Feasibility Report

Measuring Fiji's Sustainable Tourism [1]

December 2016

1. Introduction

Fiji is a significant tourism destination and, in turn, tourism contributes much to Fiji's economic structure and growth. At the same time, Fiji also recognizes that continued growth in this sector needs to be balanced with the broader social and environmental context in which tourism activity takes place. To this end, tourism is recognised as a core part of national development planning and a key sector in its forthcoming national development plan and the Green Growth Framework for Fiji.

In recent years, Fiji has also taken clear steps to improve its national statistical system. An important aspect of this improvement process, given the significance of tourism, has been the compilation of Tourism Satellite Accounts (TSA) building on initial accounts developed for 2002 and 2008. Fiji has also in the process of commencing work on environmental statistics and accounts using the framework of the UN System of Environmental-Economic Accounting (SEEA). These two areas of work provide a "hook" to investigate the development of a more rigorous information base to assess the sustainability and related aspects of tourism in Fiji.

With this background in mind, Fiji has a particular interest in being involved in early phases of the newly established UNWTO/UNSD Measuring Sustainable Tourism (MST) project which is aiming to develop a statistical framework to support the measurement of sustainable tourism. It is expected that this framework will have, as a central feature, the articulation of links between the SEEA framework and TSA.

The interest was driven by the Fiji Bureau of Statistics (FBoS). As the focal point for the engagement with UNWTO and UNESCAP, FBoS requested technical assistance, established the agenda for the missions and facilitated meetings throughout the mission with relevant agencies and experts. Significantly, the link between TSA and SEEA was reinforced since the mission on MST was immediately preceded by a workshop on SEEA implementation in Fiji hosted by FBoS and facilitated by UNESCAP and UNSD.

Both UNWTO and UNESCAP were keen to support the interest of the Fiji Bureau of Statistics (FBoS) in this area and provided technical assistance to Fiji from 19th to 23rd September 2016. FBoS led effort to examine the relevance and feasibility of a statistical framework for measuring sustainable tourism, is captured in this report.

2. Summary of findings and outcomes

The assessment finds the need for a statistical framework and associated information on sustainable tourism, both highly relevant and feasible for Fiji. While measurement challenges exist, there is a substantive statistical infrastructure on which to build and a high chance of immediate application and use of information on sustainable tourism to support policy analysis and development and monitoring.

Relevance

Tourism has long been an important socio-economic activity in Fiji. However, several factors suggest real current interest in additional and broader information on tourism. First, there is a general recognition that on-going growth and development must take into account environmental and social linkages. Specifically with regard to the environment, the Green Growth Framework for Fiji observes that:

> "The interdependence between economic and environmental systems requires Fiji's industries to become progressively greener as the current global focus on growth is

placing unsustainable pressure on our natural resource endowments" (Chapter 10: Greening Tourism and Manufacturing Industries).

This general theme of seeking balance between economic, environmental and social outcomes will also emerge in the context of current policy developments particularly the National Development Plan: 2016 to 2020 and to 2035 and the Fiji Tourism Development Plan to 2020. Based on discussions with key stakeholders, there is clear intent and action to seek alignment across these different policy instruments. The concept of sustainable tourism is clearly on the agenda.

Second, beyond the national level, there is particular interest across the Pacific area in advancing sustainable tourism. For example, the 2014 SAMOA Pathway for sustainable development in SIDS countries identified tourism as an important way forward and the 2015 UN Sustainable Development Goals (SDGs) recognise sustainable tourism as a relevant policy response in the context of a number of goals.

While all the SDG's are directly or indirectly linked to tourism sector activities, three SDGs of particular relevance for sustainable tourism include, Goal 8 concerning decent work and economic growth, Goal 12 concerning sustainable consumption and production and Goal 14 concerning life below waters. Within each of these goals are various targets that highlight sustainable tourism. The relevant targets are:

> Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

> Target 12.b: develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

> Target 14.7: By 2030, increase the economic benefits to Small Island Developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Initial indicators to support measurement towards these targets have been determined with the indicators including measures of the direct contribution of tourism activity to economic growth (GDP) and employment. Both of these measures can be derived from the TSA framework. At this stage, there are no agreed indicators for the environmental or cultural aspects of sustainable tourism. Work on measurement through this pilot study will point to the feasibility of reporting on the two indicators already agreed and also serve as a test case for developing indicators to cover the missing aspects of sustainable tourism.

