	0.01%
95	Tonghe Trading Company Pte Ltd	122.304	0.41%
96	Turttle Island Resort	9.504	0.03%
97	United Containers (Fiji) Ltd	5.014	0.02%
98	Vatuvara Ltd	11.98	0.04%
99	Vomo Fiji Ltd	47.489	0.16%
100	Western Home Ltd	46	0.16%
101	Yalodina Tropical Farms	19.68	0.07%
102	Yanjian Group (Fiji)Company Ltd	87.288	0.29%
	Total	29617.461	

Appendix 8: Average Plywood Price in the Local Market

						Unit QTY				
							Retail			
	Form				Size	per sheet	Price	per m ³		price/m ³
1	Exterior Plywood	2.4	1.2	0.003	2400 x 1200 x 3mm	1 sheet	20.88	0.009	1.002	2422.08
2	Exterior Plywood	2.4	1.22	0.004	2400 x 1220 x 4mm	1 sheet	30.9	0.012	1.007	2657.4
3	Exterior Plywood	2.4	1.2	0.004	2400 x 1200 x 4 mm	1 sheet	26.15	0.012	1.002	2275.05
4	Exterior Plywood	2.4	1.22	0.006	2400 x 1220 x 6mm	1 sheet	38.16	0.018	1.001	2175.12
5	Exterior Plywood	2.4	1.2	0.006	2400 x 1200 x 6 mm	1 sheet	37.39	0.017	1.002	2168.62
6	Exterior Plywood	2.4	1.22	0.009	2400 x 1220 x 9 mm	1 sheet	38.97	0.026	1.001	1480.86
7	Exterior Plywood	2.4	1.2	0.009	2400 x 1200 x 9mm	1 sheet	58	0.026	1.011	2262
8	Exterior Plywood	2.4	1.22	0.012	2400 x 1220 x 12mm	1 sheet	46.05	0.035	1.019	1335.45
9	Exterior Plywood	2.4	1.2	0.012	2400 x 1200 x 12mm	1 sheet	71.12	0.035	1.002	2062.48
10	Interior Plywood	2.4	0.9	0.003	2100 x 900 x 3mm	1 sheet	16.58	0.006	1.004	2569.9
11	Interior Plywood	2.4	1.22	0.004	2440 x 1220 x 4mm	1 sheet	29.75	0.012	1.007	2558.5
12	Interior Plywood	2.4	1.2	0.003	2400 x 1200 x 3mm	1 sheet	16.58	0.009	1.002	1923.28
13	Interior Plywood	2.4	1.2	0.006	2400 x 1200 x 6mm	1 sheet	34.42	0.017	1.002	1996.36
14	Interior Plywood	2.4	1.2	0.004	2400 x 1200 x 4mm	1 sheet	21.86	0.012	1.002	 1901.82
15	Interior Plywood	2.4	1.22	0.009	2400 x 1220 x 9mm	1 sheet	36.45	0.026	1.001	1385.1

16	Interior Plywood	2.4	1.2	0.006	2400 x 1200 x 6mm	1 sheet	35.68	0.017	1.002	2069.44
17	Interior Plywood	2.4	1.2	0.012	2440 x 1200 x 12mm	1 sheet	44.46	0.035	1.002	1289.34
					Total					34532.8
					Average price					2031.341



EXPORT AND IMPORT GUIDELINE

A. SAWN TIMBER EXPORT PROCEDURES

INTRODUCTION

These procedures apply to the export of sawn timber destined for any market where the exporter requires the Department of Forestry to provide export license. These export licenses indicate that timber has been inspected to particular phytosanitary requirements and quality / grade meet customers' specification.

Exporters are reminded that the general ban on Indigenous Log exports and sawn timber over **300mm x 150mm (12' x 6')** or equivalent areas section. Application to export such items would be considered only under very exceptional circumstances.

Although Grade checks are limited to sawn timber exports, an export license remains a requirement for veneer, plywood and other wood products.

Companies intending to export should have a business registered certificate issued by Register of Companies office under the Ministry of Justice.

APPLICATION FOR EXPORT LICENCE

Exporters are required to submit in triplicate an application for export license. The application forms are available at Divisional Forestry Office (Lautoka, Labasa and Suva) and application- forms distributed by the exporters as follows:

- Original Copy Conservator of Forestry
- Duplicate Principal Utilization Officer
- Triplicate Divisional Forestry Office Timber Inspector (Lautoka, Labasa & Suva) as appropriate

An application should record fully details of the consignment as shown in the contract specification with FOB unit values being quoted if more than one species of grade is involved.

On receipt of the Application for Export License, assuming there is no reason for application to be immediately rejected; arrangements will be made for timber inspectors to undertake 100% check on the grade.

GRADING

Export grading of Indigenous Timbers will be based on the National Grading Rules for Fijian Timbers metric version 1986 and grades being designated as follows:

Finishing or Appearance Grade

- o Fiji Prime
- o Fiji Finishing Select
- Fiji Finishing Standard
- Construction or Framing
 - Fiji Construction Select
 - o Fiji Construction Standard

Export grading of Mahogany is now based on the National Hardwood Lumber Association Grading (American grading rules) and Fiji Pine exported on the basis of the Australian Standard AS 2858 (Visual stress grade) and AS 3519 (Machine stress grade).

Department of Forestry involvement relates only to the checking of graded materials. **Initial grading remains firmly the responsibility of the exporter.**

Prior to undertaking the check, the timber inspector will require sighting the contract document to confirm the specification at first hand. This should clearly detail the species, the grade, seasoning and preservative requirements, if any, dimensions and volume.

With regards to "Grade" the full nomenclature should be quoted for example "Fiji Finishing Select and Better " is adequate, indicating it is a finishing grade. Any variations from the rules agreed between the buyer and the seller should also be clearly indicated in the contract documents, e.g. sawing tolerances.

Procedures for physical undertaking the check will depend on the nature of individual exporter's operations. It will usually be undertaken when the consignment is being put together at mill or yard site. Occasions may arise when it is necessary for timber already bundled to be inspected, necessitating packets being opened. The provision of whatever is necessary remains the exporter's responsibility. No grading operations whatsoever will be undertaken on any wharf.

Material failing to meet requirements will be rejected. Substandard material will not be permitted to be exported simply to make up a minimum required shipping volume.

The checks undertaken refer to grade only. Certificates to the effects that the consignment conforms to particular seasoning or preservative treatment levels should be provided by the exporter.

Material satisfying grade requirements will be hammer mark, branded on the end grains, individual lengths of timber being stamped.

TIMBER GRADING REPORT

For each proposed export consignment, grading report is submitted by the timber inspector in charge of the Division's activities, distributed directly as follows;

- Original copy Conservator of Forest
- Duplicate copy Exporter
- Triplicate Principal Utilization Officer
- Quadruplicate Timber Inspectors File

The grading check is no way absolves the exporter from complete responsibility for the consignment in every respect at all times.

PHYTOSANITARY INSPECTION

Phytosanitary inspection, aiming at 100% check, is undertaken by timber inspector only at sawmills, veneer & plywood mills, timber yards or processing centers when the consignment is being bundled. No Department of Forestry inspection is carried out on any wharf.

If clean, an inspection certificate of the Forest Produce for export will be issued by the timber inspector and distributed as follows:

- Original copy Exporter
 - Duplicate Agriculture Quarantine Office (Lautoka or Suva)
- Triplicate Principal Utilization Officer
- Quadruplicate Timber Inspector (Suva or Lautoka)

Agriculture quarantine issues the formal phytosanitary certificate and a valid Forestry Inspection certificate is a prerequisite. It should be noted that the inspection certificate is an international document. The "Phytosanitary Certificate" is the country's only formal phytosanitary clearance. It is stressed here that neither the "Inspection Certificate" nor the **"Phytosanitary Certificate"** is a guarantee that any consignment is free from active infestation and that meets the requirement of the importing country.

EXPORT LICENCE

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On the basis of the recommendation indicated in the Timber Grading Report and the inspection certificate and export license will be issued by the Conservator of Forest distributed as follows:

- Original Exporter
- Duplicate Controller of Customs
- Triplicate Forestry HQ
- Quadruplicate Principal Utilization Officer

The license cover only that particular shipment, each subsequent shipment require separate license.

An export license will be withheld if the consignment is not up to the grade (quality) required or fails to meet phytosanitary requirements.

INVOICE FOR CUSTOMS PURPOSE

When shipping documents is finalized, a true copy of the "Invoice for Customs Purposes" requires to be forwarded by the exporter to the Conservator of Forest for statistical purposes. The information contained in this form remains confidential.

B. TIMBER IMPORT PROCEDURES

IMPORT REQUIREMENTS

Any interested individual or parties intending to import timber or any timber products must;

- Be registered locally under the Register of Companies from the Ministry of Industry Trade and Tourism. In addition to this the exporter must obtain a Tax Identification Letter from the Fiji Islands Revenue & Customs Authority (FIRCA).
- Ensure local producers do not have stock or product is not manufactured locally. This can be confirmed through writing to the Conservator of Forests of their inability to do so or in the absence of supply.
- Carry out due diligence as outlined in the Importer's responsibility and assessing legality of timber source, origin and product.
- Clearly specify the product type, volume, cross section, length, species, grade, preservative treatment and seasoning (moisture content) requirements.

IMPORT DOCUMENTS

The complete import documents include the following;

- Covering letter justifying reasons for import
- Completely filled timber import application form for an import permit
- Packing List
- Confirmation of contract of supply (Orders above 100m³)
- Bill of lading
- Phytosanitary Certificate from country of origin
- Company registration and Tin Letter for first time importers

PROCESSING

The Conservator of Forests will verify all applications for imports before issuing an import permit within 24 hours if all documents are in order and requirements fulfilled.

INSPECTION

Ministry of Forestry's Timber Inspectors will inspect upon arrival of shipment before a release form is issued to BAF for the release of consignment.

Appendix 2

Ministry of Forestry Supplementary Response for 2016-2017, 2017-2018 and 2018-2019



Ministry of Forestry Responses to Supplementary Questions

2016-2017 Annual Report

No.	Questions	Ministry's Response
1.	Can the Ministry please provide the Status Report as alluded to in your response to question 4? (Research Trial Plots)	 Research Trial plots The objective of setting up Private woodlots for mixed exotic tree species namely Queensland maple, Rosewood, Mahogany and Teak is to conduct a threefold study on : Its growth performance and ability to grow in sites with limited edaphological conditions (as pH, nutrient availability, moist content, texture, etc.); The potential of replicating it as large scale plantations to ease the demand and reliance on Mahogany and Pine; and Creation of new forest products range and export markets in the areas of airplane propellers, coachwork, carriages, boat building, exterior construction, veneer, furniture, carving and turnings. Moving away from monoculture plantations like pine, which can be risky if targeted tree pests occur in these plantations. With mixed species, targeted pests will only infect selected few so we don't lose a whole plantation The support that the Ministry received from the Land Owning Unit since 2015 to date has been very positive as they not only allocated 0.23 hectares of land for the establishment of 2 mixed trial plots consisting of 125 trees, they have also taken ownership of the programme by conducting monthly maintenance and weeding. The Silviculture Research Officers only come in for periodic assessment of height and girth of the species on a yearly basis. Results : Looking at the results of research studies between 2015 and 2020 and with more than 85% survival rate, the average growth rate per annum for the 4 species were 0.7 meters, which is in alignment to the normal increment rate for these species.
2.	Can the Ministry please advise the Committee of its Mahogany Replanting Program? Is it on target?	The replanting of Mahogany is part of the national tree planting initiative, 30 million trees in 15 years (30MT15Y). Since the inception of the Reforestation of Degraded Forests (RDF) project in 2015, Mahogany was included in this replanting programme along with pine, indigenous and other exotic species. To date a total of 907,291 mahogany trees (1,886.26 hectares) have been planted by the Ministry.

		The Ministry also provides support to the replanting efforts of Fiji Hardwood Corporation Limited (FHCL) through assistance in seed processing, quality checks (moisture content check & germination test) and seed technology training to FHCL staff. Since 2017, FHCL has planted a total of 1,543 hectares in Nukurua and Galoa mahogany forests. This 2021-2022 financial year and as part of the 30MT15Y initiative, the national target is to plant a total of 400,000 mahogany trees.
3.	As a forest commodity, the Committee wishes to know the current value of standing mahogany and how much of this is ready to be harvested?	 Majority of Fiji's matured mahogany is located in FHCL's lease boundary which is around 75,277.51 hectares. According to records with FHCL, a total of 41,426.31 hectares is stocked with mahogany with the rest of the area stocked with mixed species. 50% of the stocked mahogany area has reached maturity age of which 15% had already been harvested. From the last assessment conducted in 2008, the value of mahogany plantation was estimated to be over \$200million. Another valuation is scheduled to be conducted soon to provide an up to date value of the standing mahogany plantation. <i>NOTE: These assessments of value are approximations based on expected volumes from standing trees and does not factor losses from pests and disease which are inside the tree trunks and can only be estimated when trees are cut down and sawn into timber. These values cannot be used for claims in any litigation.</i>

Tevita W. Tuivanuavou

From:	Akanisi Rumasakea
Sent:	Wednesday, May 4, 2022 11:54 AM
То:	Sanjana Lal
Cc:	Susana J. Korovou; Tevita W. Tuivanuavou; Alexander D. O'Connor; Mitieli Bulanauca; Jese Saukuru; pvlkirpal@connect.com.fj; pvltd@connect.com.fj; Jale Sigarara; Pene
Subject:	RE: Request for more clarifications

Good morning Madam Conservator, Ms. Sanjana Lal We Acknowledged receipt of email with Thanks

Should there be any further queries from the Members on the Ministry's response attached, we will advise you and the Team accordingly.

