



Sector Profile of Sustainable Tourism in the Pacific

Prepared for:
Secretariat of the Pacific
Regional Environment Programme (SPREP)

[Cameron-Cole, LLC](#)
100 Cummings Center, Suite 335-A
Beverly, MA 01915
P. 781.881.0271
www.cameron-cole.com

Date: 19 December 2016

creating sustainable success



Executive Summary

According to the UN, international tourism continues to grow rapidly. In 2012, 1 billion tourist arrivals were recorded and the industry contributed 9% to global GDP (direct, indirect and induced impact), accounting for 1 in 11 jobs worldwide. Between 2020 and 2030, developed and developing countries anticipate continued significant growth—2.2% and 4.4%, respectively—reaching a total of 1.8 billion international arrivals by 2030.¹ Pacific Island tourism growth exceeds the developing country rate by over 25%.²

Tourism activities have significant environmental impacts, including an estimated 5% contribution to global climate change emissions. If business as usual growth trends continue, tourism-related impacts are expected to grow significantly by 2050: energy use (154%), greenhouse gas emissions (131%), water consumption (152%) and solid waste disposal (251%).³

2017 has been designated as the UN World Tourism Organisation's 'Year of Sustainable Tourism'. In the context of this recognition, Sustainable Tourism is defined as tourism activities that promote:

- (1) Inclusive and sustainable economic growth
- (2) Social inclusiveness, employment and poverty reduction
- (3) Resource efficiency, environmental protection and climate change
- (4) Cultural values, diversity and heritage
- (5) Mutual understanding, peace and security.⁴

Based on Cameron-Cole's research and our visitation experience, we believe that 'Sustainable Tourism' in the Pacific does not have the requisite qualities to be considered a 'sector'.

Although some of the necessary elements for Sustainable Tourism to be considered a sector are in place, or are ready to be put in place, in general there is a lack of the following, which is sufficient for Sustainable Tourism to qualify as a sector:

- Basic, measurable standards (both mandatory and voluntary) and terminology that define what is sustainable/sustainability
- Means to develop and enforce such standards
- Adequate levels of visitor or economic volume/size.

For example, almost none of the Pacific Island nations visited or studied quantifies the contribution of tourism to the national economy, let alone Sustainable Tourism.

For this reason, Cameron-Cole's analysis and data on environmental, social and economic impacts will focus on tourism in general. We will provide anecdotal evidence of sustainability activities and provide a framework and template for transforming the general tourism sector toward sustainability. For our analytical portion, we will look at total tourism arrival numbers and assess the impact of overall tourism on environmental, conservation, and cultural heritage issues. Where available, economic impacts will be discussed in terms of the entire tourism industry.

- Based on our interviews and our own experience, we will discuss illustrative cases of ecotourism activities that are directly or indirectly related to marine environments. Similarly, we

¹ CONCEPT NOTE – Towards the Development of the IOYFP Sustainable Tourism Programme, Revised: 22 December, 2014, pp. 1-6.

² From 2011-2015, Pacific Island tourism arrivals grew on average by 5.2% per year, mostly driven by cruise ship arrivals.

³ Ibid, p. 6-7.

⁴ <http://www2.unwto.org/tourism4development2017>



will need to base any market demand or forward-looking indicators based more on anecdotal evidence, rather than any formal data collection effort.

Arrival and Visitation Trends

Overall, the recent trend of tourism visitation to Pacific Island nations is growing at 5.2% per year, as shown in Table I, exceeding even the forecast high developing country rate of 4.4%. Emerging industry consensus is that these growth rates are not sustainable.⁵ Indeed, in terms of the overall impact, several countries have already exceeded the carrying capacity of the environment to absorb the impacts of tourism visitation, while other countries have resources that are still viable ecologically, but face significant and growing pressures that could render them nonviable.

In terms of absolute numbers, we focused on the countries, shown in Table I, that represent 90% or more of the tourism in the region. Guam is an outlier in terms of its overall tourism visitation. Guam has nearly twice as many visitors as the next most visited country—Fiji—while receiving approximately 20 times the visitation of Tonga.⁶

| Air & Sea Visitors | 2011 | 2012 | 2013 | 2014 | 2015 | AARG ⁷ | Total Visitors |
|-----------------------|------------------|------------------|----------------------|------------------|------------------|-------------------|-------------------|
| Fiji ⁸ | 675,050 | 660,590 | 676,090 ⁹ | 692,630 | 754,835 | 2.9% | 3,459,195 |
| French Polynesia | 196,448 | 209,488 | 214,278 | 228,273 | 239,077 | 5.0% | 1,087,564 |
| Guam | 1,159,778 | 1,308,035 | 1,334,497 | 1,343,092 | 1,409,050 | 5.1% | 6,554,452 |
| New Caledonia | 347,559 | 390,145 | 493,678 | 528,823 | 558,075 | 12.9% | 2,318,280 |
| Palau | 118,055 | 124,286 | 111,145 | 146,867 | 167,481 | 10.2% | 667,834 |
| Samoa | 127,603 | 134,564 | 124,579 | 131,796 | 120,901 | -1.1% | 639,443 |
| Tonga | 73,646 | 63,722 | 68,707 | 58,393 | 63,184 | -3.1% | 327,652 |
| Vanuatu | 248,898 | 321,404 | 357,405 | 329,013 | 287,423 | 4.9% | 1,544,143 |
| Total Visitors | 2,947,037 | 3,212,234 | 3,380,379 | 3,458,887 | 3,600,026 | 5.2% | 16,598,563 |

Table I: Annual Air and Sea Arrivals, 2011–2015.

⁵ See: <http://linkis.com/www.travelmole.com/tjmfa>, <http://destinationcenter.org/2016/10/what-to-do-about-overcrowded-destinations/> and <http://www.conscious.travel/beyond-overtourism/>

⁶ Our analysis of visitation trends by arrival type is hindered by the fact that we do not know how visitors to Fiji are apportioned by mode of arrival. Because Fiji does not track visitation by type of arrival, we need to estimate based on other sources of related data. Based on preliminary research, we assume that sea visitation to Fiji in 2011 was approximately 80% that of visitation to New Caledonia. Air arrivals in 2011 are estimated to be the difference between sea visitation estimates and known total arrivals. For 2012–2014 in Fiji, we assume that air arrivals grew at the average regional rate of 0.4%. Sea arrivals are calculated at the difference between air arrivals and total visitation. Also, 2013 data for Fiji was not available; for that year, we used the average of 2011, 2012 and 2014 data.

⁷ Average annual rate of growth.

⁸ See Footnote 6.

⁹ Data not available for 2013. Average of visitors from 2011, 2012 and 2014 used instead.

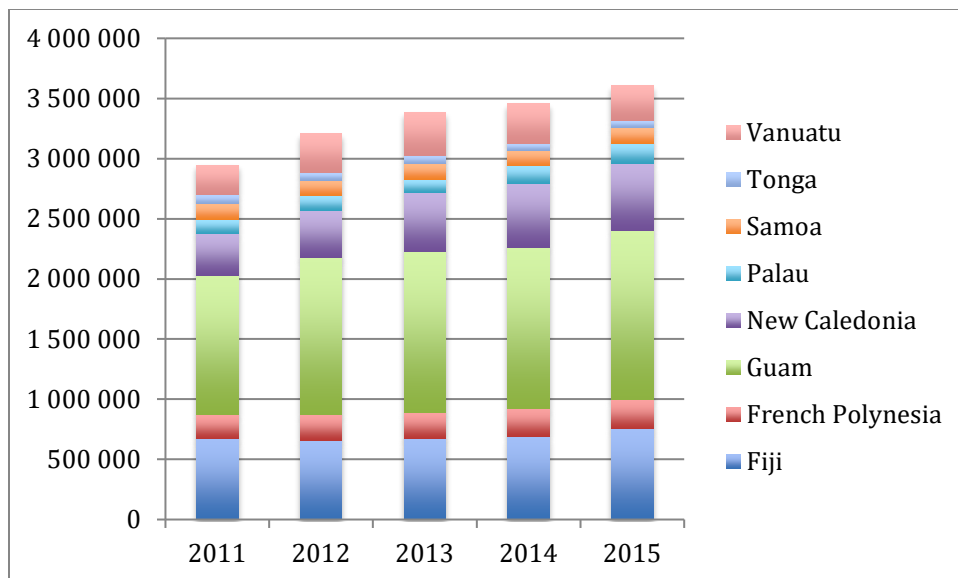


Figure 1: Annual Air and Sea Arrivals, 2011–2015.

