

**Regional Workshop on the Compilation of the Tourism Satellite Account**

**Manila 19<sup>th</sup> to 20<sup>th</sup> June, 2017**

# **Development Towards Measuring Fiji's Sustainable Tourism**

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# Presentation Outline

1. Introduction
2. Fiji's Tourism Satellite Account
3. Environment Accounts
4. Development Towards Fiji's Sustainable Tourism
5. Challenges

# Fiji's Tourism Industry

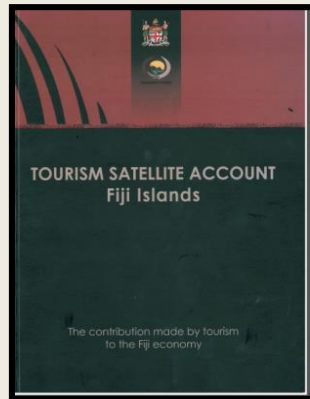
Fiji is a significant tourism destination - single largest foreign exchange earner.

Tourism being the significant contributor to growth, it is critical that the tourism industry be sustainable. On average over the last 5 years tourism earnings and visitor arrivals increased by 50% and 14% respectively.

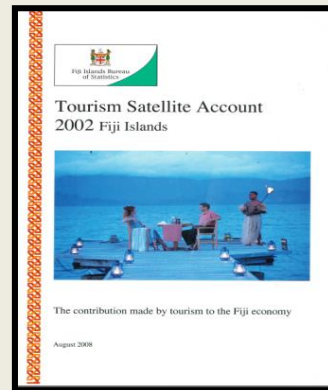


# Fiji's Tourism Satellite - History

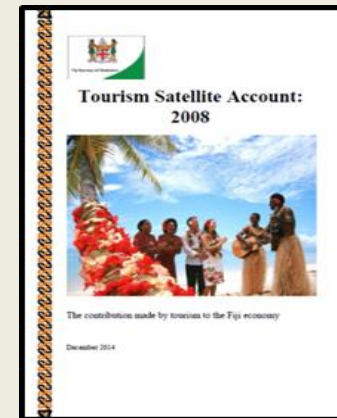
1995



2002



2008



2011



Annual

# TSA Tables for Fiji

1. *Tourism Expenditure by type of tourist and product*
2. *Production Account by Industry*
3. *Sales by industry and tourism products*
4. *Tourism Product Ratio*
5. *Tourism Industry Ratio*
6. *Tourism Value Added*
7. *Direct Tourism Employment & Compensation of Employees*
8. *Gross Fixed Capital Formation*

# TSA Tables

**Step 1:** Tourism expenditure by type of product and type of tourist is calculated in Table 1 and then carried on to Table 4.

**Tourism Expenditure**  
*By type of product and type of tourist*  
**Year ended December 2011**  
**FJD [000's]**

Products	Domestic Demand			International Demand	Total Demand
	Household Demand	Government Demand	Business Demand		
<b>Tourism-characteristic products</b>					
Accommodation services	10,710	3,633	8,223	408,576	431,142
Food serving services	3,137	2,683	5,024	131,910	142,754
Beverage serving services	1,031	473	802	74,978	77,284
Land transport services of passengers	37,322	1,104	2,846	14,101	55,373
Water transport services of passengers	14,491	2,293	2,229	7,776	26,789
Air transport services of passengers	47,238	19,268	78,392	490,281	635,179
Travel arrangement, tour operator and related services	6,506	445	10,544	111,252	128,747
Leasing or rental services concerning cars and light vans without operator	1,976	231	9,710	39,482	51,399
Recreational, cultural and sporting services	5,111	0	1,046	21,358	27,515
<b>Total tourism-characteristics products</b>	<b>127,522</b>	<b>30,130</b>	<b>118,816</b>	<b>1,299,714</b>	<b>1,576,182</b>
<b>Tourism-related products</b>					
Retail sales	113,205	4,171	103,922	192,976	414,274
<i>Food</i>	77,906	653	26,493	18,005	123,058
<i>Beverages and Tobacco</i>	19,471	0	3,888	1,000	24,359
<i>Wearing apparel</i>	8,582	1,227	8,622	3,003	21,434
<i>Fuel</i>	5,998	2,277	62,774	4,770	75,820
<i>Handicraft</i>	0	0	0	161,652	161,652
<i>Others</i>	1,247	14	2,145	4,546	7,952
Financial services	18	1	1	9,797	9,817
Gambling services	5	0	0	0	5
Education services	17,055	0	0	12,800	29,855
<b>Total tourism-related products</b>	<b>130,283</b>	<b>4,172</b>	<b>103,923</b>	<b>215,573</b>	<b>453,951</b>
<b>Total tourism demand by type of tourist</b>	<b>257,805</b>	<b>34,302</b>	<b>222,739</b>	<b>1,515,287</b>	<b>2,030,133</b>

# Table 2: Output/VA

*Step 2: This table shows the components of GDP of the economy*

## System of National Accounts Production Accounts

*By Industry*

Year ended December 2011

FJD [000's]