Once again, Thank always for your support

Regards

Akanisi Rumasakea Committees Unit Department of Legislature Parliament of the Republic of Fiji PO Box 2352, Government Building Suva, Fiji. Landline : (679) 3225600 Extension: 394211 Mobile: (679) 9908974 Email: <u>akanisi.rumasakea@parliament.gov.fj</u> or <u>akanisi.rumasakea@legislature.gov.fj</u> Website: http://www.parliament.gov.fj/

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" A Resilient Parliament responsive to the needs of the people and driven by the ideal of a better quality of life for all Fijians"



JOIN FIJI'S CAMPAIGN AGAINST COVID-19 For More Information visit www.carefiji.digitalfiji.gov.fj

From: Sanjana Lal [mailto:lal.sanjana@gmail.com] Sent: Wednesday, May 4, 2022 11:21 AM ¥**

To: Akanisi Rumasakea <akanisi.rumasakea@parliament.gov.fj> Cc: Susana J. Korovou <s.korovou@parliament.gov.fj>; Tevita W. Tuivanuavou <tevita.tuivanuavou@parliament.gov.fj>; Alexander D. O'Connor <alexander.o'connor@health.gov.fj>; Mitieli Bulanauca <mitibula@gmail.com>; Jese Saukuru <jese.saukuru@yahoo.com>; pvlkirpal@connect.com.fj; pvltd@connect.com.fj; Jale Sigarara <jale.sigarara@govnet.gov.fj>; Pene Baleinabuli <pnbaleinabuli@gmail.com> Subject: Re: Request for more clarifications...

Dear Ms. Rumasakea, thank you for your email and the request from the Parliament Standing Committee on Natural Resources, is acknowledged.

Please find attached our response to the question raised "Request information on the estimated sustainable native timber volume and trend in Fiji from 2000 till to date" as requested.

Should you require any further information, please do not hesitate to contact us.

Vinaka

Sanjana Lal:

Conservator of Forests, Ministry of Forestry, PO Box 2218 Government Buildings, Suva, Republic of Fiji

On Thu, 28 Apr 2022 at 15:04, Akanisi Rumasakea <<u>akanisi.rumasakea@parliament.gov.fj</u>> wrote:

Good afternoon Ms Sanjana Lal, Conservator of Forests

We wish to Thank you for responding to the Committee's questions sent earlier to the office of the PS. As you might have been aware that the Committee is currently scrutinizing the Ministry of Forestry Annual Reports for the period Aug 2016 – July 2017, 2017 – 2018, 2018 – 2019 respectively.

However, Madam, the Standing Committee on Natural Resources during its report compilation, raised a question and request your good self to kindly respond to it.

The question raised is :

- Request information on the estimated sustainable native timber volume and trend in Fiji from 2000 till to date.

Your response to the above question will assist the Committee in finalizing its report on the Ministry of Forestry before tabling to Parliament in the May sitting.

Grateful if the soft copy of the response is sent to the Secretariat by 9.00 am **Tuesday next week 03rd May**, **2022**.

Thank You

Akanisi Rumasakea

Parliament Standing Committee on Natural Resources

P.O Box 2352, Government Buildings, Suva

Mobile : 9908974

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Year	Volume of native species harvested
2000	106,672.1
2001	102,137.0
2002	101,971.4
2003	132,293.0
2004	101,859.0
2005	104,484.0
2006	79,480.0
2007	62,239.0
2008	81,706.0
2009	59,614.0
2010	49,814.0
2011	34,349.0
2012	30,516.0
2013	38,052.0
2014	46,775.0
2015	54,350.0
2016	52,939.6
2017	39,116.8
2018	32,294.7
2019	23,411.9
2020	20,698.7
2021	36,540.1



Appendix 3 Annual Report Summary Ministry of Forestry 2016-2017, 2017-2018 and 2018-2019
Annual Report Summary – Ministry of Forestry August 2016 – July 2017 Annual Report Standing Committee on Natural Resources

Vision-"The leader in forestry sustainability and innovation for small island economies" **Mission**-"To drive sustainable resource management, economic growth and improve livelihoods through SMART forest policies that are based on applied research and development"

	August 2016 – July 2017			
Background	• The Ministry is a regulatory and service organisation responsible for the national forestry sector through the following functions:			
	 Formulate and implement forest strategies and policies; 			
	 Provide and administer the regulatory function under the respective Ministry's legislation and regulations; 			
	 Monitor and evaluate current strategies, policies and deliverables; 			
	 Develop and promote effective training, communication and awareness and extension advisory services; 			
	 Strengthen community and industry networks and support frameworks; 			
	 Maintain international bilateral and multilateral commitments and; 			
	 Undertake applied research for sustainable forest resource management practices and product development. 			
Organization	• The organization structure can be viewed after the cover page of the annual report.			
Structure	• The Ministry has a total staff of 237, of which 127 are established and 68 are wage earners. A total of 42 project staff were also			
	employed to ensure the timely delivery of project outputs. The 237 staff does not include the 17 corporate and executive staff			
	that were shared between the Ministry of Fisheries and Ministry of Forestry.			
Acts in Place	• The legislative framework of the Ministry can be viewed on page 5 of the annual report.			
Major	 Details on the Ministry Programmes and Capital Projects can be viewed on page 6 of the annual report. 			
Highlights	• The Ministry commenced work on a new Policy, the Planted Forests Policy, with assistance from the Food Agriculture			
	Organisation (FAO). The aim of the Policy is to increase forest areas under managed plantations to reduce pressures on Fiji's			
	natural forests. Consultations were conducted with all relevant stakeholders and a draft Policy was developed with FAO			
	consultants.			
	• During the 2016-2017 Financial Year, the Ministry continued to pursue the finalisation and endorsement of the Forest Bill 2016			
	[Bill No. 13 of 2016].			



- Fiji has a total of 1.2 million hectares of forest areas, of which natural (indigenous) forests comprises 81.3%, Pine comprises 7.2%, Mahogany comprises 5.7% and Mangrove comprises 5.0%. The Northern Division has the most forest areas covering 40.6% of total forest areas, followed by the Central Eastern Division with 30.5% and the Western Division with 28.2%.
 National log production from August 2016 to July 2017 stood at 251,222.8 cubic meters, of which Pine was 192,385.8m³ (76.6%), native species was 43,190.7m³ (17.2%) and Mahogany was 15,646.2m³ (6.2%).
 A total of 66 sawmill licenses were issued during August 2016 to July 2017, of which 25 (38.5%) were for static sawmills while 40 (61.5%) were for portable sawmills.
 Under the Forest (Preservative Treatment) Regulations 1996, 26 treatment plants existed during this period. Of these, 20
 - Under the Forest (Preservative Treatment) Regulations 1996, 26 treatment plants existed during this period. Of these, 20 treatment plants were licensed, two were non-operational, one was newly established and three were under process before issuance of licenses.
 - A total of 988 permits were issued this financial year, of which 284 (28.7%) were for exports while 704 (71.3%) were for imports.
 - Total export value of forest products from August 2016 to July 2017 amounted to \$33.0 million. The two major export commodities were pine chips and sawn timber, which generated total export revenue of \$26.4 million and comprises 80.0% of total exports.
 - The major export destinations for forest products for the 2016-2017 FY were Japan, Dominican Republic, USA, New Zealand and Australia, with a total export value of \$30.9 million.
 - Total import value of forest products from August 2016 to July 2017 amounted to \$29.2 million. The major import commodity was sawn timber, which stood at \$15.0 million and comprises 51.8% of total imports.
 - The major import countries of origin for forest products for 2016-2017 FY were New Zealand, China and Australia, with a total import value of \$27.5 million.
 - Forest Logging Annual Licenses:
 - The total number of annual logging licenses (right licenses) issued during this period was 562, of which 184 (32.7%) was issued from Central/Eastern Division, 110 (19.6%) from Western Division and 268 (47.7%) from the Northern Division.
 - New licenses issued were 276, of which 98 (35.5%) were issued from the Central/Eastern Division, 47 (17.0%) were issued from the Western Division and 131 (47.5%) were issued from the Division.
 - A total of 286 licenses were renewed, of which 86 (30.1%) were from the Central/Eastern Division, 63 (22.0%) were from the Western Division and 137 (47.9%) were from the Northern Division.
 - Timber Processing:
 - A total of 65 sawmills were licensed during the period of which 25 were static mills and 40 were portable mills.
 - Out of the 26 treatment plants, only 20 treatment plants were licensed to operate during this period while two treatment plants were non-operational, one was newly established and three were under process.



 A total of 20 kiln facilities existed during this period, however only five were operational as the rest were mostly conducting
air drying. Tropik Wood Industries records the highest number of kiln drying production figures due to the high demand of
its treated products (more details can be seen on page 13 pf the annual report).
 Permanent Sample Plots – details can be seen on pages 14 & 15 of the annual report.
GIS and Mapping:
• A forestry officer was deployed to the Geoscience Division (SPC), Nabua, from August to November 2016, for the collection
of points to stratify the land use category.
 The task was to collect 10,000 Plots all over Fiji, and to visually identify the Land Use Category, as to whether the Plots (In
yellow) fall on Forest, Cropland, Grassland, Wetland, Settlement etc.
• After the completion of 10,000 Plots in November, a cleaning process of the 10,000 plots organised by FAO was conducted
by Mr Haraguji (Japan) and Mr Gewa (PNG) and held at the Forestry Training Centre (FTC) in the month of December, in
order to rectify the problems of this data collected. The cleaning process was run by the data cleaning tool (Saiku Analysis).
 Results of the analysis can be seen on page 16 of the annual report.
• The Division received 40 applications for timber volume assessment. Five applications were from the Northern Division, 28
applications were from the Central Eastern Division and seven were from the Western Division. A total of 20 Logging /Harvesting
Plans were produced during the period.
 Reducing Emissions from Deforestation and Forest Degradation (REDD Plus):
 The REDD+ readiness is being followed in a phased approach to its current national REDD+ programme:
The first phase aims to put in place policy and institutional frameworks for the implementation of REDD+ and addressing
capacity needs for the establishment of a national Measuring, Reporting and Verification (MRV) system.
The second phase involves the development of a national REDD+ strategy, the establishment of pilot sites and
strengthening MRV capacities (towards Tier 2 and 3 level reporting).
The third phase will be the implementation of the strategy, participation in a REDD+ carbon financing mechanism, and
the establishment of an operational MRV and IPCC reporting system.
• Fiji is currently in phase 2 of its national REDD+ programme, and Readiness Preparation Proposal (R-PP) development and
implementation supports the achievement of the targets set out in this phase, working towards successfully achieving the
third phase.
• The main focus of the programme in 2016 – 2017 is the Emalu lease payment, development of awareness material,
Institutional Strengthening, continued development of the Emalu Pilot Site reforestation, agriculture demo plot, monitoring
and alternative livelihood activities, development of Forest Reference Level (FRL) and National Forest Monitoring System
(NFMS), Environmental and Social Monitoring Framework (ESMF), Analytical Studies of Drivers of Deforestation and Forest







- Forest Harvesting Training The Fiji Forest Policy highlighted the need for comprehensive skills training for the forest industry to be able to improve knowledge on forest utilisation, the Fiji Forest Harvesting Code of Practice and environment protection practices, log conversion, timber preservation, quality assurance and marketing (full details can be seen on page 23 of the annual report).
 - Forest Warden Training The Forest Policy also mandated the Ministry to train resource owners on the environmental requirements of the Fiji Forest Harvesting Code of Practice and any other environmental protection requirements stipulated in the management and harvesting licenses and, where possible, engaged these trained resource owners to monitor environmental standards. The Ministry, through the Forestry Training Centre, started the consultation and curriculum development in 2015, followed by recruitment and selection. The formal Forest Warden training started in 2016 (full details can be seen on page 24 of the annual report).
 - Seed Production:
 - The objective of this programme is to develop improved methods for harvesting, processing, testing, storing, retrieving and distributing seeds, to ensure improved viability.
 - There was a great decline on the volume of seeds being collected compared to previous years. The quantity of native seeds have been reduced to as low as 50% deficit due to many factors, including natural disaster, change in weather pattern, change in fruiting and maturity season, temperature increase, logging, stress and so forth.
 - One of the greatest challenges in this work is to have the required volume of seeds to cater for all the demand on any forest activities. These include private sectors, business, institutions, non-government organisations, faith based organisations, government and interested individuals.
 - Seed Collection A total of 3061.1kg of seeds were collected during the year. Sandalwood species 3.72kg, Indigenous species 551.4kg and 2506.kg Exotic species.
 - Seed Processing Seeds received were processed according to seed type and equipment available in the lab. During the year a total of 278.56 kg of seeds was processed Sandalwood species 3.04 kg, Indigenous species 122.62 kg, and Exotic species 152.9 kg.
 - Seed Sowing A total of 86,842 seeds were sowed for germinant production during the year. Sandalwood species, 21,608 seeds; Indigenous species, 41,631 seeds and Exotic species, 23,603 seeds.
- Seed Sales and Distribution A total of 18.5kg of Mahogany seeds were distributed during the year. 2.5kg of Mahogany seeds were sold and 16.0kg were distributed to the three Divisions; Central, West and North, for reforestation programmes.
- Transplant A total of 3,130 Sandalwood seedlings were transplanted, which is basically the same as the quantity of seeds, and being one of the lowest number recorded. This is due to many reasons, including the limited number of seeds available and also the viability of seeds.