As shown in Table 2, on some level, anyone who visits a country, whether for business or family visitation, ends up partially or fully being a ‘tourist’. All visitors—or the vast majority—utilise all or a portion of the infrastructure geared toward ‘tourists’. These include environmental and cultural sites and activities, as well as hotels, restaurants, etc., while at the same time putting significant pressure on basic infrastructure including food, energy, transportation and water & sewer. While business and family visitors may utilise many of these elements with less intensity than might a conventional ‘tourist’, they utilise them nonetheless and direct or indirect marine impacts result.

| Impact Intensity | Residents | Family Visitors | Business Visitors (Gov’t, Bus. Sport) | Air Arrival Tourists | Sea Arrival Tourists |
|----------------------------|-----------|-----------------|---------------------------------------|----------------------|----------------------|
| Coastal Marine Resources | ⊙ | ●/○ | ●/○ | ○/○ | ⊙ |
| Ocean Marine Resources | ⊙ | ● | ● | ●/○ | ⊙ |
| Marine-connected Land | ⊙ | ●/○ | ● | ●/○ | ● |
| Marine-connected Water | ⊙ | ●/○ | ● | ●/○ | ● |
| Food | ○/○ | ●/○ | ● | ○/○ | ⊙ |
| Energy | ○/○ | ●/○ | ● | ○/○ | ●/○ |
| Water | ○/○ | ●/○ | ● | ○/○ | ●/○ |
| Sewer | ○/○ | ●/○ | ● | ○/○ | ● |
| Local Transportation | ⊙ | ●/○ | ●/○ | ●/○ | ○/○ |
| Nat’l/Int’l Transportation | ○ | ●/○ | ●/○ | ⊙ | ●/○ |

High Impact ⊙ Mid Impact ○ Low Impact ●

Table 2: Impact Intensity on Resources.

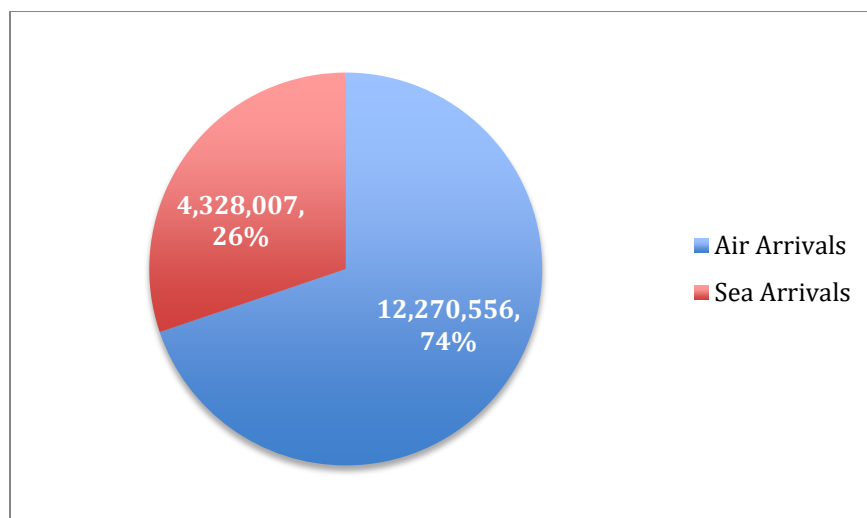


Figure 2: Proportion of Air and Sea Arrivals—All Islands.

People arriving at Pacific Islands by air form a significant majority of arrivals compared with seaborne visitors. Although overall air travel visitors are increasing, cruise ship visitors are growing significantly faster.

| Air Arrivals | 2011 | 2012 | 2013 | 2014 | 2015 | AARG | Total |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-------|------------|
| Fiji ¹⁰ | 486,503 | 488,449 | 490,403 | 492,364 | 494,334 | 0.4% | 2,452,053 |
| French Polynesia | 136,432 | 143,682 | 137,349 | 141,921 | 147,651 | 2.1% | 707,035 |
| Guam | 1,150,201 | 1,298,641 | 1,328,761 | 1,330,721 | 1,400,397 | 5.2% | 6,508,721 |
| New Caledonia | 111,875 | 112,204 | 107,753 | 107,187 | 113,951 | 0.5% | 552,970 |
| Palau | 118,055 | 124,286 | 111,145 | 146,867 | 167,481 | 10.2% | 667,834 |
| Samoa | 124,705 | 131,842 | 122,120 | 128,624 | 117,824 | -1.2% | 625,115 |
| Tonga | 46,005 | 47,457 | 48,188 | 50,436 | 53,752 | 4.0% | 245,838 |
| Vanuatu | 93,960 | 108,161 | 110,109 | 108,808 | 89,952 | -0.4% | 510,990 |
| | 2,267,736 | 2,454,722 | 2,455,828 | 2,506,928 | 2,585,342 | 3.4% | 12,270,556 |
| Percent of Total Arrivals | 77% | 76% | 73% | 72% | 72% | | 74% |

Table 3: Annual Air Arrivals, 2011–2015.

¹⁰ See Footnote 6.

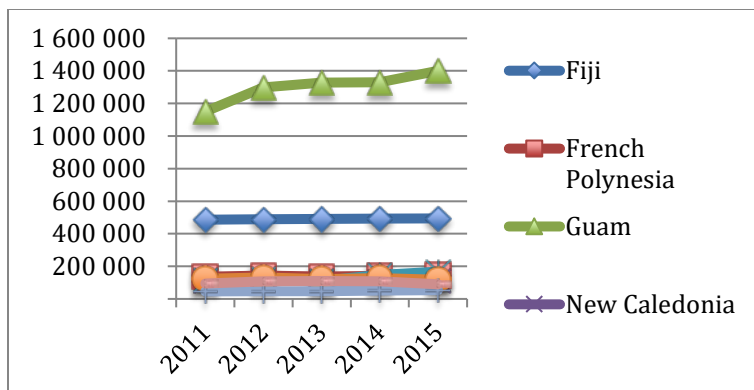


Figure 3: Annual Air Arrivals, 2011–2015.

| Sea Arrivals | 2011 | 2012 | 2013 | 2014 | 2015 | AARG | Total |
|---------------------|----------------|----------------|----------------|----------------|------------------|--------------|------------------|
| Fiji ¹¹ | 188,547 | 172,141 | 185,687 | 200,266 | 260,501 | 9.3% | 1,007,142 |
| French Polynesia | 60,016 | 65,806 | 76,929 | 86,352 | 91,426 | 11.2% | 380,529 |
| Guam | 9,577 | 9,394 | 5,736 | 12,371 | 8,653 | 11.2% | 45,731 |
| New Caledonia | 235,684 | 277,941 | 385,925 | 421,636 | 444,124 | 17.8% | 1,765,310 |
| Palau ¹² | - | - | - | - | - | 0.0% | - |
| Samoa | 2,898 | 2,722 | 2,459 | 3,172 | 3,077 | 2.6% | 14,328 |
| Tonga | 27,641 | 16,265 | 20,519 | 7,957 | 9,432 | -14.4% | 81,814 |
| Vanuatu | 154,938 | 213,243 | 247,296 | 220,205 | 197,471 | 8.1% | 1,033,153 |
| TOTAL: | 679,301 | 757,512 | 924,551 | 951,959 | 1,014,684 | 10.8% | 4,328,007 |
| TOTAL % | 23% | 24% | 27% | 28% | 28% | | 26% |

Table 4: Annual Sea Arrivals, 2011–2015.