	Tourism-Characteristics Industries								Tourism-Related Industries			All non-tourism related industries	Total
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education		
GDP at current basic price													5,738,835
GDP by production	327,428	42,111	67,205	16,322	105,421	15,113	43,717	21,616	467,764	240,662	409,620	3,981,857	5,738,835
<i>Equivalent to: Total Output</i>	715,681	156,893	158,055	63,700	649,346	59,182	143,670	58,224	734,035	340,232	543,205	7,878,950	11,501,172
<i>Less: Intermediate Consumption</i>	388,253	114,782	90,850	47,378	543,926	44,069	99,953	36,607	266,272	99,570	133,585	3,897,094	5,762,337
GDP by income													
<i>Compensation of employees</i>	151,522	20,584	26,817	11,922	65,143	5,705	17,929	15,381	121,643	63,997	324,591	1,255,811	2,081,046
<i>Consumption of fixed capital</i>	55,999	3,322	14,696	4,552	25,463	4,717	1,506	3,522	24,292	15,223	81,157	505,527	739,976
<i>Gross operating surplus</i>	119,907	18,205	25,692	-152	14,815	4,690	24,282	2,714	321,829	161,442	3,872	2,220,518	2,917,814

# Table 3: Sales

**Step 3:** Total output of each tourism-characteristic and tourism-related industry presented in Table 2 is disaggregated into tourism products in Table 3. This gives the total supply of each industry classified by products.

Table 3

Sales  
By type of product and industry  
Year ended December 2011  
FJD [000]

Products	Tourism-Characteristic Industries								Tourism-Related Industries			All non-tourism related industries	Imports	Total	
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education				
<b>Tourism-characteristic products</b>															
Accommodation services	438,601	4,570	0	0	0	0	0	0	0	0	0	0	0	0	443,170
Food serving services	130,994	84,668	0	0	0	0	0	0	0	0	0	0	0	0	215,662
Beverage serving services	79,445	66,295	0	0	0	0	0	0	0	0	0	0	0	0	145,740
Land transport services of passengers	6,528	0	157,686	0	0	0	0	0	0	0	0	0	0	0	164,215
Water transport services of passengers	7,105	0	0	63,700	0	0	0	0	0	0	0	0	0	0	70,805
Air transport services of passengers	1,920	0	0	0	646,446	0	0	0	0	0	0	0	0	0	648,366
Travel arrangement, tour operator and related services	12,451	250	0	0	0	0	143,533	0	0	0	0	0	0	0	156,235
Leasing or rental services concerning cars and light vans without operator	2,112	0	0	0	0	59,128	0	0	0	0	0	0	0	0	61,240
Recreational, cultural and sporting services	960	0	0	0	0	0	0	48,495	0	0	0	15,837	0	0	65,292
<b>Total tourism-characteristics products</b>	<b>680,117</b>	<b>155,782</b>	<b>157,686</b>	<b>63,700</b>	<b>646,446</b>	<b>59,128</b>	<b>143,533</b>	<b>48,495</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,837</b>	<b>0</b>	<b>0</b>	<b>1,970,726</b>
<b>Tourism-related products</b>															
Retail sales															
Food	0	0	0	0	0	0	0	0	352,272	0	0	92,445	609,463	0	444,716
Beverages & Tobacco	10,636	102	0	0	0	0	0	0	6,169	0	0	4,364	46,944	0	21,271
Clothing	0	0	0	0	0	0	0	0	65,381	0	0	8,475	25,174	0	73,856
Fuel	0	0	0	0	0	0	0	0	71,506	0	0	147,705	1,288,076	0	219,212
Handicrafts	0	0	0	0	0	0	0	0	182,378	0	0	0	0	0	182,378
Others	0	0	0	0	0	0	0	0	52,966	0	5,106	377,809	87,810	0	435,881
Financial Services	0	0	0	0	0	0	0	0	0	340,232	0	445,373	0	0	785,605
Gambling services	0	0	0	0	0	0	0	0	5,849	0	0	0	0	0	5,849
Education services	0	0	0	0	0	0	0	0	0	0	201,928	341,277	0	0	543,205
<b>Total tourism-related products</b>	<b>10,636</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,849</b>	<b>730,672</b>	<b>340,232</b>	<b>207,035</b>	<b>1,417,447</b>	<b>2,057,466</b>	<b>2,711,972</b>
<b>Sales of domestically produced non-tourism related products</b>	<b>24,928</b>	<b>1,008</b>	<b>369</b>	<b>0</b>	<b>2,900</b>	<b>54</b>	<b>137</b>	<b>3,879</b>	<b>3,363</b>	<b>0</b>	<b>336,170</b>	<b>6,445,666</b>	<b>0</b>	<b>0</b>	<b>6,818,474</b>
<b>Total Sales</b>	<b>715,681</b>	<b>156,893</b>	<b>158,055</b>	<b>63,700</b>	<b>649,346</b>	<b>59,182</b>	<b>143,670</b>	<b>58,224</b>	<b>734,035</b>	<b>340,232</b>	<b>543,205</b>	<b>7,878,950</b>	<b>2,057,466</b>	<b>0</b>	<b>11,501,172</b>
Less imports of tourism-related products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,057,466
<b>Total Output</b>	<b>715,681</b>	<b>156,893</b>	<b>158,055</b>	<b>63,700</b>	<b>649,346</b>	<b>59,182</b>	<b>143,670</b>	<b>58,224</b>	<b>734,035</b>	<b>340,232</b>	<b>543,205</b>	<b>7,878,950</b>	<b>0</b>	<b>0</b>	<b>11,501,172</b>