- Distribution A total of 1,977 Sandalwood seedlings were distributed in this financial year, equivalent to 63% of the germinants. This figure should not be interpreted as high mortality, as there is a need to also consider other areas of stock take and recording, which would itemise the remaining 37% Looking at the high distribution of Indigenous species in February and March depicts that most of the planting programmes are carried out concurrently.
 - Mixed species woodlot:
 - Four high value timber species were selected and planted to create small forest stands on farm-land to maximise economic returns for farmers as a long term crop. The four species are Mahogany, Queensland Maple, Rosewood and Teak.
 - Two sites have been selected; Colo-i-Suva and Vaqia in Ba, for replication of methods to test the growth and survival.
 - It was interesting to note that all four species adapted well on both sites, producing an average survival rate of 85 -100%.
 For the Colo-i-Suva trial, the average height increase after a year of planting is 1m, whereas the Vaqia trial showed an increase by only 0.1m.
 - Sandalwood spacing:
 - This is a key to improved growth and quality products. Over the years, spacing is one of the greatest points of discussion due to high mortality, slow growth, pest and disease infestation and management control.
 - A lot of information on the growing of Yasi has been documented by individuals, but with very little emphasis on the spacing. This trial would be able to validate theories and practices and to ascertain appropriate sandalwood spacing. Kumi, Colo-i-Suva and Wainiyabia have been selected to conduct this spacing trial.
 - The three spacing trials are; 3m x 3m, 4m x 4m and 6m x 3m. At this stage, it would be difficult to determine the appropriate spacing, however, the information on growth and survival could be a basis of assumption. The average growth increments for all spacing within and between trials range from 1.806 5.9cm per annum.
 - Studies on Growth Dynamics of Calophyllum inophyllum:
 - The major objective of this research is to improve the growth of Calophyllum inophyllum (Dilo), especially with tolerance to cyclone strength winds and to survey oil production and market potential of Dilo in selected countries of the Pacific Region.
 - Throughout the 2016-2017 fiscal year, the Species planted in Vunimaqo Fisheries Station performed much better with an average growth rate of 84.27cm, compared to those established in Sigatoka Sand Dunes with the average growth rate of 43cm.
 - Forest Health The scope of research throughout the year covered the following activities from August 2016 to July 2017:
 - Forest Health Assessment at Plantation areas; Pest and Disease Surveys at Nurseries; Surveillance and Monitoring, and Laboratory Work.
- Forest Health Assessment at Plantation Areas:
 - Throughout the year, the Forest Health team concentrated on two sites, the Spacing Trial in Colo-i-Suva and the Yavuna Restoration Plot in the Nausori Highlands.



- Mode of assessments is 100% where all the plants are assessed for pest and disease infestation. Almost all Agarwood plants survived and the mortality rate are very low at 5%. There is no major symptoms of tree disorders, except for a few and minor chewing of some of the foliage of these Agar wood plants (full details can be seen on page 31 of the annual report).
- Pest and Disease Surveys Assessments were undertaken at the Private Nursery in Nasoso, Nadi, SRD Nursery, Extension Nursery and DFO/West Nursery. Most of the seedlings raised in these nurseries are thriving well with overall mortality about 5%, which is very low, indicating a high survival rate. However, seedlings have signs of pest and diseases and some of the major pests are mealy bugs, scales and white flies, with minor chewing *(full details can be seen on page 31 of the annual report)*.
- Surveillance and Monitoring Trapping methods are used as a surveillance and monitoring tool to monitor pest incursion throughout the year. During the day, static traps are set at plantation areas, native forest areas and nurseries and ports of entry (full details can be seen on page 32 of the annual report).
- Way Forward for the Silviculture Research Division The resources allocated to the Division are sufficient to produce research outcomes and deliverables set out in the business plan. However, there are areas that need improvement including capacity building, research publication and in-depth analysis. The objectives of research needed to be reviewed so that current issues are embedded into research activities and programmes. There is also a need for the refocus and realignment of the research structure, including human resources and programmes, to explore the finer details of plantation forestry, sustainable forest management and Mangrove ecosystems.
- Graveyard assessment trials are normally conducted to assess the natural durability of species in ground contact and treated species when exposed to outside environment conditions, seawater contact, in and out of ground contact. Results of assessments can be seen on pages 34-36 of the annual report.
- Quality Control Laboratory Preservative Loading Tests (August 2016-July 2017):
 - The laboratory facility at Nasinu was utilised throughout the year on a "user-pay" basis for treated timber analysis and spot testing under the Division's quality control monitoring scheme.
 - Total number of samples received were 966 with revenue collection of \$21,349.25.
- The sawmill section provides advice and technical assistance to the sawmill industry with the view of improving quality and quantity of sawn out-turn, wood working industries, in support of value added products and also to operate the Division's sawmilling and wood working facility on a semi-commercial basis. Sawmill monitoring was carried on a quarterly basis for all 66 sawmills that were licensed during this period. Non-compliant companies were issued with an Improvement notice on the spot and Monitoring reports were submitted to management for their information.
- Research on Maesopsis Species details can be seen on page 38 of the annual report.



•	Research on the Effects of Resin Tapping on Timber Quality:
	• This research aims to research and compare the timber qualities between untapped and tapped Pine. The results from the
	study done will assist industries, resources owners and also the general public that have a special interest in Pine Resin
	Extraction and Pine timber as commercial products.
	After numerous discussions with Fiji Pine Linned, the field visit for sample conection was finally implemented in March 2017.
	Samples were collected from PO 9 at their Nabou Pine Woodlot where 20 trees were selected (10 tapped and 10 untapped).
•	Administration of CCADE.
•	Administration of SCARF:
	 Applicants were assisted with technical advice and were also guided in the filling of the forms with other related requirements that were needed by EDP before approving the leap request. Six applications were received and vetted
	The rise in number was mainly due to the impacts of T.C. Winston and applications were applying to the SCAPE assistance loan
	or The fise in humber was mainly due to the impacts of fice stry specialised machines with a maximum amount of \$250,000. This
	included the Ministry's SCARE contributions, which is 35% of the total loan, and 65% is the FDB contributions
	Forest Subsidy Programme - Under this programme with a budget allocation of \$50,000, the Ministry was able to assist six people
_	with the procurement of their specialised value adding tools and machines. This creates opportunity for those with skills and
	potential for wood carving, in order to boost their production while also enhancing the quality of their products.
•	Reforestation of Degraded Forests Project - The project was tasked to plant 500ha of degraded areas this financial year. With a
	budget allocation of \$500,000.00, the team managed to afforest/reforest 506ha of degraded land. 28.71% of the achievement
	was from the Northern Division, 17.38% was from the Central/Eastern Division and 55.1% was from the Western Division.
•	Reforestation of Degraded Forests (RDF Awareness) - The Project also participated in the dissemination of Sustainable Forest
	Management and Reforestation information to the communities (details can be seen on page 42 of the annual report).
•	Other highlights of the RDF Project during the 2016- 2017 Financial Year can be seen on page 43 of the annual report.
•	ITTO Project – Community based restoration & sustainable management of vulnerable forests of the Rewa Delta, Viti Levu:
	• This project, which started in 2015, is one of the Ministry's internationally funded projects with the aim of sustainably
	managing coastal and Mangrove forest areas. The project is also supported by the University of the South Pacific, the
	Conservation International and the Secretariat of the Pacific Communities.
	 ITTO Project has two components for implementation and they are: Component 1: Community Awareness and
	• Alternative Livelihood Options and Component 2: Restoration and Rehabilitation of Degraded Coastal and Mangrove
	Wetland.
	• In 2017, the Project had completed its first component, which was the 'Community Awareness and Alternate Livelihood
	Options' for all its six Project sites around the Rewa Delta, and is currently undertaking its second component (details can be
	seen on pages 43 & 44 of the annual report).

	Colo-i-Suva Forest Park:		
	 The Division continued to promote a the Colo-i-Suva Forest Park. Mainten safety of all park users. 	nd educate the importance of protectir ance of the park and its facilities inclue	ng the natural resources to the public, such as ding tracks and trails, continued to ensure the
	 Colo-i-Suva Park, as a popular local \$118,486 in revenue (entry fees) from 	picnic spot, was visited by 41,893 visiten August 2016 to July 2017.	ors (locals and tourists) and earned a total of
	 Queens Commonwealth Canopy Award - Fiji, through the Ministry of Forestry, received Her Majesty's Commonwealth Award during this financial year for the dedication of the Colo-i-Suva Forest Park. This Award was received by His Excel President of the Republic of the Fiji Islands. The Queens Commonwealth Canopy Award is a promotion of Forest Con in Commonwealth countries. Nature and Reserves: The Ministry manages a total number of seventeen (17) Forest Reserves and seven (7) Nature Reserves covering a to area of 34,890.43 hectares. Other parks and reserves managed by other Environmental organisations cover a forest area of 17,004.5 hectares. The maintenance of Forest Reserves for 2015 was conducted on four Forest Reserves which included the reserves Suva, Savura, Lololo and Saru Creek. Activities mainly included boundary maintenance and demarcation. Anr payments for all reserves totaled to \$66,426.14. Full details on the forest reserves, nature reserves and other parks & reserves location and area (HA) can be seen 46 & 47 of the annual report. 		eceived Her Majesty's Commonwealth Canopy This Award was received by His Excellency, the y Award is a promotion of Forest Conservation even (7) Nature Reserves covering a total forest yer a forest area of 17,004.5 hectares. Reserves which included the reserves of Colo-i- maintenance and demarcation. Annual lease es location and area (HA) can be seen on pages
Financial		12 months 31 July 2017 (\$)	7 months 31 July 2016 (\$)
Position	Total Revenue	2,718,654	1,388,702
	Total Operating Expenditure	16,277,590	10,709,462
	Total Capital Expenditure	5,756,060	5,363,863
	Total Expenditure	23,012,137	16,914,837
	TMA – Profit and Loss Statement – Timber		
	Utilization Division (Total Income)	1,141,783	10,153
	TMA – Profit and Loss Statement – Timber		
	Utilization Division (Total Expenses)	1,288,574	43,263
	Net Loss	(146,791)	(33,110)



	Trust Account – 1/3 Subsidy Scheme (Total	47,677	112
	Receipts) Trust Account – 1/2 Subsidy Schome (Total	49 504	1 824
	Payments)	49,504	1,024
	(Deficit)/Surplus	190,095	191,922
	TMA – Balance Sheet – Timber Utilization	,	
	Division (Total Assets)	2,096,730	2,571,967
	TMA – Balance Sheet – Timber Utilization		
	Division Total Liabilities	2,208,074	2,536,520
	Net Assets	(111,344)	(35,447)
	Total Equity	(111,344)	(35,447)
Opinion	Internet (111,344) (35,447) Audit Opinion The Auditor has audited the financial statements of the Ministry of Fisheries and Forests, which comprise the Statement of Receipts and Expenditure, Appropriation Statement, Statement of Losses, TMA Manufacturing Account, TMA Trading Account, TMA Profit and Loss Statement, TMA Balance Sheet, Trust Account Statement of Receipts and Payments for the year ended 31 July 2017, and notes to and forming part of the financial statements, including a summary of significant accounting policies. In Auditor's opinion, except for the effects on the matters described in the Basis for Qualified Opinion paragraph, the accompanying financial statements are prepared, in all material respects, in accordance with the Financial Management Act 2004 and Finance Instructions 2010 and Finance (Amendment) Instructions 2016. Basis for Qualified Opinion Operating Fund Account 1. Expenditures amounting to \$276,181 were not recorded in the Statement of Receipts and Expenditures for the year ended 31 July 2017. This amount relates to unrecorded expenditures of \$191,147 paid from Standard Liability Account &4 and retired Accountable Advances of \$85,034 for the current year which were not cleared from the Revolving Fund Account. As a result, the expenditure balance of \$23,012,137 for the year ended 31 July 2017 is understated by \$276,181.		