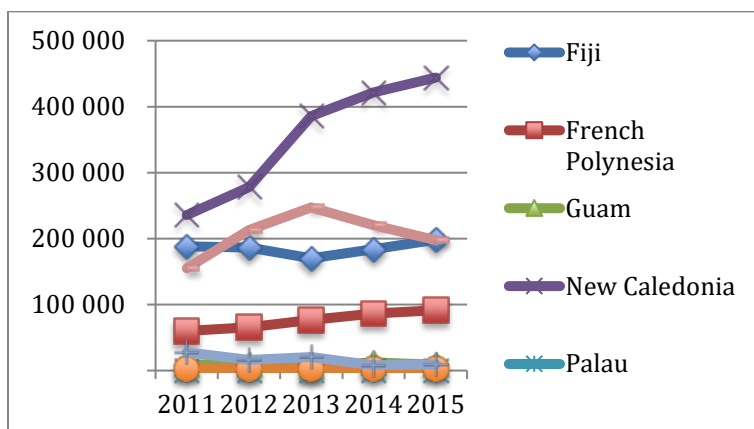


Figure 4: Annual Sea Arrivals, 2011–2015.

¹¹ See Footnote 6.

¹² Palau does not track visitors by arrival type and there is no meaningful cruise visitation.



In terms of air versus sea visitation, Guam and Palau—both located in the northern hemisphere—are significant outliers with regards to how visitors arrive, with nearly 100% of visitors coming by air. If we remove these two countries from our analysis, air visitation no longer dominates sea visitation to the same degree. Indeed, visitor travel mode is almost the same, with sea arrivals growing very rapidly in the South Pacific at several key marine environment destinations. This points out the vital importance of engaging with cruise providers as a core strategy of addressing Sustainable Tourism in the region.

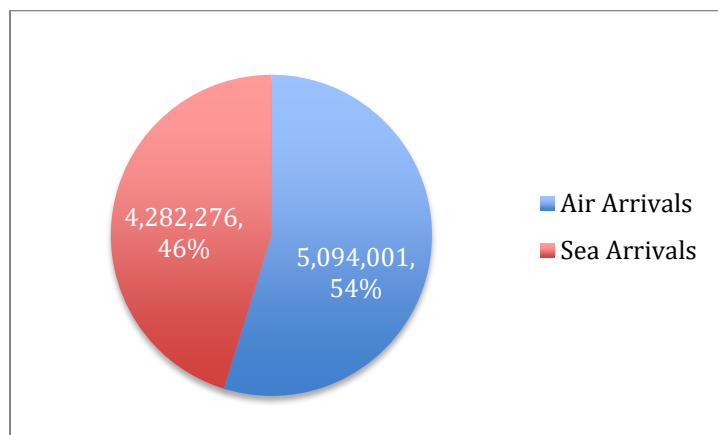


Figure 5: Proportion of Air and Sea Visitors—South Pacific Only.

With Guam out of the picture, Fiji becomes the largest air destination of the remaining islands by a considerable margin, although we are not certain the exact volume of air visitation. Although the numbers in Table 5 show a slow, steady growth of visitation by air to Fiji, this is simply the result of our attempt to split air from cruise ship arrivals, which was initially correlated to cruise ship visitation of New Caledonia, which very frequently share itinerary with Fijian ports of call.

| Air Arrivals | 2011 | 2012 | 2013 | 2014 | 2015 | AARG | Total |
|--------------------|----------------|------------------|------------------|------------------|------------------|-------------|------------------|
| Fiji ¹³ | 486,503 | 488,449 | 490,403 | 492,364 | 494,334 | 0.4% | 2,452,053 |
| French Polynesia | 136,432 | 143,682 | 137,349 | 141,921 | 147,651 | 2.1% | 707,035 |
| New Caledonia | 111,875 | 112,204 | 107,753 | 107,187 | 113,951 | 0.5% | 552,970 |
| Samoa | 124,705 | 131,842 | 122,120 | 128,624 | 117,824 | -1.2% | 625,115 |
| Tonga | 46,005 | 47,457 | 48,188 | 50,436 | 53,752 | 4.0% | 245,838 |
| Vanuatu | 93,960 | 108,161 | 110,109 | 108,808 | 89,952 | -0.4% | 510,990 |
| TOTAL: | 999,480 | 1,031,795 | 1,015,922 | 1,029,340 | 1,017,464 | 0.5% | 5,094,001 |
| TOTAL % | 60% | 58% | 53% | 52% | 50% | | 54% |

Table 5: Annual Air Arrivals—South Pacific Only—2011–2015.

¹³ See Footnote 6.

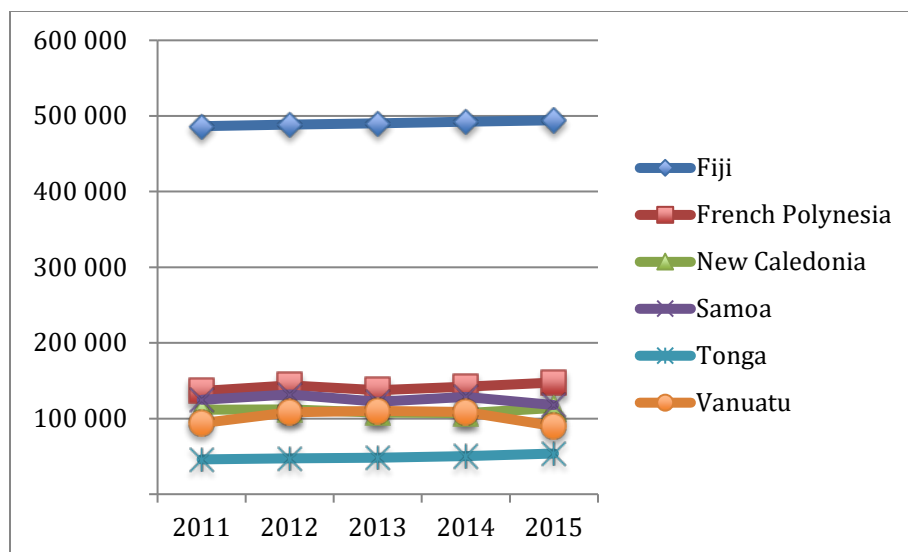


Figure 6: Annual Air Arrivals—South Pacific Only—2011–2015.

Tracking cruise ship and air arrivals in Fiji will add an important data point to the regional assessment of visitation by this mode in the region and will contribute to better policymaking.

| Sea Arrivals | 2011 | 2012 | 2013 | 2014 | 2015 | AARG | Total |
|--------------------|----------------|----------------|----------------|----------------|------------------|--------------|------------------|
| Fiji ¹⁴ | 188,547 | 172,141 | 185,687 | 200,266 | 260,501 | 9.3% | 1,007,142 |
| French Polynesia | 60,016 | 65,806 | 76,929 | 86,352 | 91,426 | 11.2% | 380,529 |
| New Caledonia | 235,684 | 277,941 | 385,925 | 421,636 | 444,124 | 17.8% | 1,765,310 |
| Samoa | 2,898 | 2,722 | 2,459 | 3,172 | 3,077 | 2.6% | 14,328 |
| Tonga | 27,641 | 16,265 | 20,519 | 7,957 | 9,432 | -14.4% | 81,814 |
| Vanuatu | 154,938 | 213,243 | 247,296 | 220,205 | 197,471 | 8.1% | 1,033,153 |
| TOTAL: | 669,724 | 748,118 | 918,815 | 939,588 | 1,006,031 | 11.0% | 4,282,276 |
| TOTAL: % | 40% | 42% | 47% | 48% | 50% | | 46% |

Table 6: Annual Sea Arrivals—South Pacific Only—2011–2015.

¹⁴ See Footnote 6.