# Table 4: Tourism Product Ratio

*Step 4: The tourism product ratio for each product is summarized in Table 4. The ratios are obtained by dividing the value of total tourism expenditure (demand) from Table 1 by total supply from Table 3.*

<b>Derivation of Tourism Product Ratios</b>			
<b>Year ended December 2011</b>			
<b>Products</b>	<b>Total Demand (from Appendix A Table 1) FJD[000's]</b>	<b>Total Supply (from Appendix A Table 3) FJD[000's]</b>	<b>Tourism Product Ratio</b>
<b>Tourism-characteristic products</b>			
Accommodation services	431,141	443,170	<b>0.97</b>
Food serving services	142,754	215,662	<b>0.66</b>
Beverage serving services	77,284	145,740	<b>0.53</b>
Land transport services of passengers	55,373	164,215	<b>0.34</b>
Water transport services of passengers	26,789	70,805	<b>0.38</b>
Air transport services of passengers	635,179	648,366	<b>0.98</b>
Travel arrangement, tour operator and related services	128,746	156,235	<b>0.82</b>
Leasing or rental services concerning cars and light vans without operator	51,400	61,240	<b>0.84</b>
Recreational, cultural and sporting services	27,514	65,292	<b>0.42</b>
<b>Total tourism-characteristics products</b>	<b>1,576,179</b>	<b>1,970,726</b>	<b>0.80</b>
<b>Tourism-related products</b>			
Retail sales	414,273	3,434,780	<b>0.12</b>
<i>Food</i>	123,058	1,054,179	<b>0.12</b>
<i>Beverages &amp; Tobacco</i>	24,359	68,215	<b>0.36</b>
<i>Clothing</i>	21,434	99,030	<b>0.22</b>
<i>Fuel</i>	75,820	1,507,287	<b>0.05</b>
<i>Handicrafts</i>	161,651	182,378	<b>0.89</b>
<i>Others</i>	7,951	523,691	<b>0.02</b>
Financial Services	9,817	785,605	<b>0.01</b>
Gambling services	5	5,849	<b>0.00</b>
Education services	29,855	543,205	<b>0.05</b>
<b>Total tourism-related products</b>	<b>453,949</b>	<b>4,769,439</b>	<b>0.10</b>

# Table 5: Tourism Industry Ratio

**Step 5:** Each industry's supply by product given in Table 3 was multiplied by the tourism product ratio to calculate the tourism supply by industry. Tourism supply in Table 5 was then divided by total output in Table 3 to give tourism industry ratios – the proportion of each industry's total output that is purchased by tourists

Products	Tourism- Characteristics Industries								Tourism-Related Industries			All non-tourism related industries	Imports	Total	
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education				
<b>Tourism-characteristic products</b>															
Accommodation services	426,696	4,446	0	0	0	0	0	0	0	0	0	0	0	0	431,141
Food serving services	86,710	56,045	0	0	0	0	0	0	0	0	0	0	0	0	142,754
Beverage serving services	42,129	35,155	0	0	0	0	0	0	0	0	0	0	0	0	77,284
Land transport services of passengers	2,201	0	53,171	0	0	0	0	0	0	0	0	0	0	0	55,373
Water transport services of passengers	2,688	0	0	24,101	0	0	0	0	0	0	0	0	0	0	26,789
Air transport services of passengers	1,881	0	0	0	633,297	0	0	0	0	0	0	0	0	0	635,179
Travel arrangement, tour operator and related services	10,261	206	0	0	0	0	118,279	0	0	0	0	0	0	0	128,746
Leasing or rental services concerning cars and light vans without operator	1,773	0	0	0	0	49,627	0	0	0	0	0	0	0	0	51,400
Recreational, cultural and sporting services	405	0	0	0	0	0	0	20,436	0	0	0	6,674	0	0	27,514
<b>Total tourism-characteristics products</b>	<b>574,743</b>	<b>95,852</b>	<b>53,171</b>	<b>24,101</b>	<b>633,297</b>	<b>49,627</b>	<b>118,279</b>	<b>20,436</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,674</b>	<b>0</b>	<b>0</b>	<b>1,576,179</b>
<b>Tourism-related products</b>															
Retail sales															
Food	0	0	0	0	0	0	0	0	41,122	0	0	10,791	71,145	0	123,058
Beverage & Tobacco	3,798	36	0	0	0	0	0	0	2,203	0	0	1,558	16,763	0	24,359
Clothing	0	0	0	0	0	0	0	0	14,151	0	0	1,834	5,449	0	21,434
Fuel	0	0	0	0	0	0	0	0	3,597	0	0	7,430	64,793	0	75,820
Handicrafts	0	0	0	0	0	0	0	0	161,651	0	0	0	0	0	161,651
Others	0	0	0	0	0	0	0	0	804	0	78	5,736	1,333	0	7,951
Financial Services	0	0	0	0	0	0	0	0	0	4,251	0	5,565	0	0	9,817
Gambling services	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Education services	0	0	0	0	0	0	0	0	0	0	11,098	18,757	0	0	29,855
<b>Total tourism-related products</b>	<b>3,798</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>223,528</b>	<b>4,251</b>	<b>11,176</b>	<b>51,672</b>	<b>159,483</b>	<b>453,949</b>
<b>Direct tourism sales</b>	<b>578,540</b>	<b>95,888</b>	<b>53,171</b>	<b>24,101</b>	<b>633,297</b>	<b>49,627</b>	<b>118,279</b>	<b>20,441</b>	<b>223,528</b>	<b>4,251</b>	<b>11,176</b>	<b>58,346</b>	<b>159,483</b>	<b>0</b>	<b>2,030,129</b>
<b>Total industry output</b>	<b>715,681</b>	<b>156,893</b>	<b>158,055</b>	<b>63,700</b>	<b>649,346</b>	<b>59,182</b>	<b>143,670</b>	<b>58,224</b>	<b>734,035</b>	<b>340,232</b>	<b>543,205</b>	<b>7,878,950</b>	<b>0</b>	<b>0</b>	<b>11,501,172</b>
<b>Tourism industry ratio [TIR]</b>	<b>0.81</b>	<b>0.61</b>	<b>0.34</b>	<b>0.38</b>	<b>0.98</b>	<b>0.84</b>	<b>0.82</b>	<b>0.35</b>	<b>0.30</b>	<b>0.01</b>	<b>0.02</b>	<b>0.01</b>	<b>...</b>	<b>...</b>	<b>0.18</b>