Tra	ading and Manufacturing Account
2.	There is an unreconciled variance of \$104,597 between the bank reconciliation and the Cash at Bank general ledger balance. Consequently, Auditor was not able to confirm the accuracy and completeness of the Cash at Bank balance of \$1,896,419 recorded in the TMA Balance Sheet as at 31 July 2017.
3.	The Ministry paid a sum of \$2.5 million to the Trading and Manufacturing Activity (TMA) account from its operating budget for the purpose of salvaging logs after Tropical Cyclone Winston. Of the amount, a sum of \$301,451 was utilized for this purpose in 2017 leaving a balance of \$2,198,459 as at 31 July 2017. The cash at bank balance of \$1,896,419 recorded in the TMA Balance Sheet is not sufficient to support the remaining balance of \$2,198,459.
4.	The Ministry recorded total expenses of \$1,288,574 in the TMA – Profit and Loss Statement for the year ended 31 July 2017. The Ministry was not able to provide documentations to support expenditures totaling \$515,515. As a result, Auditor was not able to verify the accuracy and completeness of the total expenses recorded in the Profit and Loss Statement.
5.	The Ministry recorded sales of \$1,161,623 in the TMA – Trading Account for the year ended 31 July 2017. The Ministry was not able to provide documentations to support transactions totalling \$306,623. As a result, Auditor was not able to verify the accuracy of the Sales amount recorded in the Trading Account.

- 6. The Ministry did not maintain a detailed listing of the beneficiaries of the Trust Accounts. Consequently, Auditor was not able to substantiate the completeness of the closing balances of \$190,095 reflected in the Statement of Receipts and Payments for the Trust Fund Account.
- Gender
Analysis• According to page 25 of the annual report, a total of 22 students were enrolled in the 2016-2017 forest technician programmes.
The recruitment process was very fair, with recruitment of 50% males and 50% females, promoting gender balance as stipulated
in the 2013 Constitution.



Guiding Questions

- 1. Can you inform the Committee on the status of the "Planted Forests Policy", what does this policy cover and who are the beneficiaries of this policy?
- 2. The annual report states that "Fiji had secured FCFP funding of US\$3.8m to implement its R-PP from 2015 2019, with co-funding from the Fiji Government and the SPC/GIZ Regional Programme Coping with Climate Change in the Pacific Island Region". Can you update the Committee on this?
- 3. Page 26 of the annual report states "There was a great decline on the volume of seeds being collected compared to previous years. The quantity of native seeds have been reduced to as low as 50% deficit due to many factors..." Please advise what strategies has the Ministry taken to deal with this?
- 4. Page 26, also states that "One of the greatest challenges in this work is to have the required volume of seeds to cater for all the demand on any forest activities". Has the Ministry been able to overcome this challenge, if yes, then what has been done?
- 5. Page 33 of the annual report states the Way Forward for the Silviculture Research Division, that there are areas that need improvement including capacity building, research publication and in-depth analysis. Have resources been provided to the Ministry to make improvements to these areas?
- 6. There were 6 Qualified Opinions by the OAG stated on pages 51 & 52 of the annual report. Please advise on the status of these Qualified Opinions?
- 7. What were some of the challenges faced by the Ministry especially when transiting into a single portfolio (from Department to Ministry) and how have these been overcome?

01 September 2021

Disclaimer

This Annual Report Summary was prepared to assist the Standing Committee on Natural Resources in its review of the Ministry of Forestry August 2016 – July 2017 Annual Report. This summary should not be relied on as a substitute for specific advice. Other sources and information should be consulted. Whilst every effort has been made to ensure that the information is accurate, the Parliament of the Republic of Fiji will not accept any liability for any loss or damage which may be incurred by any person acting in reliance upon the information. The Parliament of the Republic of Fiji accepts no responsibility for any references or links to, or the content of, information maintained by third parties. For further information please email: Shobhna Rani on shobna.rani@govnet.gov.fj



Annual Report Summary – Ministry of Forestry 2017-2018 Annual Report

Standing Committee on Natural Resources

Vision-"The leader in forestry sustainability and innovation for small island economies" Mission-"To drive sustainable resource management, economic growth and improve livelihoods through SMART forest policies that are based on applied research and development"

	2017-2018		
Background	The Ministry is a regulatory and service organisation responsible for the national forestry sector through the following functions:		
	 Formulate and implement forest strategies and policies; 		
	 Provide and administer the regulatory function under the respective Ministry's legislation and regulations; 		
	 Monitor and evaluate current strategies, policies and deliverables; 		
	 Develop and promote effective training, communication and awareness and extension advisory services; 		
	 Strengthen community and industry networks and support frameworks; 		
	 Maintain international bilateral and multilateral commitments; and 		
	 Undertake applied research for sustainable forest resource management practices and product development. 		
Organization	The organization structure is provided on page 9 of the annual report.		
Structure			
Act in place	The legislative framework of the Ministry can be viewed on page 8 of the annual report.		
Major	Details on the Ministry Programme and Projects can be viewed on page 10 of the annual report.		
Highlights	A total of \$16.0 million was allocated to the Ministry, of which \$13.3 million (83.1%) was utilized for the implementation of the		
	Ministry's programmes and projects, leaving a balance of \$2.7 million at the end of July 2018.		
	The separation of Forestry and Fisheries led to development of the Ministry's its first Strategic Development Plan (SDP) to guide the		
	work of the Ministry till 2030. The draft framework for the SDP was developed in consultation with its stakeholders and was guided		
	by the objectives and targeted Outcomes of the National Development Plan, and international obligations.		
	Review of and development of Forest Legislations & Regulations - During the financial year 2017-2018, continued the Ministry to		
	purse the finalization and endorsement of the Forest Bill [Bill No. 13 of 2018], which is a review of the Forest Act 1992. However, the		
	stakeholder consultations with a view of revising the 1992 Forest Act to include recent developments within the Forest Sector in		
	addition to supporting the full implementation of the Fiji Forest Policy 2007.		



- Cabinet Submission Three Cabinet submissions were made during this period and are as follows: i. The Memorandum of Understanding (MOU) between Indonesia's Ministry of Environment and Forestry and Fiji's Ministry of Forestry; ii. The Third Asia-Pacific Rainforest Summit; and iii. The United Nations Forum on Forests 12th Session Meeting Report.
- Partnership | Memorandum of Understanding The Ministry developed a Memorandum of Understanding (MOU) with the Ministry of Environment and Forestry of the Republic of Indonesia. This MOU was signed on 24 April 2018 at the 3rd Asia-Pacific Rainforest Summit (APRS) in Yogyakarta, Indonesia by the Fijian Minister for Forestry, Honourable Osea Naiqamu, and Honourable Siti Nurbaya, Indonesia's Minister of Environment and Forestry. The areas of cooperation include forest and land rehabilitation, wildlife and plant protection, wood and non-wood products utilization, and promotion of trade in forest products.
- Human Resource The financial year 2017 2018 saw the separation of the Ministry of Forestry and the Ministry of Fisheries corporate staff that were once shared. The HR Division continued with its normal function despite the challenges of performing extra responsibilities for better services. The implementation of the Job Evaluation Exercise (JEE) 2017 was also carried out in this financial year where a total of 226 transition contracts were signed. Following this the Performance Management Guideline, Discipline Guideline and the Learning and Development Guideline were implemented. The staffing strength at the end of this financial year stood at 85.8%. The staff establishment structure is given on page 12 of the annual report.
- Upgrade of Quarters The upgrading project was delayed during the year due to delay in drawings and trade cost summary from Ministry of Infrastructure & Transport. As a result the Tender was re-advertised due to variation in costs. However, the team managed to hasten the process and subsequently awarded the tender towards the end of the financial year. Maintenance work of the 8 selected quarters continued in the next financial year.
- Fiji has a total of 1.1 million hectares of forest areas, of which natural (indigenous) forests comprises 86.56%, Softwood comprises 6.83% and Hardwood comprises 6.6%.
- Forest Production National log production from Aug 2017 Jul 2018 stood at 445,803 cubic meters, of which pine was 395,276.20m³ (88.67%), indigenous species was 39,242.11m³ (8.80%) and mahogany was 11,285.46m³ (2.53%).

Downstream Processing

- Sawmills in Fiji- A total of 54 sawmill licenses were issued during Aug 2017 Jul 2018, of which 23 (42.6%) were for static sawmills, while 31 (57.4%) were for portable sawmills.
- Sawmill Production The total log volume input for Aug 2017 Jul 2018 was 45,874.67m³ and the total sawn timber production was 21,698.42m³. Thus, the average sawmills recovery rate was 47.0% as detailed in the table.
- Timber Treatment Plants Under the Forest (Preservative Treatment) Regulation 1992, 27 treatment plants existed during this period. 19 treatment plants were licensed, 4 were non-operational, and 4 were under process before issuance of licenses.
- Exports Total value of export for forest products from Aug 2017-Jul 2018 amounted to \$48.4, an increase of \$15.5 million (46.9%) compared to the \$32.98 million of the previous financial year. The 2 major export commodities were pine chips and sawn timber with



a total export revenue of \$45.3 million contributing to 93.6% of total exports. The major export destinations for forest products for 2017-2018FY were Japan, China, Dominican Republic, USA and New Zealand with total export value of \$46.0 million.

- Imports Total value of import of forest products from Aug 2017 Jul 2018 amounted to \$28.5 million, a decline of \$0.66 million (2.26%) compared to the previous financial year. The major import commodities were sawn timber, plywood, hardboard and cross arms which accounted for \$22.98 million (80.5%) of imports. The major countries of origin for imports of forest products for 2017-2018FY were New Zealand, China and Australia with a total import value of \$24.5 million.
- Forest Law Enforcement: Licensing, Compliance & Monitoring
 - Forest Harvesting Total annual logging licenses (right licenses) issued during this period was 314 of which 75 (23.9%) was issued from Central/Eastern Division, 194 (61.8%) from Western Division and 45 (14.3%) from the Northern Division. These licenses included both new and renewed licenses. A total of 23 licenses were issued for Mahogany, 158 licenses issued for Pine, 36 licenses issued for Indigenous species, 81 licenses issued for Minor Forest Produce (MFP) and 16 licenses issued for clear felling.
 - Monitoring, Compliance and Surveillance Monitoring, compliance and surveillance were carried out by forestry officers stationed in the three Operation Divisions in the Western, Northern and Central/Eastern Division.All logging licenses issued and harvesting operations are constantly inspected and supervised to ensure compliance against the Fiji Forest Harvesting Code of Practice 2013, the Forest Act 1992, Harvest Plans and the Health & Safety at Work (OHS) Act 1998. The compliance level was above 80% for field operations and field machines, including chainsaws and safety equipment. The Monitoring, Compliance and Surveillance Project was allocated a budget of \$100,000.00 which was used to monitor compliance level in all Divisions by the MCS Project Officer and selected team members. Two national monitoring were successfully conducted in this financial year. The MCS budget was also used to carry out refresher trainings and awareness to officers; and this includes training for supervisors in logging companies. The objective is to ensure that operations in the forests are carried out according to relevant laws and approved operating procedures. The project continued work on the 2 Memorandum of Understandings (MOUs) between the Ministry of Forestry and the Ministry of Employment, Productivity and Industrial Relations (MEPIR); and the Land Transport Authority (LTA). The two MOUs were submitted to the Solicitor General's Office for vetting and clearance.
 - Timber Processing A total of 54 sawmill licenses were issued during Aug 2017 Jul 2018 with the total sawn timber production at 21,698.42m³. A total of nineteen (19) licensed timber treatment plants were operating during the year. These plants treated a total sawn timber volume of 31,606.51m³. Monitoring of these sawmills and treatment plants were conducted throughout the year to ensure compliance against the1968 Forest (sawmill) regulation and the 1992 Forest (preservative treatment) regulation.
- Solution Forest Management- Forest Resource Information-
 - The Management Division is responsible for the management of Forest Information System (FIS) and data; growth assessment of natural forests through permanent sample plots, administration of mapping and surveys of forest boundaries and forest functions and services; and co-ordination and facilitation of forest international and regional conventions and agreements.