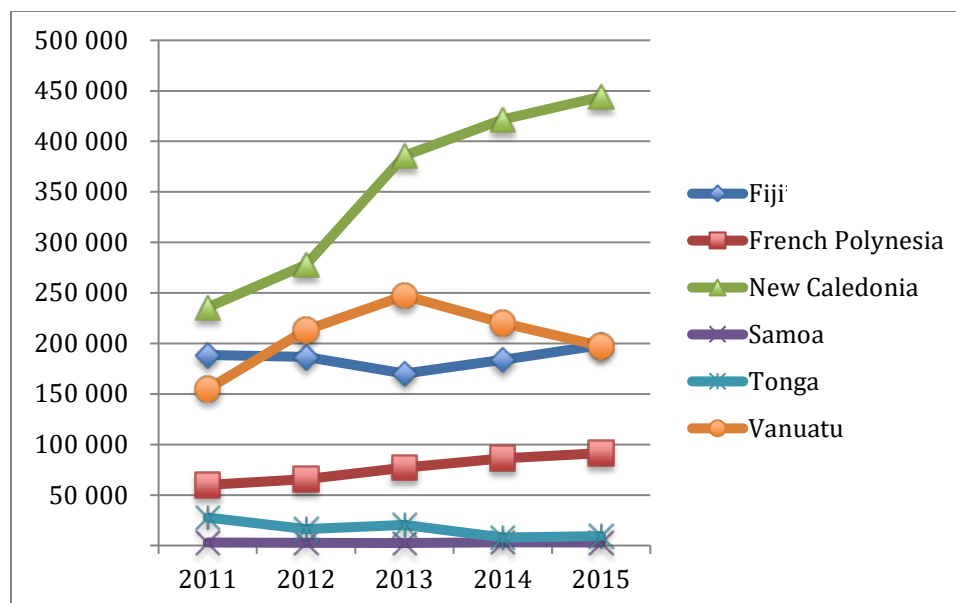


Figure 7: Annual Sea Arrivals—South Pacific Only—2011–2015.

Defining ‘Sustainable’

For many of the reasons outlined in this report, visitor growth cannot continue unabated in the tourism industry. Thus, a new model of tourism—one that emphasises development, rather than growth¹⁵—should be conceived and disseminated throughout the Pacific Island nations.

Beyond being simply a mode of travel or visitation, Sustainable Tourism (also called Responsible or Conscious Tourism) is also a framework for an approach to development of a tourism industry that focuses as much on quality as it does on quantity.

Although no Pacific region-specific figures are available, Sustainable Tourism is growing across the globe.¹⁶ In addition to emphasising travel in a lower-impact manner, one important element of Responsible/Conscious Tourism entails visitors dedicating all or part of their time in a country to participating in a volunteer cultural or environmental restoration activity. For example, ‘farm stay’ tourism is one aspect of Responsible/Conscious Tourism.

We believe that this tourism niche could be an excellent basis for Pacific Island nations to take advantage of these resources in order to improve the natural environment, while building and extending an environmental sustainability brand.

As we noted in our project proposal, we are taking an expanded definition of sustainability compared with the original RFP to address two specific elements. First of all, we apply the term sustainability to the broader tourism sector and look for ways of making mass tourism more sustainable, generally through improving infrastructure and setting up minimum performance standards that include environmental, social, and economic sustainability elements. Secondly, in Deliverable 4, we will make recommendations toward the development of broader transformation toward the creation and expansion of a formal ecotourism sector.

¹⁵ http://www.diffen.com/difference/Economic_Development_vs_Economic_Growth

¹⁶ <http://www.sciencedirect.com/science/article/pii/S2211973612000396>



Thus, our discussion of environmental, conservation and cultural heritage impacts will focus on overall visitation numbers, under the assumption that all visitors impact either tourism-related infrastructure, or tourism-related places or activities, or both.

At current levels of development, ‘sustainability’ as it applies to mass tourism, or ‘ecotourism’ as it applies to both infrastructure and activities can only be described anecdotally, rather than analysed through sufficiently large data sample sizes to draw meaningful conclusions.

Growth vs. Development

For the purposes of this report, Cameron-Cole distinguishes between growth and development in terms of the evolution of Sustainable Tourism.

A growth-centred model tends to pursue the basic objective—increasing numbers—without fully incorporating systemic limits, generally environmental and/or social, but sometimes financial. Limited stocks (typically natural or social resources) are extracted in pursuit of increasing numbers, with little regard for the impact of the diminution of the stock and the resulting impact on natural flows.

A development-centred model focuses beyond economic parameters to include environmental and social well-being. Development also emphasises sufficiency and staying within the resource limits proscribed by natural flows or processes.

There are many ways of combining Responsible/Conscious Tourism activities with Sustainable Tourism activities. In particular, access to sensitive sites could be reserved in part for participants in a Sustainable Tourism program. The ability to secure access to a restricted area would be a very strong draw for many travellers.

As we will discuss in more detail in Deliverable 2, restricting access to a resource makes it significantly more valuable. It would also have the benefit of allowing further restoration or maintenance of pristine conditions of these precious resources.

A ‘Sustainable Tourism Market/Industry’ Does Not Yet Exist in the Pacific

In general, the level of visitation and the degree of resource management in the tourism sector are not sustainable. In particular, tourist activities that involve visitor engagement with unique marine elements, whether they be coastal reefs, offshore dive spots, or

interaction with important species, such as whales, sharks, rays, etc., do not yet have sufficient guidelines established for either the quality or nature of interaction nor do they have the degree of supervision and enforcement necessary to protect the species or the location.

There are efforts underway, some driven by government, some driven by the private sector, that hold significant promise for providing the necessary guidelines and structure to ensure that sensitive sites or species interactions are conducted in a sustainable manner.

Cameron-Cole believes that in order for an industry or part of an industry to qualify as a sector, three key elements must be in place:

- 1) A set of consistent performance standards— both for minimum performance and for advanced performance—must exist that defines elements that distinguish the sector from other sectors. For example, what distinguishes ‘sustainable’ tourism from ‘normal’ tourism?
- 2) A professional organisation must exist that helps set the standards and provides a forum for further development and enhancement of the sector.
- 3) Sufficient numbers must exist that represent a meaningful impact either economically or as a percent of a total industry.

While performance standards defining Sustainable Tourism do exist, none has been adopted by a broad set of actors in the Pacific region. Thus, in our opinion, it is not possible to ascertain the specific impact



of 'Sustainable Tourism' on the environment, conservation of natural heritage, or to distinguish Sustainable Tourism visitor arrivals and the economic impact of this activity.

Therefore, our analysis and recommendations will discuss the current status of the South Pacific tourism industry in general, identify where conventional elements of the existing tourist infrastructure can be made more sustainable, while at the same time identifying the gaps that prevent a Sustainable Tourism sector from being defined, and present recommendations for closing that gap. A parallel set of activities on both the regulatory and voluntary/market fronts is necessary for the tourism sector as a whole to become more sustainable, as well as for an 'ecotourism' niche to be developed.

Cameron-Cole is basing its recommendations on the Sustainable Tourism Market Transformation Protocol developed by Principal Investigator Rob Watson, which has been demonstrated to be effective in transforming various sectors from utilities and energy conservation to green buildings. The process of following this market transformation protocol (MTP) will fulfil the three necessary requirements identified as above for a sector: 1) the development of minimum and more advanced standards, 2) the need for industry support groups, and 3) sufficient participants to define a sector.



Figure 8: Market Transformation Protocol for Sustainable Tourism.

Economic Contribution of Tourism

Knowing the extent to which tourism contributes to a country or territory's economy is of obvious interest. Unfortunately, few Pacific nations produce readily available data on the subject. Fortunately, the World Travel and Tourism Council (WTTC) produces a series of excellent monographs that answer exactly the questions we are asking. We took data from four reports, one aggregating 12 countries under 'Other Oceanic', and three individual countries—Fiji, Tonga, and Vanuatu (see Table 8).¹⁷

¹⁷ World Travel and Tourism Council (WTTC), Travel & Tourism ECONOMIC IMPACT 2016--OTHER OCEANIC STATES; [...]: FIJI; [...]: TONGA; [...]: VANUATU. (4 reports) March 2016. Note: We excluded the report from Papua New Guinea because tourism has less than a 1% impact on GDP and employment there; including these figures would distort the overall importance of tourism to the region. The methodology for the derivation of these figures can be found here: <http://www.wttc.org/-/media/files/reports/economic-impact-research/2016-documents/2016methodology-final.pdf>



WTTC annual reports on the impact of travel and tourism cover key economic issues such as, direct contribution of tourism to GDP as well as total (direct, indirect, induced) contribution. In addition, the annual reports track direct and total employment related to the sector and the percentage contribution of direct foreign expenditure as a percentage of exports. In addition to current figures, WTTC also creates forecasted figures for each of these areas.

| Tourism-Related GDP (\$US million) | Tourism | % of Total GDP |
|--|---------|-----------------------|
| Direct 2016 | 5,035 | 12.7% |
| Direct 2026 | 8,892 | 13.7% |
| Total 2016 | 13,407 | 33.8% |
| Total 2026 | 23,482 | 36.3% |
| Avg. Total GDP Growth (2016–2026) | 8.4% | % of total Exports |
| 'Visitor Exports' (2016) | 9,789 | 48.8% |
| 'Visitor Exports' (2026) | 17,593 | 47.7% |
| Employment | | % of total Employment |
| Direct 2016 | 120,500 | 14.7% |
| Direct 2026 | 149,000 | 16.4% |
| Total 2016 | 307,000 | 37.2% |
| Total 2026 | 373,000 | 41.0% |
| Avg. Total Employment Growth (2016–2026) | 2.4% | |

Table 7: 15 Pacific Countries¹⁸ Economic Contribution of Tourism.