# Table 6: Tourism Value Added

**Step 7:** The tourism industry ratios were multiplied through each industry's production account given in Table 2 to obtain total tourism value-added.

## Derivation of Direct Tourism Value Added

Year ended December 2011

	Tourism- Characteristics Industries								Tourism-Related Industries			All non-tourism related industries	Total
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education		
Tourism industry ratios [TIR]	0.81	0.61	0.34	0.38	0.98	0.84	0.82	0.35	0.30	0.01	0.02	0.01	
Direct tourism value added FJD[000's]	264,686	25,737	22,608	6,175	102,815	12,673	35,991	7,589	142,443	3,007	8,427	29,487	661,639
<i>Equivalent to: Tourism output</i>	578,540	95,888	53,171	24,101	633,297	49,627	118,279	20,441	223,528	4,251	11,176	58,346	1,870,646
<i>Less: Tourism intermediate consumption</i>	313,855	70,151	30,563	17,925	530,482	36,954	82,288	12,852	81,085	1,244	2,748	28,859	1,209,007
GDP at current basic price													5,738,835
Direct tourism value added as a percent of GDP [%]													11.5
Components of direct tourism value added FJD[000's]													
<i>Tourism compensation of employees</i>	122,487	12,581	9,022	4,511	63,533	4,784	14,760	5,400	37,043	800	6,678	9,300	290,897
<i>Tourism consumption of fixed capital</i>	45,268	2,030	4,944	1,722	24,833	3,956	1,240	1,237	7,397	190	1,670	3,744	98,231
<i>Tourism gross operating surplus</i>	96,930	11,126	8,643	-58	14,449	3,933	19,991	953	98,003	2,017	80	16,444	272,511

# Table 7: Tourism Employment

## Direct Tourism Employment and Compensation of Employees

By Industry

Year ended December 2011

	Tourism- Characteristics Industries								Tourism Related Industries			All non-tourism related industries	Total	
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education			
Total employment in Fiji														
Male	4,143	1,031	3,688	537	551	453	534	677	7,299	933	7,604	63,108	85,136	
Female	4,488	1,485	165	146	361	258	332	252	4,955	948	7,804	31,527	46,447	
Total	8,631	2,516	3,853	682	912	711	866	929	12,254	1,881	15,408	94,635	131,583	
Tourism Industry Ratio	0.81	0.61	0.34	0.38	0.98	0.84	0.82	0.35	0.30	0.01	0.02	0.01		
Total tourism employment in Fiji														
Male	3,349	630	1,241	203	537	380	440	238	2,223	12	156	467	9,764	
Female	3,628	908	56	55	352	216	273	88	1,509	12	161	233	7,362	
Total	6,977	1,538	1,296	258	889	596	713	326	3,732	24	317	701	17,126	
Tourism employment as a percentage of total employment (%)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.0	
Tourism compensation of employees FJD[000's]	122,487	12,581	9,022	4,511	63,533	4,784	14,760	5,400	37,043	800	6,678	9,300	290,897	
Average compensation per tourism employee FJD	17,556	8,181	6,960	17,470	71,445	8,024	20,703	16,556	9,927	34,023	21,066	13,270	16,986	