National Forest Inventory (NFI) 2007 - The NFI Statistics Report was finalised this financial year, however the full report was still work in progress.
Permanent Sample Plots: details can be seen on pages 18 and 19 of the annual report.
GIS and Mapping - 2 Officers were involved in this GIS and Mapping activity at the Pacific Islands Applied Geoscience
Commission (SOPAC). They also worked on Forest Change Detection from the year 2006 – 2012 & from 2012-2016 (Period of 10 years) for the following islands: Vitileyu: Vanualeyu: and Tayeuni. The Man depicts forest / vegetation cover change
Timber Volume Estimates & Harvesting Plans – During this period, the Division received 21 applications for timber volume
assessment. Eight applications were from the Northern division, 20 applications were from the Central Eastern division and 3
from the Western division. A total of 23 Logging /Harvesting Plans were produced during the period.
Reducing Emissions from Deforestation and Forest Degradation (REDD Plus) - The REDD+ readiness is being followed in a
phased approach to its current national REDD+ programme:
• The first phase aims to put in place policy and institutional frameworks for the implementation of REDD+ and addressing
capacity needs for the establishment of a national Measuring, Reporting and Verification (MRV) system.
• The second phase involves the development of a national REDD+ strategy, the establishment of pilot sites and
strengthening MRV capacities (towards Tier 2 and 3 level reporting).
• The third phase will be the implementation of the strategy, participation in a REDD+ carbon financing mechanism, and the
establishment of an operational MRV and IPCC reporting system.
Fiji is currently in phase 2 of its national REDD+ programme and R-PP development and implementation supports the achievement
of the targets set out in this phase while working towards successfully achieving the 3rd phase.
Development of REDD+ Readiness and Emission Reduction Programme - Fiji had secured FCFP funding of \$U\$3.8m to implement its
R-PP (Readiness Preparation Proposal) from 2015 – 2019 with co-funding from the Fiji government and SPC/ GIZ Regional Programme
coping with Climate Change in the Pacific Island Region. The status of achievement for REDD+ Project can be seen on page 21 of the annual report.
Education and Training - The Training and Education Division 2017 - 2018 Operation Plan continued to be guided by the Fiji Forest
Policy 2007 and similar to the previous years, it sets the directions for all the training and awareness activities. Under Section 5.5.7 of
the Forest Policy, Forestry Training and Education outline the following: "The Forestry Department will have training courses
conducted for forestry personnel and resource owners in all aspects of sustainable forest management, timber utilization principles
and practices, log scaling, and protection of environmental values". The Training Centre also worked on submitting documents to the
Fiji Higher Education Commission to allow schools to be fully registered by the Fiji Higher Education Commission and this is expected
to be completed before the end of 2018.
> Technical Skills Training - In comparison to the last financial year training, this year's training has seen an increase in the
number of participants attending the technical skills training. A total of 760 participants from 26 different stakeholders



participated in this financial year compared to 381 participants from 15 stakeholders in the same period last year. This has mainly contributed to the development that has taken place in the provinces particularly in the reconstruction of homes.

- Sustainable Forest Management (SFM) Training and Awareness these continue to be conducted with the understanding that a well-managed forests with applicable conservation measures can deliver society's needs in a sustainable way. The Academic Section had planned for 4 trainings to be conducted for this financial year but due to limited staff capacity, only one training was conducted during quarter 1 of the financial year at Kilaka, Kubulau in Bua. However, a three days awareness training was conducted in Waciwaci, Lakeba, and Lau fully funded by the Action Against Desertification (AAD) Project, under the Food and Agriculture Organization (FAO) of the United Nation.
- Forest Harvesting Training One of the main outputs of the division under the Ministry Operation Plan aim is to promote quality training programmes for capacity building to communities and industry operators. In trying to achieve this, the Ministry through the Training and Education Division conducted relevant Training Courses to Harvesting contractors throughout the Country. A total of 15 training activities were completed by the section, an increase of 1 training compared to the same period last year. Details on the training activities are provided on page 24 of the annual report.
- Forest Warden Training The programme, which was mandated by the 2007 Forest Policy, enabled Forest Wardens to assist in the policing of Forest Laws. A total of 28 Forest Wardens graduated with Certificate I in Forest Management & Conservation, and are now actively implementing their roles & responsibilities in their area of operation within their various districts. During the year, a round of consultation was also held within the 3 Field Divisions to establish the responsibilities of the Forest Wardens within their respective divisions. The meeting was attended by representatives from the Provincial Offices as well, as they customarily work closely with Forest Wardens.
- Forest Technician Programme- A total of 22 students graduated with an Advance Certificate in Forest Management from the Forestry Training Centre.
- Biodiversity Conservation and Protected Area Management Course a Tailor-made workshop was delivered to National Trust of Fiji Rangers and Resource Owners from the 4th to the 8th of December at Nadave. The workshop was funded by FAO and the Training Centre. There was a total of 25 participants from National Trust of Fiji's Reserve sites and they also comprised of some resource owners from these sites. This tailor-made workshop was widely conducted by Non-Government.
- Certificate in Applied Woodcraft Technology TITC- 14 students were recruited to undergo a one-year Certificate in Applied Woodcraft Technology.
- > Portable Sawmill Training- A total of 10 portable sawmill training was conducted during the period.
- Other Trainings There were other trainings conducted during the period which targeted the timber industry: Timber Grading Training – Labasa; Timber Grading Training – Lautoka; and Treatment plant Operations – Nasinu.
- Village Rehabilitation The training team also participated in the village rehabilitation programme which were conducted in; Ono, Lau; Nukuvou village, Kadavu; Navutulevu village, Serua; and Vatubalavu village, Nadroga Navosa.



- Silviculture Research and Development- The Silviculture Research Division undertakes applied and silviculture research. The overall research programme has 2 key research areas; the plantation forestry and the sustainable management of native forests including mangrove forests/ecosystem. These programmes consisted of 5 sub-programmes with multiple activities. The 5 sub-programmes are; seed technology, nursery practice, tree improvement, forest health, natural forest management.
 - Seed Technology- The objective of this programme is to develop improved methods for harvesting, processing, testing, storing, retrieving and distributing seeds to ensure improved viability. There was a great decline in the volume of seeds collected compared to previous years and this was due to the trail of destruction that was left by TC Winston in 2016 affecting most of the seed collection areas and seed stands. Furthermore, the continuous rain period experienced in the beginning of 2017 affected the flowering and fruiting of tree species.
 - Seed Collection- The seed collection team conducted seed collection on a monthly basis targeting forest areas in the Western and Northern Divisions. Due to the high yield and quality of seeds attributed to its climatic condition i.e., favorable dry and hot conditions which greatly enhances fruiting and maturity resulting in high seed viability. The total volume of seeds collected this year is 934.1kg of seeds comprising 2.8 kg (0.3 %) of Sandalwood seeds and 931.3 kg (99.7 %) of Indigenous species. There was no mahogany seeds collected due to the 200kg dried weight at stock.
 - Seed Processing Some trees can easily be grown from seed but some may take a much longer time to propagate. Seeds propagation can be a tricky process for several local tree species. It is important to understand the different seed processing techniques. Treating the seed properly is necessary before germination occurs and a seedling can be assured. During the year a total of 275.74 kg of seeds was processed. These seeds were processed and sowed. These were Sandalwood species 1.44kg [1%], Indigenous species 195.4kg [71%] and Exotic species 78.9kg [28%].
 - Seed Sowing There are number of important reasons a seed cannot germinate under various conditions. Two major causes for unsuccessful tree seed germination are hard seed coats and dormant seed embryos. A small seedling can be very tiny and delicate when first germinated and often require much more care to ensure that it can successfully become a seedling. As a result, a total of 47,052 seeds were sowed for germinant production during the year. Sandalwood species 11,633 seeds; Indigenous species 83,386 seeds and Exotic species 2,402 seeds.
 - Nursery Practice- In this financial year, the nursery section was mainly involved in production of seedlings activity which is an extension of the work started by the Seed Technology section in the nurturing of seedlings and connects/ supports the extension for the operations divisions in the afforestation and reforestation programmes. The nursery practice team worked with optimum care and attention on seedlings during their critical juvenile stage, resulting in the production of healthy, vigorous seedlings mainly focusing on research and not on mass production.
 - Transplant- A total of 6,751 germinants were transplanted from the germination room which was twice the target of what was achieved in the last financial year. However, despite this achievement, we still encountered mortality at various stage of seedling development and this is attributed to adverse weather conditions that are unfavorable to seedling growth. Out of the total



transplanted, 54% were distributed to planting activities, 30% were in stock at the nursery and a 16% mortality. The mortality is equivalent to 1,071 seedlings and the section strives to reduce this to the range from 5 – 10% through effective management practices. Distribution- A total of 3,680 seedlings were distributed throughout the year. Out of this, 1,922 (52%) were sandalwood seedlings, 1,112 (30%) indigenous seedlings and 646 (18%) exotic seedlings. Graph of the Seedling Distribution is shown on page 28 of the annual report. > Tree improvement- The objective of tree improvement is to identify, thin and develop superior stands for the purpose of supplying quality seeds for reforestation. > Yavuna Trial Plot- Between 2017 and 2018, the Tree Improvement team conducted assessment at the Yavuna Research plot for three species of economic interests i.e., Rosewood, Teak and Acacia. Of the 57 seedlings assessed at the Yavuna research trial plot, 18 Rosewood, 20 teak plants and 19 Acacia plants were assessed. > Yagia Trial Plot- A total of 116 plants were assessed at the research trial plot in Vagia in Ba. Of the 116 tree species under research, 34 were Rosewood plants, 39 Teak plants and 43 mahogany plants. Graph 20 depicts the growth trend of Teak, Rosewood and Mahogany over the 2017-2018 timeframe. > Alternative Species Trial at Vagia, Ba- Details of the Species Trial at Vagia, Ba is given on page 30 of the annual report. Forest Health - Forest Health is concerned with insects that affect the forest and forest products and its scope of research is to survey, collect and rear timber infesting insects, to liaise with timber inspectors and guarantine officers for imports of timber products and periodical trapping at ports of entry, plantations and nursery. Some of the important insects affecting wood products are termites, powder post beetles, carpenter ants and the old house borer. Diseases are also a major contributing factor to the health of the trees, forests and ecosystems. Most common disease are Fungi, bacteria, misletodes or viruses that can also spread from tree to tree which causing deviation to the normal functioning of a plant. The devastated effect of symptoms ranges from gradual decline of plant growth to defects in defected plant parts to outright mortality. Yellowish colour foliage is an indicator of affected plants. Surveillance and Monitoring - this are an ongoing activity for forest health undertaken for assessing insect interceptions at various sites such as plantation forest, natural forest, trade borders and nurseries. Modes of assessments varies; static traps are monitored every fortnight to note the insect assemblages at various site location, sentinel plants are placed at trade borders to monitor new pest and disease incursion for early detection before its widespread damage to plantation areas, light trapping is undertaken to monitor insect interception at night as not all insects are active during the day. These will give us a clear illustration on insect assemblages and compare its occurrence, its density via night or day and at respective geographical locations. • Static Trap - A critical component of our activity is meant to capture the occurrence of pests and disease in specific areas. These include port of entries, plantations, natural stands and vegetation, seed production and gene conservation areas.



 Sentinel Plants - Sentinel plants placed at the Kings Suva Wharf serves as a control remedy for early detection of introduced pests and diseases to the country and to avoid its widespread damage to plantation areas. Assessment undertaken together with the static traps assessment is done twice a month. Plants with symptoms of tree disorders are replaced with newly potted and healthy plants. Sentinel Plant species are Guava, Pine, Mahogany, Eucalyptus and Teak. These plants are placed at ports of entry to determine early detection of pests and diseases outbreak and to avoid widespread damage to plantation areas.
 Pest and Diseases - Forest Health assessments are carried out to monitor pest and disease infestation to a 0–5-year-old plantations of both native and exotic. For this period, 2 different sites were assessed; Sandalwood Gene Conservation Trial Plot at RKS and Wainiyabia Sandalwood Spacing. The main objective of the activity is to survey and monitor insect pests and diseases occurrence on plantation areas and draw up a pest list analysis for insect pest and disease infestation on specific plantation areas. The mode of assessment was a 100% assessment as all individual plants were assessed for pest and disease. Infestation rate to all species is different taking into account the geographical location of the area including the weather patterns and the soil composition.
 Sandalwood GCA (RKS) - The objective of establishing the gene conservation site at RKS is to conserve the native yasi which is threatened by high compatibility for hybridization with the Santalum album and their hybrid. Genetic diversity is essential for sustainable forest management as it permits tree species to adapt to new stresses such as disease and climate change, and allow tree breeders to continue achieving genetic improvement objectives. Wainiyabia Spacing Trial- The spacing trial was established in 2013 to determine the best possible spacing for Santalum species growth dynamic. For the past 3 years forest health assessments shows that there was no severe threat to this trial as almost all plants are thriving. Only in the case of plants growing under a thick canopy cover having increase humidity the plants were not vigorously growing.
 Research - The nursery nurtures both native and exotic timber tree species seedlings. Most of the seedlings raised in the nursery are thriving well with overall mortality about 5% which is very low indicating high survival rate. Majority of the seedlings are healthy with minor chewing, blight and decay or stains on their foliage. A common disease on Santalum species are leaf spots and common pests are mealy bugs, white flies and scale insects. Good nursery practice and management will minimize pest and disease in a nursery set up and will avoid the widespread damage to plantation areas. Before seedlings are to be transferred for field cultivation it must be of the required standard in size and in health (free of pest and diseases) in order to withstand the outside temperatures. Seedling Transfer- All potted plant species are being inspected for pest and disease before transferring to outer islands. This is a collaboration work with the Biosecurity Authority of Fiji (BAF) in trying to minimise pest and disease infestation from the main island being transferred to outer islands and vice versa.