Based on the aggregated information on the 15 countries, it is quite apparent that tourism is a regionally significant industry for Pacific nations and one that is expected to grow in importance.¹⁹ Direct expenditures as a proportion of GDP are expected to reach nearly 14% by 2026, increasing from nearly 13% today. When one includes the indirect and induced economic activity tourism in 2016 it represents over one third of the regional economy and in excess of 36% by 2026. The so-called Visitor Exports²⁰ represent almost half of all exports from the studied nations. Similarly, tourism has an even greater impact on employment, representing nearly 15% of total direct employment today, which is forecast to grow beyond 16% by 2026. When indirect and induced activity is included, these numbers grow to 37% and 41%, respectively.

Although it is clear that tourism is regionally significant, the contributions to national economies do vary widely. For example, tourism as a fraction of Tonga's GDP is approximately one third that of, say Vanuatu or Fiji. Moreover, the aggregation of 12 island nations under 'Other Oceanic' masks other potentially large variations of the contribution of tourism to different national economies.

Given that tourism activity and employment is one of the most significant drivers of Pacific Island economies, we recommend that SPREP and the island nations work with the World Travel and Tourism Council to harmonise data collection and analytical efforts to ensure the most robust assessment possible. We believe that such a partnership would be of mutual benefit.

¹⁸ Aggregated figures from WTTC reports and Cameron-Cole calculations. See Appendix A for a detailed table.

¹⁹ Appendix B shows the individual results for Fiji, 'Other Oceanic', Tonga and Vanuatu.

²⁰ 'Visitor Exports' are in-country expenditures made by foreign visitors. See e.g., WTTC economic impact reports *op.cit.* at p. 5.



As noted in our report, the ‘sustainable’ elements of the tourism sector are not adequately defined nor are they large enough to show up at the national level. If SPREP were to develop a strategic partnership with WTTC, another very useful aspect of that partnership might be the development of specific Sustainable Tourism metrics and data that could then be aggregated regionally and used to track progress in growth of the sector.

Environmental and Social Impacts

As noted above, at present we have no direct data on the social and environmental impact of tourism. As a framework for evaluating the potential for environmental impacts, we will use the Environmental Vulnerability Index, which is an international assessment tool sponsored in part by SPREP.

The Environmental Vulnerability Index (EVI) is a broad-based indicator of a country's ability to adapt or withstand vulnerabilities from an environmental and social perspective. The EVI was developed over several years culminating in a 2005 report entitled ‘Building Resilience in SIDS’. The EVI was produced by the South Pacific Applied Geoscience Commission (SOPAC) in conjunction with the United Nations Environment Programme (UNEP).

The EVI groups countries within five vulnerability classifications ranging from extremely vulnerable (red color code) to resilient (green color code). The vulnerability classifications are based on evaluation of 50 different indicators that are grouped within seven different environmental impact areas. The EVI identifies and attempts to quantify three aspects of Vulnerability. These are:

1. The risk of hazards occurring,
2. The inherent resistance to damage, and
3. The acquired vulnerability resulting from past damage.²¹

| Economic Impact Studies | |
|-------------------------|----------------------------------|
| 1. | American Samoa |
| 2. | Cook Islands |
| 3. | Fiji |
| 4. | French Polynesia |
| 5. | Guam |
| 6. | Marshall Islands |
| 7. | Micronesia (Federated States of) |
| 8. | New Caledonia |
| 9. | Niue |
| 10. | Northern Mariana Islands |
| 11. | Palau |
| 12. | Samoa |
| 13. | Tonga |
| 14. | Tuvalu |
| 15. | Vanuatu |

Table 8: Countries Evaluated by WTTC for Economic Impact of Tourism.

| | |
|----------------------|------|
| Extremely vulnerable | 365+ |
| Highly vulnerable | 315+ |
| Vulnerable | 265+ |
| At risk | 215+ |
| Resilient | <215 |

Figure 9: Environmental Vulnerability Index Classifications.

The risk associated with hazards is dependent on the frequency and intensity of events that, by definition, may adversely affect the environment. This risk, in turn is informed by two types of vulnerability: ‘inherent vulnerability’ and ‘acquired vulnerability’. The inherent resilience or resistance of

²¹ The Environmental Vulnerability Index (EVI) 2004 at 11. Damage can be the result of natural or anthropogenic activities.



the environment refers to the innate characteristics of a country that would tend to make it more or less able to cope with natural and anthropogenic hazards.²² For example, low-lying Pacific Island nations are inherently vulnerable to sea-level rise. Acquired vulnerability arises from damage sustained in the past and is related to the ecological integrity or level of degradation of ecosystems. Thus, an island country in which natural mangrove forests have been destroyed would have significantly more acquired vulnerability than one where they have been left intact or restored to a significant degree.

Further quoting from the EVI Technical report:

‘Risks to the natural environment include any events or processes that can cause damage. These include natural and human events and processes, such as the weather and pollution... [Since] natural and human hazards affect the environment in interactive ways...an integrated approach is required when analyzing vulnerability issues. For example, the effects of cyclones on natural communities are worse where marine and shoreline ecosystems have been degraded by pollution and over-harvesting. High levels of natural disturbance can drive populations of organisms down to low levels or make their populations more variable. This in turn, makes the risk of local extinction from other hazards more likely. The frequency and intensity of natural disturbances cannot be separated from the effects of human disturbances and needs to be incorporated in the concept of environmental vulnerability’.

Environmental vulnerability is also a function of intensity and the Environmental Vulnerability Index reflects this by taking into consideration the area over which the effects of the hazard are to be absorbed or attenuated. In this way, highly concentrated impacts can be assessed for their true impact on fragile ecosystems.²³

Of the 22 Pacific Islands on the EVI list, 10 of them were characterised as ‘extremely vulnerable’, 5 of them were classified as ‘highly vulnerable’, 6 were classified as ‘vulnerable’. Only one of the islands is classified in one of the two least vulnerable categories ‘at risk’ and ‘resilient’. The three elements of vulnerability— *hazards*, *resistance*, and *damage*—were evaluated across all 50 indicators on a scale of 1 to 7.

Most of the islands we studied or visited fall under the category of Small Island Developing States (SIDS), with the exception of islands that are colonies or protectorates of developing countries. Table 9 and Appendix A describe the indicators and distribution of environmental sub-indices, as well as the resulting Environmental Vulnerability score.

²² Ibid.