# Table 8: Tourism Gross Fixed Capital Formation

## Gross Fixed Capital Formation

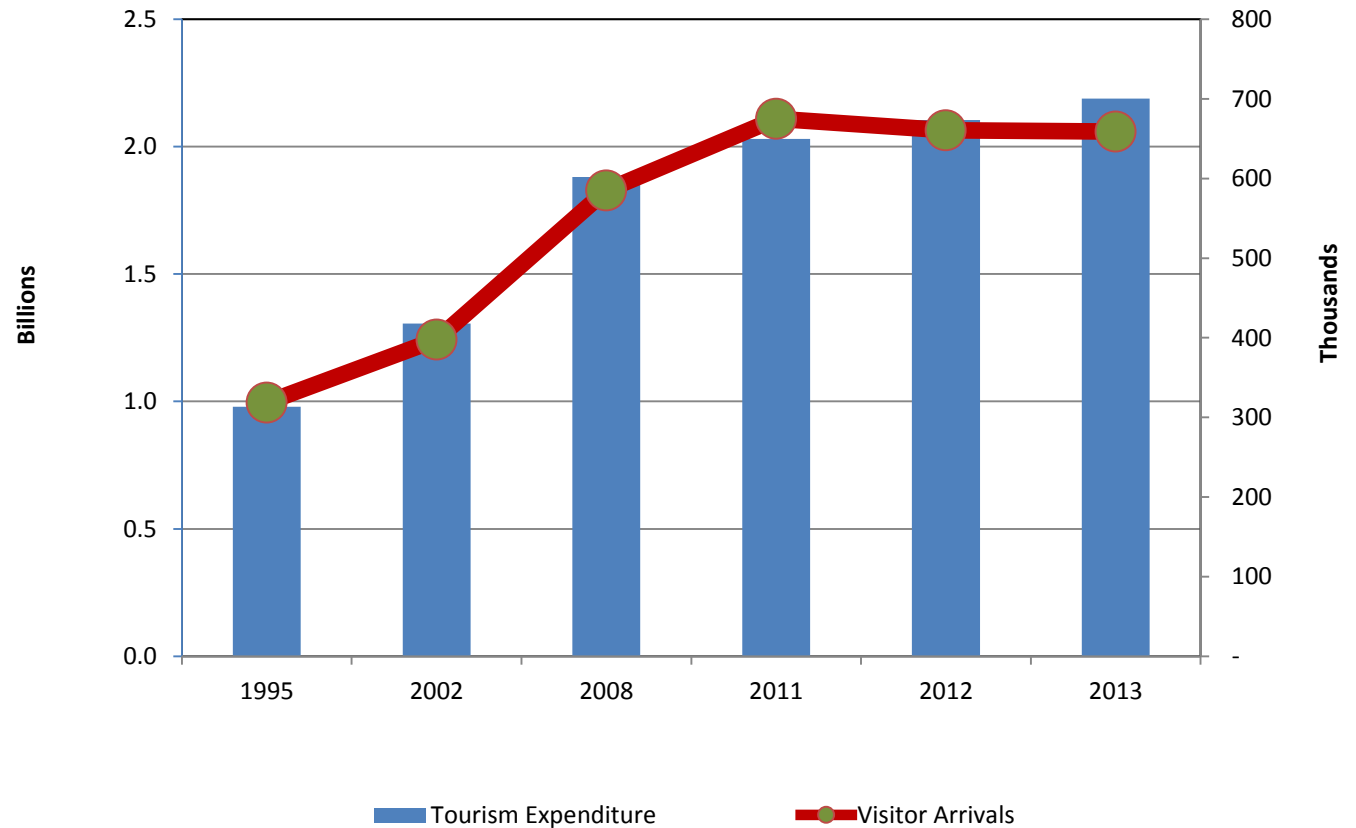
By Industry

Year ended December 2011

	Tourism- Characteristics Industries								Tourism Related Industries			All non-tourism related industries	Total
	Accommodation	Food and beverage service activities	Road passenger transport	Water passenger transport	Air passenger transport	Rental and leasing activities	Travel agency and tour operator activities	Recreational and cultural activities	Retail trade	Financial activities	Education		
<b>Capital Formation FJD(000's)</b>													
Land Development and Improvement	0	0	36	288	483	17	2	123	7	2,178	0	25,197	28,331
Buildings	15,887	1,201	1,441	1,284	0	0	1,101	135	12,341	26	4,514	85,408	123,339
Plant & Machinery	7,680	669	134	709	2,078	182	133	517	2,643	3	120	176,104	190,972
Furniture, Fixtures and Office Equipment	18,774	978	197	710	3,436	130	329	544	6,522	4,484	452	41,427	77,984
Transport Vehicles and Related Equipment	5,047	788	24,574	3,549	427	4,853	323	541	1,563	1,919	821	94,233	138,639
Other Capital Formation	424	70	568	613	1,172	99	0	223	7	12,945	5,633	439,183	460,935
<b>Total Capital Formation</b>	<b>47,811</b>	<b>3,705</b>	<b>26,950</b>	<b>7,153</b>	<b>7,596</b>	<b>5,281</b>	<b>1,889</b>	<b>2,083</b>	<b>23,084</b>	<b>21,555</b>	<b>11,541</b>	<b>861,552</b>	<b>1,020,200</b>
<b>Tourism Industry Ratio</b>	<b>0.81</b>	<b>0.61</b>	<b>0.34</b>	<b>0.38</b>	<b>0.98</b>	<b>0.84</b>	<b>0.82</b>	<b>0.35</b>	<b>0.30</b>	<b>0.01</b>	<b>0.02</b>	<b>0.01</b>	.....
<b>Tourism Capital Formation FJD(000's)</b>													
Tourism Land Development and Improvement	0	0	12	109	471	14	2	43	2	27	0	187	867
Tourism Buildings	12,843	734	485	486	0	0	907	47	3,758	0	93	632	19,985
Tourism Plant & Machinery	6,208	409	45	268	2,027	153	110	182	805	0	2	1,304	11,512
Tourism Furniture, Fixtures and Office Equipment	15,176	598	66	269	3,351	109	271	191	1,986	56	9	307	22,390
Tourism Transport Vehicles and Related Equipment	4,080	482	8,267	1,343	416	4,069	266	190	476	24	17	698	20,328
Tourism Other Capital Formation	343	43	191	232	1,143	83	0	78	2	162	116	3,252	5,644
<b>Tourism Total Capital Formation</b>	<b>38,650</b>	<b>2,265</b>	<b>9,066</b>	<b>2,706</b>	<b>7,408</b>	<b>4,428</b>	<b>1,555</b>	<b>731</b>	<b>7,030</b>	<b>269</b>	<b>237</b>	<b>6,380</b>	<b>80,726</b>