- Laboratory Work Laboratory work is an ongoing activity including species identification and recording of insect pest collected from static traps, nursery and plantation assessments. All insects' specimen collections are stored at the entomology laboratory for future referencing and further authentication. Specimen curation to preserve field collected specimens to catalogue what species exist in a certain area and to have reference specimens to compare to others in the future.
- Natural Forest Management The Natural Forest management programme and research in Nakavu research trial plot seeks to conduct non-detriment findings, establish Diameter limit tables and sustainable logging practices for tree species in Appendix II of the CITES Listing. The Diameter Limit Table (DLT) implementation guideline aims to train the Ministry of Forestry staff and other stakeholders (contractors and land owners) on the standard logging practice under the Ministry's regulation for native tree species according to the species Diameter Limit. Full details can be seen on pages 35-38 of the annual report.
- Sandalwood Development Project There were a few new activities that were identified to be implemented at community level in order to continue promoting this development activity and most importantly, for the betterment of sandalwood activity in Fiji. The total budget allocated for this capital project was \$100,000.00. The Sandalwood Development Project is a capital project funded and supported by the government for the past 8 years since its commencement in 2011. The main idea of this development activity is to support the development at community level and at the same time, promote long term investments for our future generations.
 - Method of Implementation All the sites for project implementation and assistance were selected based from the lists of requests received at our office from various interested communities, individuals and stakeholders on sandalwood development activity. A standard operating procedure was followed in the process of analysing the requested list before submitting to the Screening Committee for final approval of the request. Sandalwood inventory and market consultation activity are two major new activities that commenced this year for this sandalwood development project. The main objective of these two activities is to maintain and support this development activity at national level and ensure that the end point of the development is well structured by the market force and demand.
 - Field Planting This activity is mainly focused at community level for sandalwood establishment and planting assistance. The sandalwood seedlings were all raised and nurtured in all our 3 divisional offices; North, Central & Eastern and Western Division before distributed to those targeted sites for planting. The annual target for 2017 2018 is to establish 25 hectares of sandalwood at community level through community assistance and private partnerships with other interested stakeholders. Details is given on page 39-40 of the annual report.
 - Awareness The main objective of this community awareness activity is basically to build up capacity and improve knowledge and skills on sandalwood technology at community level for the betterment of sandalwood development activity. The main reason for doing this is to disseminate sandalwood information and technology to the general public and at the same time, promote the sandalwood commodity as part of the ministry's development.
 - Inventory The sandalwood inventory activity was initiated by the Ministry of Forestry and it is one of the major activities of Sandalwood Development Project in 2017 – 2018 programmes. The sites were randomly selected and visited by the Silviculture



- Research Division staffs with the assistance of Divisional Forestry Offices (DFOs); Northern, Western Central & Eastern, Provincial Offices, turaga ni koros' and communities for data collection. This inventory data is essential to fully support the idea of introducing sandalwood policy and regulation to improve sandalwood management and market stability in Fiji. In the course of conducting sandalwood inventory activity, the number of sandalwood trees in all sites were recorded and marked with GPS for mapping purposes. > Value adding and Market consultation- The main objective of this consultation activity was to engage all existing and known sandalwood buyers locally for the betterment of harvesting and marketing process. Currently, there are no proper rules and regulations established to safeguard the sandalwood resource owners and the buyers. This is one of the main reasons that led to the overexploitation of the sandalwood species in Fiji over the past decades. Full details of the consultation is given on pages 41-42 of the annual report. > Discussion and Analysis - Since sandalwood field planting and capacity building activity is an ongoing activity from the past 5 years or so, it is found that the rate of implementation is much faster and easier as compared to the rest of the activities. The main reason behind that is to get people and communities be aware of the activity and getting them interested to engage in this development activity for various purposes. > Key findings: • The highest number of sandalwood populations planted and grown within the 3 divisions range from 1 - 5 years old. This clearly shows that due to lack of knowledge and skills, people were not interested to engage in such development activity over the past decades. Most of the old sandalwood trees, 6 – 10 years old, are called mother trees and almost half of them were from existing 0 population. • Sandalwood species also have a fast regeneration rate. From one mother tree, especially for wildings, an average of 3 young trees can be grown to the size of the mother tree if proper thinning and management are done in timely manner. It is either from the fallen matured seeds or newly grown shoots from the roots. Sandalwood species grow very healthy and strong in most areas, but the basal diameter and height varies a lot. Low-cost implementation. 0 Solution of \$150,000 to carry out the "Research and Development for Wood and Non-Wood" Species" project activities carried out included the research study on the effects of pine resin tapping on wood quality, the completion of service trial bure and the purchase of a mini Pellet Machine.
 - Effects of pine tapping on wood quality- The study on the effects of pine resin tapping on wood quality continued during the financial year (August 2017- July 2018). A main activity was the identification of an insect found on the research site. The process of insect identification was initially carried out at the Silviculture Research Division, identifying the insect as a long







- Forest Subsidy Programme- Under this programme with a budget allocation of \$50,000, the Ministry was able to assist 6 people with the procurement of their specialised value adding tools and machines. This creates opportunity for those with skills and potentials for wood carving in order to boost their production while also enhancing the quality of their products.
 - Duty Exemption- The division continued to provide administrative support in facilitating the request from the industries through the provision of support letter for duty exemption. This included purchasing of logging machineries from other countries. Full details are provided on pages 48-49 of the annual report.
 - Pine Woodlot Logging/ Maritime Assistance- the Ministry continued working in various pine schemes in Maritime zones and this included Cicia, Narocake (Gau), and Kadavu. In this financial year, the Ministry focused on housing rehabilitations in the islands greatly affected by tropical cyclones. Full details are provided on pages 49-50 of the annual report.
- Extension and Advisory Services- These services have been decentralised to the 3 Operation Divisions in the Northern, Western and Central/Eastern Divisions to ensure wider outreach all over Fiji. The extension officers are responsible for the promotion of sustainable forests management through instituting afforestation and reforestation to stabilise degraded and logged over sites and expansion of forest cover.
 - Reforestation of Degraded Forests Project The project is an ongoing capital project under the Ministry of Forestry targeting the reforestation of degraded areas for the whole of Fiji. With an annual budget of \$500,000 and target of 500ha, 410.66ha were planted in this financial year. The two major species planted are Mahogany and Mangroves and this is because we involved private land owners and also business houses for the Reforestation project and they are mostly for mangrove planting.
 - Agro-forestry A total of 9 agro-forestry models were established during this fiscal year. This planting method was practiced as a source of livelihood for community, contour planting to prevent landslide together with Reforestation.
 - Coastal Rehabilitation Work- Apart from planting inland the division also worked on protecting our shoreline by collaborating with NGO's, communities, schools, government bodies, companies and church groups in planting mangroves. A total of 40,000 mangrove seedlings were planted this year.
 - Awareness & Nursery Establishment A total of 16 awareness programmes were conducted and 4 community nurseries were established. These nurseries were funded by the USP under the RESSCUE Project. All participants in the 16-awareness carried out were certified with basic nursery management. More than 450 people were certified during the awareness programme of which 15% were women. Full details are provided on pages 51-52 of the annual report.
 - Reforestation of Indigenous Species- This new project was allocated \$250,000.00 this financial year with the objective to revive and restock forests with indigenous tree species. The target for the year was to establish a nursery on the Queens highway in the Forestry Vunimago station and this was done successfully with the new nursery launched before end of the financial year.
 - ITTO Project Community based restoration & sustainable management of vulnerable forests of the Rewa Delta, Viti Levu This project, which started in 2015, is one of the Ministry's internationally funded projects with the aim of sustainably managing coastal



	and mangrove forest areas. The project is also supported by the USP, the Conservation International and the Secretariat of the Pacific Communities. Full details are provided on pages 53 – 54 of the appual report				
	 Forest Darks Decreation Deserves the 	E E E E E E E E E E E E E E E E E E E	nder the Earest Resource Assessment and		
	Concornation division is mandated to loop	k after the Colo i Suya Forest Dark along with	all the forest reconves in Fiji The section also		
	conservation division is manages seventeer	k after the COIO-I-Suva FOIest Park along with	an the forest reserves in Fiji. The section also		
	authinisters over and manages seventeer	r (17) forest reserves and seven (7) hature res	erves for a total of twenty-four reserves (24)		
	under the Division.	. Curre Forest Dark is a model for forest and	tourism which enhances the forestmenester		
	COIO-I-SUVA FOREST PARE THE COID through concepting account for the	-i-Suva Forest Park is a model for forest eco	tourism which enhances the forestry sector		
	through generating revenue for the Government from all the visitors to the park while also showcasing the natural beauty of				
	forests with recreational values as	well as its wildlife.	the Minister for Forestry, Honourship Ores		
	Launching of the Nabalasere Eco	tourism Forest Park - Park was launched by	the Minister for Forestry, Honourable Osea		
	through portrough hot your the	Naiqama on Friday 29th September. 2017. The completion of the park and improvement in forest trail was made possible			
	Clobal Environment Fund under	through partnership between the Nabalasere village community and the Fijian government and was also supported under the			
	Giobal Environment Fund under	the Forest and Protected Area Management	(GEF FPAN). One of the objectives of the		
	establishment of the community r	establishment of the Ecotourism Park was to support alternative income generating initiatives that would assist in the welfare			
	And Inventiood of the community in	and livelihood of the community members, while ensuring that the natural pristine forests and ecosystems are preserved.			
	 Forest Reserves and nature Reserves- the Decomics under legal gazetta. These rese 	a parks & Reserves section autilities over all	range of wildlife and tree species has areas		
	Reserves under legal gazette. These rese	Reserves under legal gazette. These reserves have been identified as having a diverse range of wildlife and tree species, has areas			
	susceptible to soll erosion and areas of public interest such as water catchment areas. Details are provided on page 57-58 of the				
	annual report.				
	Encroachment- the Parks unit received some complaints from the public about encroachment into the forest reserves. Some of the complaints received were regarding the Cole is Super Encrost Percente the Tayouni Encrost Percente and the Pavilous Nature Percentes.				
	The staff conducted their menitoring and	also swaroness to the communities and village	c Reserve and the pariphery of these reserves.		
Financial					
Position	Total Revenue	506 735	2 718 65/		
103111011	Total Operating Expenditure	9 980 390	16 277 590		
	Total Capital Expenditure	2 714 004	5 756 060		
	Total Expenditure	12 200 006	22 012 127		
	TMA Drofit and Loss Statement Timber	251.660	25,012,157		
	Itilization Division (Total Income)	551,000	1,141,765		
	The Drafit and Loss Statement Timber	F 70 F 00	1 200 574		
	Invia – Profit and Loss Statement – Timber	578,588	1,288,574		
	Net Less		(146 704)		
	NET LOSS	(226,928)	(146,/91)		



	TMA – Balance Sheet – Timber Utilization	1,857,002	2,096,730
	Division (Total Assets)		
	TMA – Balance Sheet – Timber Utilization	2,195,274	2,208,074
	Division Total Liabilities		
	Net Assets	(338,272)	(111,344)
	Total Equity	(338,272)	(111,344)
Auditor's	Audit Opinion		
Opinion	The Auditor has audited the financial stateme	nts of the Ministry of Forestry which comprise	the Statement of Receipts and Expenditure,
(Office of the	Appropriation Statement, Statement of Losses	s, TMA Manufacturing Account, TMA Trading A	ccount, TMA Profit and Loss Statement and
Auditor	TMA Balance Sheet for the year ended 31 July 2018, and notes to and forming part of the financial statements, including a summary of		
General)	significant accounting policies.		
	In Auditor's opinion, except for the effects on financial statements are prepared, in all mater Instructions 2010 and Finance (Amendment) I Basis for Qualified Opinion Operating Fund Account	the matters described in the Basis of Qualified rial respects, in accordance with the Financial I nstructions 2016.	Opinion paragraph, the accompanying Management Act 2004 and Finance
	 Expenditures amounting to \$351,097 were not recorded in the Statement of Receipts and Expenditure for the year ended 31 July 2018. This amount relates to unrecorded expenditures which were paid as accountable advance but were not cleared from the Revolving Fund Account as at 31 July 2018. Consequently, the expenditure balance of \$13,300,906 for the year ended 31 July 2018 is understated by \$351,097. There is an unreconciled variance of \$850,831 between the Financial Management Information System (FMIS) general ledger and th Ministry's payroll report for both Established Staff and Government Wage Earners. Consequently, I was unable to establish the accurate of the Established Staff Government and Wage Earners balances recorded in the Statement of Receipts and Expenditure for the year ended 31 July 2018. Trading and Manufacturing Account There is an unreconciled variance of \$105,769 between the TMA bank reconciliation and the Cash at Bank general ledger balance. Consequently, I am not able to confirm the accuracy and completeness of the Cash at Bank balance of \$1,567,496 recorded in the TM Balance Sheet as at 31 July 2018. 		Expenditure for the year ended 31 July ance but were not cleared from the 20,906 for the year ended 31 July 2018 is nation System (FMIS) general ledger and the ently, I was unable to establish the accuracy of Receipts and Expenditure for the year