²³ Ibid.



| Country/Territory | Environmental Vulnerability Classification | SIDS | <80% Data ²⁴ | EVI | Hazards | Resistance | Damage |
|--|--|------|-------------------------|-----|---------|------------|--------|
| 1. Papua New Guinea | At Risk | SIDS | - | 251 | 2.69 | 3.38 | 1.27 |
| 2. Solomon Islands | Vulnerable | SIDS | - | 281 | 2.92 | 4.13 | 1.45 |
| 3. Vanuatu | Vulnerable | SIDS | - | 285 | 2.83 | 4.13 | 1.7 |
| 4. New Caledonia | Vulnerable | | X | 290 | 2.75 | 3.43 | 2.5 |
| 5. Pitcairn | Vulnerable | | X | 304 | 2.08 | 5.29 | 2 |
| 6. Wallis and Futuna | Vulnerable | | X | 304 | 1.69 | 5.14 | 3.5 |
| 7. Niue | Vulnerable | SIDS | X | 309 | 2.53 | 5 | 2.25 |
| 8. Samoa | Highly Vulnerable | SIDS | X | 328 | 2.87 | 4.38 | 3.44 |
| 9. Tokelau | Highly Vulnerable | SIDS | X | 328 | 1.87 | 5.71 | 4 |
| 10. Fiji | Highly Vulnerable | SIDS | - | 333 | 3.36 | 4.25 | 2.55 |
| 11. Palau | Highly Vulnerable | SIDS | X | 338 | 2.65 | 4.88 | 3.89 |
| 12. Marshall Islands | Highly Vulnerable | SIDS | - | 348 | 3.13 | 4.75 | 3.67 |
| 13. Tuvalu | Extremely Vulnerable | SIDS | X | 367 | 2.74 | 5.63 | 4.67 |
| 14. Northern Mariana Islands | Extremely Vulnerable | | X | 378 | 1.9 | 4.86 | 5.71 |
| 15. French Polynesia | Extremely Vulnerable | | X | 381 | 3.11 | 4 | 5.43 |
| 16. Cook Islands | Extremely Vulnerable | SIDS | - | 383 | 3.07 | 5.5 | 4.86 |
| 17. Guam | Extremely Vulnerable | SIDS | X | 390 | 2.83 | 4.86 | 6.14 |
| 18. Federated States of Micronesia (FSM) | Extremely Vulnerable | SIDS | X | 392 | 3.14 | 5 | 5.13 |
| 19. Tonga | Extremely Vulnerable | SIDS | X | 392 | 3.14 | 5.25 | 5 |
| 20. Kiribati | Extremely Vulnerable | SIDS | - | 395 | 3.32 | 5.25 | 4.67 |
| 21. Nauru | Extremely Vulnerable | SIDS | X | 421 | 3.59 | 4.88 | 5.44 |
| 22. American Samoa | Extremely Vulnerable | | X | 436 | 3.31 | 5.29 | 5.8 |

Table 9: Environmental Vulnerability Index for SPREP Countries.

Cultural Impacts

'We are caught in the middle [of global climate change], effectively, in Tuvalu. We are very, very worried...We are already suffering. It's already like a weapon of mass destruction and the indications are all there...we only need to garner strong collective leadership to address this...The people of Tuvalu are going to underscore...the message that we are dying.'

Tuvalu Prime Minister Enele Sopoaga²⁵

Internally, feelings of helplessness in the face of implacable global climate trends, expressed so articulately by Tuvalu PM Sopoaga, leave people with feelings of social and cultural dislocation. This in

²⁴ EVI Assessments were made using 80% or less of the full data set requested or sought. As a result, some elements of vulnerability or resilience may be missing.

²⁵ <https://www.yahoo.com/news/tuvalu-pm-says-climate-change-weapon-mass-destruction-032256122.html?ref=gs>



turn, results in emigration and the feeling of resignation, which can hinder people taking responsibility for building a sustainable future.

There are few metrics and essentially no data that cover cultural dislocation. However, during the late '90s and early 2000s, the Agenda 21 process that had its genesis in the 1992 Rio conference, looked at the mutual impacts of tourism and sustainable development on each other and assessed factors for its success. An analysis of the Caribbean island Marie-Galant, a part of the Guadeloupe island group, identified many of the potential problems confronting the implementation of Sustainable Tourism.

Without the positive reinforcement of local culture and identity, a set of self-reinforcing downward spirals can occur:²⁶

- Population decline, which includes rural exodus and immigration.
- High unemployment and lack of motivation, which lead to social and economic decline.
- Lack of investment in coastal environments, both onshore and offshore, which can lead to a buildup of urban waste and erosion and sedimentation, which further exacerbates population and social and economic decline.
- A flipside of feelings of uncontrolled inevitability of environmental social pressures can lead to a boomtown effect where people are going to 'get theirs' while the getting is still good.
- This can lead to overexploitation of agricultural, for stray and mining resources, as well as poorly controlled development and other get-rich-quick schemes that can further degrade local landscapes.

Left unaddressed, all of these factors can combine to undercut the very natural resources and supporting infrastructure that could make the South Pacific an even greater attraction for Sustainable Tourism.

Seasonal Labour

Compared with other developing country demographics, the Pacific Islands are definitely 'top-heavy' with a population distribution skewing toward older age groups. Indeed, through interviews in all five countries visited, we frequently heard of the nations' youth moving off-island because of a perceived or actual lack of opportunity within the existing economy.

We see this reflected in the number of islanders attracted by the job opportunities afforded by seasonal fruit picking in Australia and New Zealand. We heard from Tonga and Vanuatu, especially, that many young men leave their families for months at a time to work as fruit pickers. Although there is some complementarity with fruit picking seasons and seasonal whale migrations—the principal tourism driver in Tonga—the availability of picking work can be used as an excuse not to get into year-round work in the tourism industry. Not only does migratory labour cause social disruption due to extended periods of absence, but it also reduces the pool of local labour for growing or even maintaining a workforce for the tourism industry.

Earning money is the principal driver for migration of these islanders to the orchards of Australia and New Zealand. Ironically, once the round trip travel and higher cost of living is factored in, people could actually make more money staying at home and working in the tourism industry. Thus, people with local outdoor and cultural knowledge must be substituted for by foreign workers, often from the Philippines.

²⁶ Tourism & Local Agenda 21, UNEP, ICLEI (2003) p. 55.



Language

Another of the greatest cultural challenges with current and potential future development of the tourism industry—especially a ‘Sustainable Tourism’ industry—revolves around language. The overwhelming majority of tourists to the region speak English. Some parties are concerned that, the requirement for a second spoken language might dilute Pacific cultures, many of which have a significant language component.²⁷ Others argue that the relatively limited number of people requiring proficiency in a second language does not represent a significant disruption to cultural or linguistic integrity.²⁸

Moreover, the lack of English language in French-speaking territories is a barrier to growth and development of both sustainable mass tourism and ecotourism. For example, in New Caledonia, cruise ships with predominantly English-speaking passengers often have difficulty booking activities, whether water-focused or culturally-focused, due to the lack of English-speaking guides.

This also can be true for local tour guides and other professionals that interface regularly with visitors. Ironically, if Sustainable Tourism were to expand around community based hospitality as suggested in the Blue Days event, one potential impact might be the erosion of linguistic and cultural integrity as more and more remote regions interact with English-speaking tourists.

Conflicts Between Sociocentric Society and Egocentric Society

Although it is not clear that SPREP, or anyone else, can do anything about it, there will be growing cultural impacts from exposure of Pacific Island sociocentric societies to the egocentric societies that largely make up the tourist population. This exposure is happening through the Internet, regardless of any tourist interaction, so the availability of meaningful actions is limited.

Many models of governance and adjudication being imported into the Pacific have their roots in egocentric society, where personal rights and claims often are allowed precedence over general social well-being. This could be especially problematic in the Pacific and lead to ‘tragedy of the commons’ results where an individual’s/company’s ‘right’ to access limited and fragile tourism resources, particularly marine sites, results in an overall diminution of the experience of other visitors, as well as a degradation of the resource itself.

Certification and Labeling Schemes

There are three basic types of certification programs: First Party, Second Party, and Third Party, with the first being an internal evaluation and the latter two external.

First Party Certification is generally the result of an internal self-audit and environmental claims are made on this basis. Second Party Certification is done by an outside entity. However, the auditing entity has a direct relationship or interest—e.g., a customer or a regulator—with the firm or program being audited or evaluated. Finally, Third Party Certification involves an independent, disinterested certifier or auditor of the program or project. Although First Party and Second Party standards can be as rigorous as Third Party standards, the market recognition and brand value are significantly greater with Third Party certification.