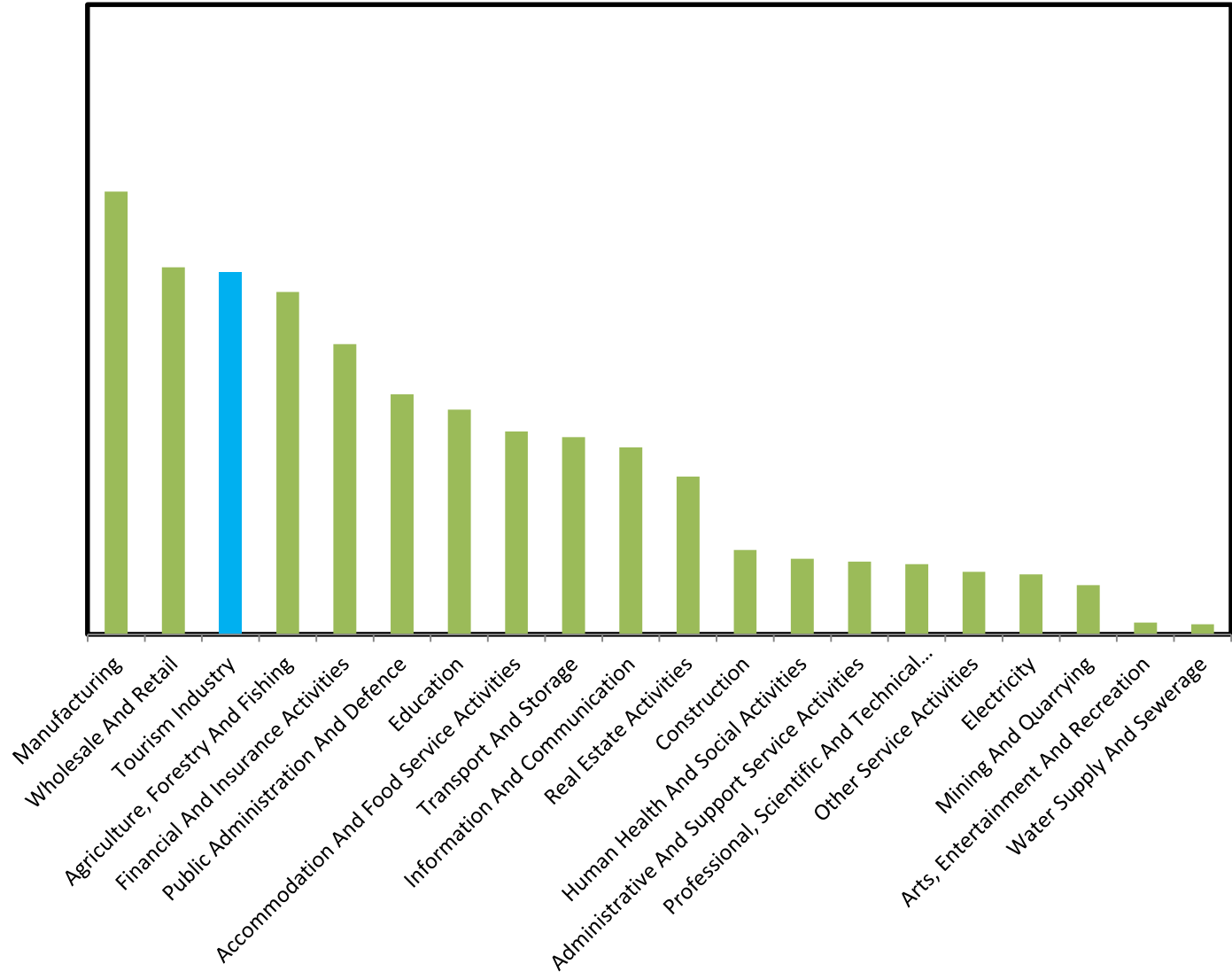
# Comparisons

## Tourism Expenditure & Visitor Arrivals

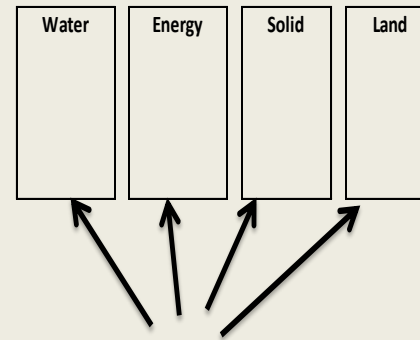


# 2011 Value Added Comparison

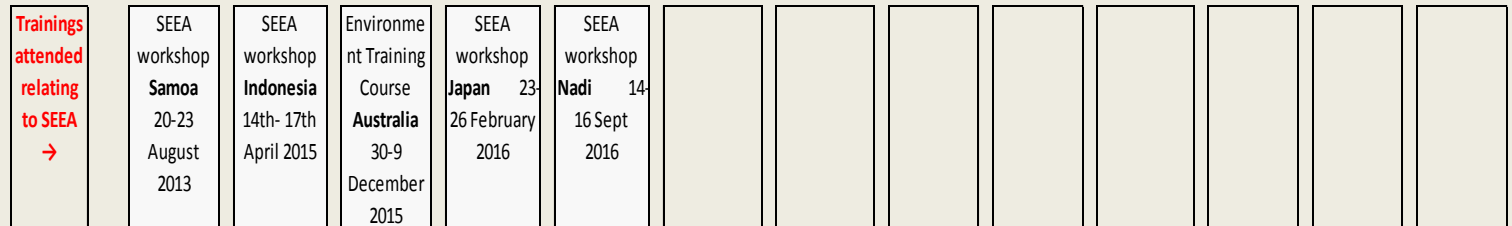
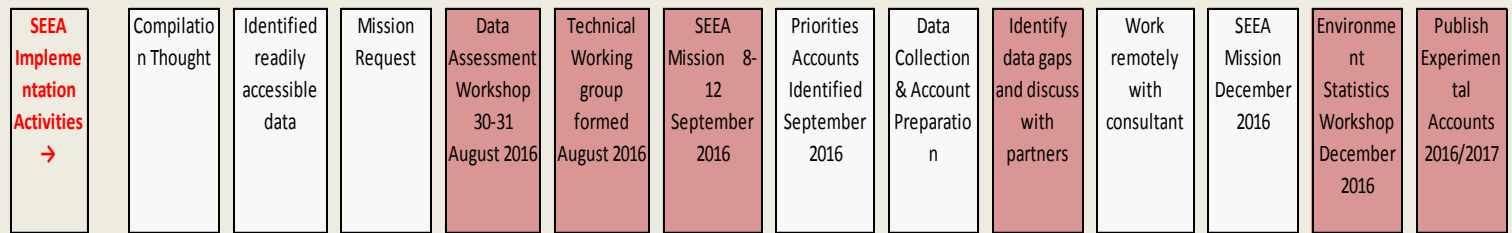
## Tourism Industry Rank



# SEEA Journey



Create Awareness





# Fiji's Experimental Waste Account

Quarter 2 2016

	SUPPLY OF WASTE (Who Generates the Waste)					Who Collects the Waste				USE OF WASTE (What happens to the waste)					
	Industries	Household s	Imports	Environment	Total waste generated	Town/City Councils	Recycling Companies	Other Industries	Total Collection	Land Fill	Incineration	Recycling/ Reuse	Other Treatment	Export	TOTAL DISPOSAL
Waste Residuals															0
General Waste	16,846		0	0	16,846	9,434		7,412	16,846	16,846					16,846
Green waste	1,833		0	0	1,833	1,816		17	1,833	1,833					1,833
Special waste	3,292		0	0	3,292	63		3,229	3,292	3,292					3,292
<b>TOTALS</b>	<b>21,970</b>		<b>0</b>	<b>0</b>	<b>21,970</b>	<b>11,313</b>		<b>10,658</b>	<b>21,970</b>	<b>21,970</b>			<b>0</b>		<b>21,970</b>



Year	Town/City Councils				Other Industries				Total Collection				Landfill				Recycle
	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	General Waste	Green waste	Special waste	Total	General Waste