	4. The Ministry with the approval of the Ministry of Economy transferred a sum of \$2.5 million in 2016 to the Trading and				
	Manufacturing Activity (TMA) account from its operating budget for the purpose of salvaging logs after Tropical Cyclone Winston.				
	Although an amount of \$569,014 was utilised for this purpose in 2018, deferred income account was not adjusted accordingly. Deferred				
	income balance for 2017 of \$2,198,548 remained the same in 2018.				
	In addition, the cash at bank balance of \$1,567,496 recorded in the TMA Balance Sheet was not sufficient to support the remaining				
	Deferred Income balance of \$2,198,548.				
Gender	According to the page 13, the gender distribution for training provided to the staff is provided.				
Analysis					

24 January 2022

Disclaimer

This Annual Report Summary was prepared to assist the Standing Committee on Social Affairs in its review of the – Ministry of Forestry 2017 - 2018 Annual Report. This summary should not be relied on as a substitute for specific advice. Other sources and information should be consulted. Whilst every effort has been made to ensure that the information is accurate, the Parliament of the Republic of Fiji will not accept any liability for any loss or damage which may be incurred by any person acting in reliance upon the information. The Parliament of the Republic of Fiji accepts no responsibility for any references or links to, or the content of, information maintained by third parties. For further information please email: Margaret Temo on Margaret.temo@parliament.com



Annual Report Summary – Ministry of Forestry 2018 – 2019 Annual Report Standing Committee on Natural Resources

Vision-"To be a Leader in Sustainable Forestry" Mission-"Sustainable Forests, Our Future"

	2018 – 2019				
Background	• The Ministry is a regulatory and service organisation responsible for the national forestry sector through the following function				
	 Formulate and implement forest strategies and policies; 				
	 Provide and administer the regulatory function under the Ministry's respective legislation and regulations; 				
	 Monitor and evaluate current strategies, policies and deliverables; 				
	 Develop and promote effective training, communication and awareness and extension advisory services; 				
	 Strengthen community and industry networks and support frameworks; 				
	 Maintain international bilateral and multilateral commitments and; 				
	 Undertake applied research for sustainable forest resource management practices and product development. 				
Organization	 The organization structure can be viewed on page 9 of the annual report. 				
Structure					
Acts in Place	• The legislative framework of the Ministry can be viewed on page 8 of the annual report.				
Major	• The Ministry utilized \$14.87m (87.1%) for the implementation of its programmes and projects. Some of the major achievements				
Highlights	include:				
	➢ The endorsement, without conditions, of Fiji's Forests Emission Reduction Programme (ERP) Document and the				
	Readiness-Package by the World Bank's Forest Carbon Partnership Facility (FCPF) Carbon Fund;				
	Hosting of the Duke of Sussex Prince Harry at the Colo-i-Suva Forest Park and the official opening of the upgraded Park				
	as part of Her Majesty the Queen's Commonwealth Canopy;				
	Launching of Fiji's initial national tree-planting campaign of 4 million trees in 4 years (4MT4Y) by the President of Fiji, His				
	Excellency Major-General (Ret'd) Jioji Konrote;				
	Finalisation of the Ministry's 13-Year Strategic Plan which is aligned to the United Nations Sustainable Development Goals				
	and Fiji's 5-Year and 20-Year National Development Plan;				



	 Signing of a Memorandum of Understanding (MOU) with the Ministry of Employment, Productivity and Industrial Relation to ensure that all forest-based companies comply with Fiji's employment laws; and among other things; Signing of a MOU with the Fiji National Provident Fund (FNPF) to also ensure that all forest-based companies contribute the mandatory funds for their respective employees.
•	Fiji has a forest cover of 1.1 million hectares (ha) which accounts for 60% of Fiji's landmass. Natural forests account for 86.6% of the 1.1 million ha forest cover, followed by softwood plantations at 6.8% and hardwood plantations at 6.6%.
•	The forestry and logging industry contributed \$26.1 million (0.2%) to Fiji's real GDP in 2018.
•	The forestry sector contributed \$158.7 million (1.4%) to national real GDP by the end of 2018. The major contribution of \$68.6 million was from the sawmilling and planning of wood activity, followed by the forestry and logging industry, which contributed \$26.1 million.
•	Employment in the Forestry Sector - Due to the nature of the work in the forestry sector, a significant amount of informal
	employment is created in which people, particularly resource owners, are employed as casuals in forest-based operations. Through its Annual Employment Survey, FBOS captures only the formal employment statistics, highlighting that a total of 880 people were employed in the sector in 2018.
•	Exports - In terms of exports, and using the Harmonised Commodity Description and Coding System (HS ²) classification adopted by FBOS, wood and wood products contributed \$94.6 million in export revenue for the year 2018. The major export commodity was woodchips, which generated \$78.5 million. Domestic exports of wood products accounted for 8% of total domestic exports.
•	Forestry Programmes And Projects – details can be seen on page 11 of the Annual Report.
•	Budget Allocation And Expenditure - A total of \$17.07 million was allocated to the Ministry, of which \$14.87 million (87.1%) was utilised for the implementation of the Ministry's programmes and projects, leaving a balance of \$2.19 million at the end of July 2019.
•	Report On Performance - The Ministry finalised its Strategic Development Plan (SDP) this financial year which highlights the four strategic goals and six strategic priorities details stated on page 13. The SDP is aligned to the National Development Plan (NDP) requirements and global commitments. This Plan will guide the work of the Ministry until 2030, and initiatives channeled for implementation within the Ministry's annual operational plans.
s	trategic Priority 1: Cohesive legislation, regulation, policy, guidelines and compliance
•	Cabinet Submission - three Cabinet Submissions were made on the following topics: (a) Reducing Emissions and Enhancing Livelihoods in Fiji: Amendments to the Letter of Intent; (b) Development of the Emissions Reductions Programme document (ERP-D) "Reducing Emissions and Enhancing Livelihoods in Fiji and (c) 4 Million Trees in 4 Years Initiative.
•	Finalisation of Forest Bill and Relevant Regulations - in this financial year, the Ministry continued to pursue the finalisation and endorsement of the Forest Bill [Bill No. 13 of 2016], which was a review of the Forest Act 1992. The Bill is the outcome of a

	number of stakeholder consultations, with the view of revising the 1992 Forest Act to include recent developments within the
	Forest Sector in addition to supporting the full implementation of the Fiji Forest Policy 2007. The Bill has been read twice in Parliament. Once the Bill is endorsed, relevant regulations already drafted will also be finalised.
•	Pural Forest Fire Strategy and draft strategy was developed with the assistance of the Dasific Community (SDC) and the relevant
	stakeholders such as the Ministry of Agriculture.
	Timber Export and Import Guideline - the guideline was completed and disseminated.
	National Plywood Standard - With budget allocation of \$20,000.00, a consultant was engaged during the financial year to undertake a feasibility study to determine the need to either develop a totally new standard or adopt the Australian Standard currently used as a guideline for processing local plywood. A feasibility study report was developed and submitted to the Ministry by the consultant
	by the consultation with relevant plan, the Ministry's CDD, which was developed in consultation with relevant stakeholders, was finalized
	and published this financial year.
•	Mangrove Management Guideline - a draft guideline was developed on the work and lessons learnt from the six communities/project sites of the International Tropic Timber Organisation (ITTO) project. This Guideline was developed in collaboration with the Pacific Community (SPC).
t	rategic Priority 2: Enhance sustainable forest management (SFM) frameworks and implementation of SFM practices
•	Forest Change Analysis - 4 officers travelled to CSIRO's Data61 Facility in Perth, Australia, where they were trained in forest change analysis. The training was conducted by a World Bank Consultant and a CSIRO Officer. Officers were introduced to manual cloud masking and classification of forests using training vectors. The software used in this training were ERMapper, RStudio and Python Scripts in Command Prompt. The officers successfully classified and cloud masked Viti Levu images from 2005 to 2017 during this exercise.
•	Harvest Plan Mans - five plan mans were produced with a total revenue of \$1,098,90. Harvest plan by area (bectares) is illustrated
	in Graph 4, on page 16.
•	in Graph 4, on page 16. Mapping Requests - 21 mapping requests were attended to and successfully completed. This included both internal and external requests.
•	in Graph 4, on page 16. Mapping Requests - 21 mapping requests were attended to and successfully completed. This included both internal and external requests. Volume Estimates - 44 volume estimate applications were received and attended to.
•	in Graph 4, on page 16. Mapping Requests - 21 mapping requests were attended to and successfully completed. This included both internal and external requests. Volume Estimates - 44 volume estimate applications were received and attended to. Permanent Sample Plots (PSP) - The PSP team undertook the fourth round of measurement of the PSP plots in the two major



- Inventory Pine inventories were conducted for Kadavu and Lakeba to determine the standing volume of forest areas. 118 plots were measured in Lakeba and 11 pine schemes in Kadavu. Two other inventories were conducted for Mataqali Vatuvula and Savura Dam.
- Forest parks and reserves Upgrade of Colo-i-Suva Forest Park Major renovations were conducted this financial year and includes the following: Upgrading of park entrance and construction of security booth; Renovation of "Bures"; Construction of toilets, bathrooms and changing rooms; Picnic area with tables and benches; Track repairs; Construction of steel railings; and Installation of rubbish bins.
- Colo-i-Suva Visitor Numbers and Revenue Generated a total of 40,291 visitors visited the Colo-i-Suva Park by end of July 2019, generating a total revenue of \$101,741.00.
- Maintenance, Management of Forest Parks and Reserves Boundary maintenance was carried out in 5 forest reserves. Boundary
 maintenance is a core output for the Division in ensuring clear demarcation of reserve boundaries under its lease conditions. It
 also includes marking of all forest and nature reserves boundaries.
- Law Enforcement licensing, monitoring and compliance
 - Harvesting Operations 142 harvesting licenses (right licenses) were issued: 45 licenses for Northern Division; 63 licenses for Central Eastern Division; and 34 licenses for Western Division. Total log volume produced in 2018-2019 financial year amounted to 439,780.0 m³.
 - Sawmilling Operations 47 sawmill licenses were issued (19 static, 28 portable).
 - Sawmill Return by Division A total of 156,849.24m³ of Log input, with 66,173.33m³ output, the average recovery rate stood at 42%.
 - Treatment Plant Operations Out of the 27 treatment plants in Fiji, 19 were licensed for operation this financial year. 1,267 timber samples were analysed by the Ministry which generated a total revenue of \$23,312.80.
 - > Treated Timber Samples and Hazard Classes details on page 21 of the annual report.
 - Monitoring, Compliance, Surveillance two rounds of national monitoring of harvesting operations were conducted under the MCS project to ensure compliance as measured against the FFHCOP 2013. Divisional quarterly monitoring and inspections were conducted for all sawmills, treatment plants and harvesting operations. Improvement notices were issued where necessary and non-renewal of licenses were relayed to companies that were non-compliant with relevant regulations.
 - Support for Maritime Operations Pine woodlot logging project four portable sawmills were purchased, inclusive of fuel, oil and preservative chemicals. Maritime pine project two vehicles were procured (one 4 x 4 vehicle and one 7-ton logging truck) to assist in maritime operations.