There are several international EcoCertification, Accreditation and labeling programs²⁹ available to buildings and resorts in the Pacific Island nations. However, there are three principal reasons for relatively low market penetration to date: 1) cost, 2) complexity, and 3) lack of evidence that

²⁷ <https://www.culturalsurvival.org/ourpublications/csqa/article/oceania-islands-land-people>

²⁸ Personal communication, Lisa Humphrey, PhD Anthropology, Pacific Island Cultures.

²⁹ These programs include the Global Sustainable Tourism Council, EarthCheck and the related Green Globe programs for buildings and resorts, as well as smaller, less formal programs such as EnezGreen and PADI GreenStar and PADI 100% AWARE. See Appendix C for a partial listing of ecocertification programs.



certification drives better profitability. As noted in Deliverable 2, tying access to premier locations and activities to Certified and Accredited providers and allocating first development rights to new locations for Certified properties will send strong signals to the market regarding the benefits of becoming Certified or Accredited.

Of the countries we visited, only Vanuatu has a comprehensive standards development process underway under the auspices of EcoTourism Australia. **This effort is already integrating many of the aspects of the Market Transformation Protocol framework and looks to be a good model for replication in the Pacific region.**

For the standard tourism industry, Vanuatu has already in place a strategic plan, as well as the necessary Enabling Legislation and has conducted Demonstration and Pilot-Scale Projects for Mandatory Minimum Standards. There is not yet enough infrastructure and familiarity with these standards to launch them full-scale, particularly on outlying islands. These activities all have elements of improving sustainability, though we will make additional recommendations elsewhere.

Ecotourism activities and infrastructure have been demonstrated and, based on lessons learned, a strategic market development plan for the Ecotourism sector is planned for early 2017. This will lead to demonstration projects and the adaptation of the Minimum Mandatory Standards into Sustainable/Ecotourism standards, which will then be piloted. The goal is to have the Ecotourism standard nationally in force by 2020.

We will be describing both the process and content of the Vanuatu tourism sector standardization process in more detail in Deliverables 3 and 5.



APPENDIX A

EVI Indicator Descriptions



| Indicators | Types | Aspects | Sub-Indices | Description |
|---------------------|-------------------|---------|---|--|
| 1. High Winds | Weather & Climate | Hazards | Climate Change Desertification | - Average annual excess winds over the last five years (summing speeds on days during which the maximum recorded wind speed is greater than 20% higher than the 30 year average maximum wind speed for that month) averaged over all reference climate stations. |
| 2. Dry Periods | Weather & Climate | Hazards | Climate Change Natural Disaster Exposure Agriculture & Fisheries Water Desertification | - Average annual rainfall deficit (mm) over the past 5 years for all months with more than 20% lower rainfall than the 30 year monthly average, averaged over all reference climate stations. |
| 3. Wet Periods | Weather & Climate | Hazards | Climate Change Natural Disaster Exposure Agriculture & Fisheries Water Desertification | - Average annual excess rainfall (mm) over the past 5 years for all months with more than 20% higher rainfall than the 30 year monthly average, averaged over all reference climate stations. |
| 4. Hot Periods | Weather & Climate | Hazards | Climate Change Natural Disaster Exposure Desertification | - Average annual excess heat (degrees C) over the past 5 years for all days more than 5° C (9° F) hotter than the 30 year mean monthly maximum, averaged over all reference climate stations. |
| 5. Cold Periods | Weather & Climate | Hazards | Climate Change Natural Disaster Exposure Desertification | - Average annual heat deficit (degrees C) over the past 5 years for all days more than 5° C (9° F) cooler than the 30 year mean monthly minimum, averaged overall reference climate stations. |
| 6. Sea Temperatures | Weather & Climate | Hazards | Climate Change Agriculture & Fisheries Biodiversity | - Average annual deviation in Sea Surface Temperatures (SST) in the last 5 years in relation to the 30 year monthly means. |
| 7. Volcanoes | Geology | Hazards | Natural Disaster Exposure | - Cumulative volcano risk as the weighted number of volcanoes with the potential for eruption greater than or equal to a Volcanic Explosivity Index of 2 (VEI 2) within 100km of the country land boundary(divided by the |



| | | | | |
|----------------------------|----------------------|------------|---|--|
| | | | | area of land). |
| 8. Earthquakes | Geology | Hazards | Natural Disaster Exposure | - Cumulative earthquake energy within 100km of country land boundaries measured as Local Magnitude (ML) ≥ 6.0 and occurring at a depth of less than or equal to fifteen kilometers (≤ 15 km depth) over 5 years (divided by land area). |
| 9. Tsunamis | Geology | Hazards | Natural Disaster Exposure | - Number of tsunamis or storms surges with run-up greater than 2 meters above Mean High Water Spring tide (MHWS) per 1000km coastline since 1900. |
| 10. Slides | Geology | Hazards | Natural Disaster Exposure | - Number of slides recorded in the last 5 years (EMDAT definitions), divided by land area. |
| 11. Land Area | Geography | Resistance | Climate Change Biodiversity | - Total land area (km ²). |
| 12. Country Dispersion | Geography | Resistance | Climate Change Biodiversity | - Ratio of length of borders (land and maritime) to total land area. |
| 13. Isolation | Geography | Resistance | Biodiversity | - Distance to nearest continent (km). |
| 14. Relief | Geography | Resistance | Climate Change Desertification Biodiversity | - Altitude range (highest point subtracted from the lowest point in country). |
| 15. Lowlands | Geography | Resistance | Climate Change Desertification Biodiversity | - Percentage of land area less than or equal to 50m above sea level. |
| 16. Borders | Geography | Resistance | Biodiversity | - Number of land and sea borders (including EEZ shared with other countries). |
| 17. Ecosystem Imbalance | Resources & Services | Damage | Biodiversity | - Weighted average change in trophic level since fisheries began (for trophic level slice ≤ 3.35). |
| 18. Environmental Openness | Resources & Services | Hazards | Biodiversity | - Average annual USD freight imports over the past 5 years by any means per km ² land area. |
| 19. Migrations | Resources & Services | Resistance | Biodiversity | - Number of known species that migrate outside the territorial area at any time during their life spans (including land and all aquatic species)/ area of land. |
| 20. Endemics | Resources & Services | Resistance | Biodiversity | - Number of known endemic species per million square kilometer land area. |
| 21. Introductions | Resources & Services | Damage | Climate Change Biodiversity | - Number of introduced species per 1000 square kilometer of land area. |



| | | | | |
|-------------------------------|----------------------|---------|---|--|
| 22. Endangered Species | Resources & Services | Damage | Biodiversity | - Number of endangered and vulnerable species per 1000km ² land area (IUCN definitions). |
| 23. Extinctions | Resources & Services | Damage | Biodiversity | -Number of species known to have become extinct since 1900 per 1000 km ² land area (IUCN definitions). |
| 24. Vegetation Cover | Resources & Services | Damage | Water Desertification Biodiversity | -Percentage of natural and regrowth vegetation cover remaining (include forests, wetlands, prairies, tundra, desert and alpine associations). |
| 25. Loss Of Cover | Resources & Services | Hazards | Water Desertification Biodiversity | - Net percentage change in natural vegetation cover over the last five years. |
| 26. Habitat Fragmentation | Resources & Services | Damage | Biodiversity | - Total length of all roads in a country divided by land area. |
| 27. Degradation | Resources & Services | Damage | Water Desertification | - Percent of land area that is either severely or very severely degraded (FAO/AGL Terrastat definitions). |
| 28. Terrestrial Reserves | Resources & Services | Hazards | Water Biodiversity | - Percent of terrestrial land area legally set aside as no take reserves. |
| 29. Marine Reserves | Resources & Services | Hazards | Water Biodiversity | - Percentage of continental shelf legally designated as marine protected areas (MPAs). |
| 30. Intensive Farming | Resources & Services | Hazards | | - Annual tonnage of intensively farmed animal products (includes aquaculture, pigs, poultry) produced over the last five years per square kilometer land area. |
| 31. Fertilisers | Resources & Services | Hazards | Human Health Water | - Average annual intensity of fertiliser use over the total land area over the last 5 years. |
| 32. Pesticides | Resources & Services | Hazards | Human Health Water | - Average annual pesticides used as kg/km ² /year over total land area over last 5 years. |
| 33. Biotechnology | Resources & Services | Hazards | | - Cumulative number of deliberate field trials of genetically modified organisms conducted in the country since 1986. |
| 34. Productivity Over-fishing | Resources & Services | Hazards | | - Average ratio of productivity: fisheries catch over the last 5 years. |
| 35. Fishing Effort | Resources & Services | Hazards | | - Average annual number of fishers per kilometer of coastline over the last 5 years. |
| 36. Renewable Water | Resources & Services | Hazards | Climate Change Human Health Water Desertification | - Average annual water usage as percentage of renewable water resources over the last 5 years. |
| 37. SO ₂ Emissions | Resources & Services | Hazards | Human Health | - Average annual SO ₂ emissions over the last 5 years. |
| 38. Waste | Resources | Hazards | | - Toxic, hazardous and municipal |