2006	27,127	7,758	75	34,960	21,313	72	3,854	25,238	48,440	7,829	3,928	60,198	48,440	7,829	3,928	60,198	0
2007	27,293	7,431	56	34,780	21,443	69	2,901	24,412	48,735	7,500	2,957	59,192	48,735	7,500	2,957	59,192	0
2008	24,716	3,659	63	28,438	19,418	34	3,247	22,699	44,134	3,693	3,310	51,137	44,134	3,693	3,310	51,137	0
2009	25,377	5,493	70	30,940	19,937	51	3,612	23,600	45,314	5,544	3,682	54,540	45,314	5,544	3,682	54,540	0
2010	26,972	6,830	67	33,868	21,191	63	3,443	24,697	48,163	6,893	3,510	58,566	48,163	6,893	3,510	58,566	0
2011	28,319	7,100	75	35,494	22,249	66	3,872	26,186	50,568	7,165	3,947	61,680	50,568	7,165	3,947	61,680	0
2012	29,013	6,298	55	35,366	22,794	58	2,829	25,681	51,807	6,357	2,883	61,047	51,807	6,357	2,883	61,047	0
2013	41,695	8,948	126	50,769	32,758	83	6,500	39,340	74,453	9,030	6,626	90,109	74,202	9,030	6,626	89,858	251
2014	45,590	10,094	205	55,889	35,818	93	10,557	46,468	81,408	10,188	10,761	102,357	81,087	10,188	10,761	102,036	321
2015	50,129	10,755	225	61,109	39,384	99	11,617	51,101	89,513	10,854	11,843	112,210	89,117	10,854	11,843	111,814	396
2016 [p]	50,532	11,029	222	61,783	39,701	102	11,445	51,247	90,233	11,131	11,666	113,030	89,850	11,131	11,666	112,647	383