•	Reforestation and afforestation
	Mass Tree Planting Initiative - With a target of 800 hectares for the Reforestation of Degraded Forests (RDF) Project, a total of 684,417 seedlings (1,632.31ha) were planted by the end of July 2019. This financial year, The 4 Million Trees in 4 Years (4MT4Y) initiative was launched in January 2019 by the President, His Excellency, Jioji Konrote.
	Agroforestry - Four agroforestry plots were established in the following locations: Vuma Village, Levuka; Dawasamu, Secondary School; Vunivaivai, Nakelo; and Yale Kadavu collaboration with USP.
	Action Against Desertification (AAD) Project - Under this project, the Ministry worked with FAO and project partners to achieve the project objectives. Details on page 24 of the annual report.
•	Research and development - silviculture research
	Seed Collection, Processing and Sowing for Seedling Production - A total of 1,243.1 kg of seeds were collected and processed by the silviculture research division. Out of these processed seeds, 97,200 seeds were sowed for seedling production.
	Forest Health - Biological Rapid Assessments (BIORAPS) were undertaken to report on the baseline assessment and
	current state of the Biological Diversity within the areas of natural forest reserves designated for the purpose of
	protection for biodiversity conservation, as consented to by the landowning communities. This year BIORAPS were
	conducted by the forest health team in the following areas:
	$\circ~$ Nadarivatu - This assessment was done in collaboration with USP-IAS. The result indicates insect diversity in the
	different trapping methods used. It was noted that the insect order Coleoptera was mostly collected from leaf litter, rather than from the normal method of collection such as light trap.
	 Upper Tuva Catchment - BIORAPS results from the upper Tuva catchment area shows the types and abundance of insects present that are known to be good forest health indicators.
	Tree Improvement – Assessment of Trial Plots - Assessments were conducted for the following trial plots and reports were compiled accordingly: a. Yavuna Nausori Highlands – Sandalwood and mixed species; b. Drasa Alternative Species
	Irial – Eucalyptus, Pine and Acacia; and c. Vaqia, Ba – Mixed species.
	A new Agarwood research trial plot was established with the Fiji Women's Growers Association at Toga, Rewa, in
	November 2018. A total of 54 Agarwood seedlings were planted in rows of two. Treatments of NPK, Aglime or Organic
	manure were applied to each two-row planting. The results of the assessments conducted in February 2019 are shown on page 26.
	Natural Forest Management – Nakavu Operation- This is the third year of operation at the Nakavu Pilot Project, based on
	the volume and species recovery after 22 years of logging. The different logging intensities were still maintained, but the
	new diameter limit table to be adopted will be based on the log volume derived from the first logging rotation. This year,
	the team worked on the following activities in the various compartments in Nakavu: Harvesting plan for compartment 10



	 was finalized; Carbon inventory for compartments 1 and 3 was completed; 20 PSP recording and maintenance were completed for compartments 1, 2, 5, 6 and 10; DLT Monitoring field training for Central / Eastern division was conducted in November 2018 and Harvesting in compartments 11 and 12. Research Consultancy and Seed Bank - Two consultants were engaged by the Ministry to conduct a review of the work of the Silviculture Research Division and the need to develop a seed bank or tree seed centre. The review was completed this financial year and the findings and report were presented to management. Sandalwood Project - With a \$100,000 budget allocation, the following activities were conducted by the Sandalwood Project team: Sandalwood market survey and consultation; Sandalwood inventory programme and registration of farmers;
	 Sandalwood planting, and
	 Monitoring of project sites.
•	Research and development – timber utilisation
	 Research on Lesser Known Species - Applied research, studying the properties and potential uses of lesser known species (LKS) continued during the financial year with a total of 31 species identified in Nakavu. With a total budget of \$150,000.00, a total of 8 species were extracted out of the 31 species identified. Further details on page 27. Wood Pellet Production and Research on Calorific Content of Pellets - One Mini pellet machine was procured this year. Pellets were tested for their calorific contents at the University of the South Pacific. In addition to the calorific value analysis, the students also conducted research on the firewood properties of Kauvula. The firewood research is still in progress as the research team in Nasinu is currently drying Kauvula to the required moisture content levels. Procurement of Metal Tape Embosser Machine - The Metal Tape Embosser machine was procured from Australia in November 2018. The machine enables tagging to be done on metal strips and these strips are attached to timber samples which are placed in trial sites for testing and assessment. A total of 160 stakes were tagged using this new machine. Upgrade of Research Exhibition Room- The exhibition room in Nasinu was renovated and improved, as it is a popular field visit site for many educational and vocational institutions, as the displays portray the various timber processes, from harvesting, sawmilling, treatment, to construction and various timber products. Display boards with summaries of sectional roles were also included. In addition to this, worn out displays were removed, and some of which have been repaired and re-polished by the workshop staff. Upgrading of the exhibition room will continue in the next financial year.
Sti	ategic Priority 3: Capacity Building (Ministry and Stakeholders)
•	Forestry technical trainings - Accreditation of Forestry Training School, Technical Forestry Training, Advanced Certificate in
	Applied Woodcraft Technology and Industrial Attachment for Students. Details on page 29 of the annual report.



• Corporate training - Local Training - 30 different local trainings were conducted and were attended by an average of 11-12 staff for each training. These were trainings identified through the Civil Service Reform Unit of the Ministry of Civil Service, local institutions and mandatory training under the TPAF Grant and Levy Scheme. Overseas Training - 46 officers attended overseas training this financial year.

Strategic Priority 4: Stewardship

- Sustainable trade environment
 - Trade Facilitation The following trade licenses/permits were issued by the Ministry: a. 196 export licenses were issued, with a total value of FJ\$65.8 million. Pine chips were the biggest contributor, with a value of \$47.6 million; b. 176 import permits were issued, with a total value of FJ\$7.8 million.
 - Business and investment Guideline The 2018-2019 Forestry business and investment guide was published and disseminated to all Divisional offices, stakeholders and the general public who visit the forestry offices, trade show booths and other interagency shows/consultations.
 - Trade Assistance and Support for Duty Exemptions- Four companies were assisted with the provision of technical advice and assistance with their applications for a license. 12 companies were issued with support letters from the Ministry to assist their applications to Ministry of Economy and Customs Office for duty exemptions.
 - Seed Capital Revolving Fund (SCARF) Programme 20 applications were received by the Ministry for vetting. 12 applications were submitted to the Fiji Development Bank for further vetting and final decision.
- Climate change adaptation and mitigation
 - REDD+ Readiness Activities The study on Carbon Rights, which evaluated the current status of carbon rights in the country and suggested options as to who owns the carbon, and Benefit Sharing Mechanism, which assessed the existing systems of benefit sharing and identified a possible mechanism for REDD+ benefit sharing, were both completed this financial year.
- Global, regional & national partnerships
 - Memorandum of Understanding 3 MOUs were signed locally
 - MOU with the Ministry of Employment, Productivity & Industrial Relations (MEPIR) was finalised and signed on 13 December, 2018.
 - MOU with Fiji National Provident Fund (FNPF) was signed on 5 June, 2019. These partnerships will ensure information sharing, enhance monitoring and strengthen compliance level of all forest operations.
 - The third MOU was between MOF, Fiji Development Bank (FDB) and iTaukei Affairs Board (TAB) sealing their partnership for tree planting and adopting a community from each Division.
 - > Implementation of MOU with Indonesia Wood carving training was sponsored by the Indonesian Government representatives who visited the country as part of the implementation of the MOU with Indonesia. A total of twenty wood



	 carvers from the Western Division participated in the programme, with the guidance of two wood carving experts from Bali, Indonesia. Participants were also provided with wood carving tools to assist them with their businesses. Livelihood assistance Housing Rehabilitation - Due to the devastating impacts of a series of tropical cyclones experienced by Fiji, the Ministry worked with affected communities to utilise their forest resources to rebuild and repair their homes. The following results were achieved in this financial year: Kadavu – 86 housing structures produced; Gau – 17 houses (9 complete houses and 8 extensions); Six other islands/villages were also assisted, including Koro Island, Lomaiviti, Onoi-Lau, Lau, Tubeinasolo, Ba, Navutulevu, Serua , Dogotuki, Macuata Namalata, Kadavu. 				
	 Strategic Priority 5: Forest Financing There was no initiative/activity planned for this strategic priority for the financial year under review. Strategic Priority 6: Organisation Effectiveness The Ministry had a staffing strength of 242 (85.8%) out of the 282 approved posts 				
Financial		2019 (\$)	2018 (\$)		
Position	Total Revenue	553,774	506,735		
	Total Operating Expenditure	11,819,146	9,980,390		
	Total Capital Expenditure	2,513,766	2,714,004		
	Total Expenditure	14,873,741	13,300,906		
	TMA – Manufacturing Account – Timber Utilization Division (Cost of Goods Manufactured transferred to Trading Account)	208,159	92,910		
	TMA – Trading Account – Timber Utilization Division (Gross Profit/(Loss) transferred to Profit and Loss Statement)	(39,536)	351,660		
	TMA – Profit and Loss Statement – Timber Utilization Division (Net Loss)	(324,607)	(226,928)		
	TMA – Balance Sheet – Timber Utilization Division (Total Assets)	1,532,481	1,857,002		

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	TMA – Balance Sheet – Timber Utilization				
	Division (Total Liabilities)	2,195,360	2,195,274		
	TMA – Balance Sheet – Timber Utilization				
	Division (Total Equity)	(662,879)	(338,272)		
Auditor's	Opinion				
Opinion	The Auditor has audited the financial statements of the Ministry of Forestry (Ministry) which comprises the Statement of Receipts and Expenditure, Appropriation Statement, Statement of Losses, TMA Manufacturing Account, TMA Trading Account, TMA Profit and Loss Statement and TMA Balance Sheet for the financial year ended 31 July 2019, and notes to the financial statements, including a summary of significant accounting policies. In the Auditor's opinion, except for the effects of the matters discussed in the Basis for Qualified Opinion paragraphs, the accompanying financial statements of the Ministry are prepared, in all material respects, in accordance with the Financial Management Act and Finance Instructions 2010. Basis for Qualified Opinion				
	Operating Fund Account				
	 Expenditures totaling \$302,301 were not recorded in the Statement of Receipts and Expenditure for the year ended 31 July 2019. This amount relate to unrecorded expenditures for accountable advance but were not cleared from the Revolving Fund Account as at 31 July 2019. Consequently, total expenditure of \$14,873,741 for the year ended 31 July 2019 is understated by \$302,301. There is an unreconciled variance of \$1,025,547 between the FMIS general ledger and the Ministry's payroll report for both Established Staff and Government Wage Earners. Consequently, Auditor was unable to establish the accuracy of the Established Staff Government and Wage Earners balances recorded in the Statement of Receipts and Expenditure for the year ended 31 July 2019. There is an unreconciled variance of \$167,998 between the FMIS general ledger for revenue received from Native Timber Measurement and the report extracted from the Timber Revenue System. Consequently, Auditor was unable to establish the accuracy of the expenditure for the year ended 31 July 2019. Included in the FMIS general ledger are accounts receivable of \$677,339, accrued expenses and deferred income of \$1,739 and accounts payable of \$5,767, which had been carried forward from previous years. The Ministry was unable to provide appropriate documentations to support these balances. As a result, Auditor was unable to verify the completeness and 				


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accuracy of the balances and also unable to determine whether any adjustments might have been necessary and any corresponding adjustments to the elements making up the statement of income and expenditure.

Trading and Manufacturing Account

- 5. There is an unreconciled variance of \$112,699 between the TMA bank reconciliation and the general ledger balance for Cash at Bank. Consequently, Auditor not able to confirm the accuracy and completeness of the Cash at Bank balance of \$1,338,610 recorded in the TMA Balance Sheet as at 31 July 2019.
- 6. The Ministry, with the approval of the Ministry of Economy, transferred a sum of \$2,000,000 in 2016 to the Trading and Manufacturing Activity (TMA) account from its operating budget for the purpose of salvaging logs after Tropical Cyclone Winston. Although funds amounting to \$228,886 was utilised in 2019, deferred income was not adjusted and the balance of \$2, 198,548 remained the same since 2017. The cash at bank balance of \$1,338,610 recorded in the TMA Balance Sheet was not sufficient to support the remaining deferred income balance of \$2, 198,548.
- 7. The Ministry recorded maintenance and operation expenses of \$285,071 in the TMA Profit and Loss Account, which included the cost of a logging truck of \$218,349. As a result, the maintenance and operations expenses recorded in the TMA Profit and Loss Account is overstated by \$218,349 for the year ended 31 July 2019.
- 8. The Ministry recorded Accounts Receivable of \$73,857 in the TMA Balance Sheet as at 31 July 2019. The Ministry was unable to provide appropriate documentations such as debtors' aging listing, subsidiary debtor's ledgers and account reconciliation statements to support the accounts receivable balance. As a result, Auditor was unable to verify the completeness and accuracy of the balance and unable to determine whether any adjustments might have been necessary to the elements making up the TMA Profit and Loss Account and TMA Balance Sheet.

Emphasis of Matter

Auditor draws attention to the following:

- Trading and Manufacturing account continues to operate at loss since 2010 which has resulted in excess of liabilities over assets of \$662,879 in the TMA Balance Sheet as at 31 July 2019.
- Note 5 to the financial statements states that TMA sales of \$144,086 included a reimbursement of TMA wages of \$55, 718. Auditor opinion is not modified in respect of these matters.



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	Other Matter
	Non-compliance with the requirements of the Finance Manual in relation to procurement of goods and services, retirement of
	accountable advance, cash management, carried forward balances and unsubstantiated Accounts Receivables balances have
	recurred despite the recommendations to improve.
Gender	• On pages 29 & 30 of the annual report, Capacity Building provides the gender breakdown for the Forestry technical trainings, and
Analysis	the local and overseas trainings attended.

Disclaimer

This Annual Report Summary was prepared to assist the Standing Committee on Natural Resources in its review of the Ministry of Forestry 2018 – 2019 Annual Report. This summary should not be relied on as a substitute for specific advice. Other sources and information should be consulted. Whilst every effort has been made to ensure that the information is accurate, the Parliament of the Republic of Fiji will not accept any liability for any loss or damage which may be incurred by any person acting in reliance upon the information. The Parliament of the Republic of Fiji accepts no responsibility for any references or links to, or the content of, information maintained by third parties. For further information please email: Shrutkeertee Devi on shrutkeertee.devi@govnet.gov.fj