| | | | | |
|------------------------------|----------------------|---------|---|---|
| Generated and imported | & Services | | | wastes per square kilometer land area over the last 5 years. |
| 39. Waste Treatment | Resources & Services | Hazards | Human Health Water | - Mean annual percent of hazardous, toxic and municipal waste effectively managed and treated over the past 5 years. |
| 40. Industry | Resources & Services | Hazards | | - Average annual use of electricity for industry over the last 5 years per square kilometer of land. |
| 41. Spills | Resources & Services | Hazards | | - Total number of spills of oil and hazardous substances greater than 1000 liters on land, in rivers or within territorial waters per million km maritime coast during the last five years. |
| 42. Mining | Resources & Services | Hazards | | - Average annual mining production (include all surface and subsurface mining and quarrying) per km ² of land area over the past 5 years. |
| 43. Sanitation | Resources & Services | Hazards | Human Health | - Density of population without access to safe sanitation (WHO definitions). |
| 44. Vehicles | Resources & Services | Hazards | | - Number of vehicles per square kilometer of land area (most recent data). |
| 45. Population | Human Populations | Damage | Climate Change Natural Disaster Exposure Water | - Total human population density (number per km ² land area). |
| 46. Population Growth | Human Populations | Hazards | Water | - Annual human population growth rate over the last 5 years. |
| 47. Tourists | Human Populations | Hazards | | - Average annual number of international tourists per km ² land over the past 5 years. |
| 48. Coastal Settlements | Human Populations | Damage | Climate Change Natural Disaster Exposure | - Density of people living in coastal settlements, i.e., with a city center within 100km of any maritime or lake coast. |
| 49. Environmental Agreements | Human Populations | Hazards | | - Number of environmental treaties in force in a country. |
| 50. Conflicts | Human Populations | Damage | | - Average number of conflict years per decade within the country over the past 50 years. |



APPENDIX B

Economic Impacts of Tourism in Pacific Island Nations



Tourism Impacts—Direct Numbers

| Country | Other Oceania | % of Other Oceania | Fiji ³⁰ | % of Fiji | Tonga ³¹ | % of Tonga | Vanuatu ³² | % of Vanuatu |
|---|---------------|--------------------|--------------------|-----------|---------------------|------------|-----------------------|--------------|
| GDP (\$US million) | | | | | | | | |
| Direct 2016 | 4,301 | 12.5% | 571 | 14.1% | 26.0 | 5.90% | 136.6 | 18.2% |
| Direct 2026 | 7,635 | 13.5% | 1,000 | 15.4% | 40.5 | 7.10% | 216.2 | 19.1% |
| Total 2016 | 11,421 | 33.1% | 1,557 | 38.7% | 74.5 | 16.90% | 354.9 | 47.3% |
| Total 2026 | 20,220 | 35.8% | 2,574 | 39.7% | 117.5 | 20.60% | 571.2 | 50.5% |
| <u>Avg. Total GDP Growth (2016–2026)</u> | 5.30% | | 5.20% | | 4.70% | | 4.90% | |
| 'Visitor Exports' (2016) | 7,601 | 53.6% | 1,900 | 35.4% | 46.1 | 54.5% | 241.6 | 57.4% |
| 'Visitor Exports' (2026) | 13,612 | 58.3% | 3,521 | 27.7% | 72.9 | 54.3% | 386.8 | 59.5% |
| Employment | | | | | | | | |
| Direct 2016 | 67,500 | 17.1% | 40,500 | 12.7% | 2,000 | 6% | 10,500 | 14.4% |
| Direct 2026 | 80,000 | 18.7% | 52,000 | 14.9% | 2,000 | 6.4% | 15,000 | 15.2% |
| Total 2016 | 164,000 | 41.0% | 108,000 | 33.8% | 6,000 | 17.5% | 29,000 | 40.4% |
| Total 2026 | 191,000 | 44.7% | 133,000 | 37.9% | 8,000 | 21.6% | 41,000 | 43.3% |
| <u>Avg. Total Employment Growth (2016–2026)</u> | 1.60% | | 2.10% | | 2.80% | | 3.60% | |

To generate our summary table in the main body of the report, we normalized and aggregated data from the four WTTC reports. To achieve national GDP and employment figures, we simply divided the figures given by the given percentage of the total.

In calculating the overall growth rates, we took the aggregate growth between 2016 and 2026 then divided it by nine.

³⁰ Original data in Fiji dollars. Converted at a rate of 1 \$US = 2 \$Fiji.

³¹ Original data in TOP. Converted at a rate of 1 \$US = 2 TOP.

³² Original data in Vatu. Converted at a rate of 1 \$US = 0.009 Vatu.



Data Derived from WTTC Reports

| | Other Oceania | Fiji | Tonga | Vanuatu | Total |
|---------------------------------|------------------|---------|--------|---------|---------|
| Total GDP (\$US million) | | | | | |
| Direct 2016 | 34,408 | 4,052 | 440 | 751 | 39,651 |
| Direct 2026 | 56,556 | 6,494 | 570 | 1,132 | 64,751 |
| Total 2016 | 34,505 | 4,022 | 441 | 750 | 39,717 |
| Total 2026 | 56,480 | 6,482 | 570 | 1,131 | 64,664 |
| | | | | | |
| | 14,181 | 5,365 | 84 | 421 | 20,051 |
| | 23,348 | 12,711 | 134 | 650 | 36,844 |
| | | | | | |
| Total Employment | | | | | |
| Direct 2016 | 394,737 | 318,898 | 33,333 | 72,917 | 819,884 |
| Direct 2026 | 427,807 | 348,993 | 31,250 | 98,684 | 906,735 |
| Total 2016 | 400,000 | 319,763 | 34,286 | 71,782 | 825,831 |
| Total 2026 | 427,293 | 350,923 | 37,037 | 94,688 | 909,942 |



APPENDIX C

Mandatory and Voluntary Tourism or Ecotourist Labels and Programs in the South Pacific



| Country | Fiji | French Polynesia | New Caledonia | Palau | Tonga | Vanuatu |
|--|--|--|--|--|--|--|
| Formal Government or Third Party Private Programs | Several Resorts and Hotels have Global Sustainable Tourism Council approved certification ³³ | 1 LEED Certified Project New facilities should be covered by EU efficiency requirements ³⁴ | New facilities should be covered by EU efficiency requirements ³⁵ | Mandatory tour guide training and certification No formal ecotourism programs or labels | No formal programs or labels | Mandatory tourism standards Government certified ecotourism standards under development based on Ecotourism Australia standards |
| First- or Second-Claims of Environmental Performance | Several properties and activities with First Party ecolodge claims or local industry sustainability awards | 4 Activities or facilities listed with Eneztreen.com Several properties and activities with First Party ecolodge claims or local industry sustainability awards | 5 Activities or facilities listed with Eneztreen.com Several properties and activities with First Party ecolodge claims or local industry sustainability awards | Several properties and activities with First Party ecolodge claims or local industry sustainability awards | Several properties and activities with First Party ecolodge claims or local industry sustainability awards | 5 Activities or facilities listed with Eneztreen.com Several properties and activities with First Party ecolodge claims or local industry sustainability awards |

³³ These labels include EarthCheck & Green Globe.

³⁴ Anecdotally, this is not the case.

³⁵ Ibid.