# Fiji's Experimental Water Account

	2013 (Megalitres)	2014 (Megalitres)	2015 (Megalitres)	2016 (Megalitres)
<b>Sources of Water</b>				
Surface water extracted	118,390	116,536	123,496	125,726
Ground water extracted	-	-	-	-
Soil water extracted	-	-	-	-
<i>Total water extracted</i>	<i>118,390</i>	<i>116,536</i>	<i>123,496</i>	<i>125,726</i>
<u>less</u> loss during purification	4,631	4,558	4,831	3,036
Water available for distribution	113,759	111,978	118,666	122,690
Billed:				
<i>Household</i>	44,800	40,442	46,733	46,152
<i>Government</i>	2,892	2,611	3,017	2,980
<i>Commercial</i>	17,433	15,738	18,185	17,960
Non-billed water distribution	42	42	44	164
Loss during distribution	48,590	53,145	50,686	55,434
<i>Returns to the environment</i>	<i>118,390</i>	<i>116,536</i>	<i>123,496</i>	<i>125,726</i>
<i>% of water loss during purification</i>	<i>3.9%</i>	<i>3.9%</i>	<i>3.9%</i>	<i>2.4%</i>
<i>% of water loss during distribution</i>	<i>41.0%</i>	<i>45.6%</i>	<i>41.0%</i>	<i>44.1%</i>

# Fiji's Experimental Energy Account

	2013 (Petajoules)	2014 (Petajoules)
<b>Sources of Energy</b>		
<i>Hydro</i>	1.9	1.4
<i>Solar and Wind</i>	0.019	0.015
<i>Fuel oil</i>	3.0	4.1
<b>Total</b>	<b>4.9</b>	<b>5.6</b>
<b><u>Less loss during Transformation</u></b>	<b>1.9</b>	<b>2.5</b>
<b>Energy Available for distribution</b>	<b>3.1</b>	<b>3.1</b>
<b>Users of Energy:</b>		
<i>Commercial</i>	1.3	1.3
<i>Industrial</i>	0.8	0.8
<i>Domestic</i>	0.8	0.8
<b>Loss during distribution</b>	<b>0.3</b>	<b>0.2</b>
<b><i>Returns to the environment</i></b>	<b>4.9</b>	<b>5.6</b>
<i>% of energy loss during transformation</i>	37.6	44.8
<i>% of energy loss during distribution</i>	5.6	4.2



# Development Towards Fiji's Sustainable Tourism

Annualized compilation of TSA and availability of relevant hotel related indicators would help measure sustainable tourism.

TSA is the principle tool to determine the impact of Tourism in terms of its contribution to GDP and employment.

A feasibility report on Measuring Sustainable Tourism was conducted in December 2016 showed to be highly relevant and feasible for Fiji.

This exercise was jointly undertaken by Fiji Bureau of Statistics, UNWTO and UNESCAP.

MST data tables with relevant indicators were designed which is basically an extension of TSA framework to capture environmental flows.

# Development Towards Fiji's Sustainable Tourism

## Key characteristics for tourism businesses

- Output by tourism characteristics and related industries
- Value Addition of the units
- Tourism Industry ratios
- Employment by Gender & type of employment
- Size of Businesses
- Ownership
- Environmental Flows used

# Key Characteristics for Tourism Businesses

2013									
Tourism Industries	Output (\$)	Value Added (\$)	Tourism Industry Ratio	Employment (# of people)			Business Size (# of businesses)		
				Male	Female	Total	Small (<20 employed)	Medium (20-100 employed)	Large (>100 employed)
Accommodation	644,113	306,098	0.79	6,658	5,762	12,420	235	67	25
Food and restaurants	102,524	29,058	0.62	1,238	1,052	2,290	474	34	-
Transport:									
<i>Road</i>	57,952	25,204	0.34	1,253	56	1,309	1,022	41	2
<i>Water</i>	28,691	7,194	0.37	318	93	411	38	22	1
<i>Air</i>	653,267	160,652	0.99	619	296	916	10	6	2
<i>Rental Cars</i>	54,199	12,677	0.86	368	3	371	138	-	-
<i>Travel Agents and Tour operators</i>	130,001	39,449	0.83	435	277	711	82	6	2
Recreation	28,640	11,100	0.30	215	78	294	40	2	-
Other Industries	322,069	185,573	0.03	4,068	2,333	6,401			

# Visitor and Accommodation Data by Tourism Area

2013									
Tourism Areas	Visitor Arrivals	Visitor Expenditure	Accommodation						
			No. of businesses	No. of beds	No. of rooms	Room Occupancy Rates	Bed Occupancy Rates	Water Use	Electricity Use
Suva	256,046	113,369,608	47	11,474	5,830	51.0	45.4		
Nadi	1,159,873	660,261,368	60	30,968	13,996	54.3	51.1		
Lautoka	106,665	64,883,318	40	7,812	3,186	35.9	25.6		
Coral Coast	897,450	336,421,044	37	19,471	7,721	56.5	53.3		
Mamanuca	612,239	359,987,234	47	14,831	5,615	47.8	45.8		
Northern Division	98,334	48,763,140	71	6,005	2,779	29.6	26.4		
Others	41,899	4,021,499	37	3,877	1,501	18.4	13.3		
<b>Total</b>	<b>3,172,506</b>	<b>1,587,707,211</b>	<b>339</b>	<b>94,438</b>	<b>40,628</b>	<b>48.9</b>	<b>44.8</b>	<b>6,193,385</b>	<b>66,231,075</b>

# Challenges

1. International Visitor Survey
2. Further investigations to disseminate tourism related statistics at disaggregated level.
3. Lack of Resources
4. Lack of Expertise





# Vinaka ☺

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