Feasibility

From a feasibility perspective there is also strong reason to be positive about the potential to develop statistical measures relevant for assessing sustainable tourism. First, there is clear demand from both the tourism industry and leading policy agencies for official statistics on tourism. Official statistics can provide an independent information set and a shared understanding of tourism in Fiji which may not emerge from information produced through non-official sources.

Second, there is a substantial information base on tourism covering both tourism demand and tourism supply and this has been brought together in a complete series of TSA tables. Underpinning these data is a comprehensive business register that gives important support for data quality but also, in its own right, holds a substantive amount of information on the characteristics of tourism businesses, including their location, that can be used to support measurement of sustainable tourism.

Work on the TSA has been fully integrated with the compilation of annual supply and use tables further underlining the robust approach to measurement that has been developed in Fiji. Most recently, work on the SEEA has commenced and produced by the same work unit that compiles the TSA – the sector satellite account unit. Overall, there is a strong institutional and data environment to support the measurement of sustainable tourism.

Measurement challenges are expected. A key feature of measuring sustainable tourism is the sub-national level focus – i.e. understanding the connection between tourism activity and local communities and in relation to the local environmental situation. An immediate aim must be the development of an agreed sub-national focus for tourism and the joint development of indicators of the structure of tourism businesses in those areas. This objective is well within reach given the current statistical infrastructure.

Although the coverage of statistics on tourism activity is of high quality and this has been reinforced through the recent advances in TSA compilation, the collection and organisation of environmental data is far less developed. Recent discussions, undertaken in the joint FBoS, UNESCAP, UNSD workshop on implementation of the SEEA, have identified four high priority areas – water, energy, solid waste and land – and a number of relevant information sets have also been identified. However, further work will be required to gather and integrate these data and to provide a tourism perspective on this information.

Beyond environmental and economic perspectives, some social data, such as employment are available but in the medium to longer term consideration is needed of better understanding community attitudes with respect to tourism and how tourism activities contribute to local economic and cultural identity. It is likely that additional surveys will need to be undertaken to collect this type of information. Such work could build on the measurement approaches that have been developed at destination level for the measurement of indicators of sustainable tourism, for example for the destination of Andalucia in Spain.[2]

Advancing work

To advance work in this area, this report provides details on the current state and potential ways forward. The Fiji Bureau of Statistics could lead this work given its demonstrated leadership in this space with the support of key ministries including the Ministry of Economy and the Ministry of Industry, Trade and Tourism. The most critical factor in success will be ongoing engagement with all stakeholders to ensure that the potential relevance of data on sustainable tourism is well understood, that there is good awareness and feedback as work progresses towards a more complete information set, and that synergies between different measurement projects can be identified.

Through this assessment work, good initial discussion with a range of stakeholders across policy agencies, the private sector and international groups was established (see *Annex 1* for list of stakeholders consulted). Resources will need to be devoted to maintaining communication with these stakeholders as well an engaging others to support further work.

There is a direct relevance of this work to Fiji, but there is also great interest in how this work might be applied in other countries in the Pacific, given tourism sector dependency. UNESCAP in particular has a direct interest in understanding potential policy and measurement pathways in relation to sustainable tourism, including in the context of broader global initiatives on sustainable development. It is anticipated that this report and any short term work by Fiji in this area will support wider discussion and implementation in the region.

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[2] http://www.tsf2014prague.cz/assets/downloads/Paper%204.3_Ana%20Moniche%20Bermejo_ES.pdf

3. Proposed spatial scope

The spatial focus for sustainable tourism work would cover all of Fiji. In large part, this scope reflects the statistical mandate of FBoS and also facilitates the use of national level information sets, particularly the TSA, that can provide the overall context and framing for the measurement of sustainable tourism.

While measurement for all of Fiji is appropriate, it is also the case that tourism in Fiji is centred on a number of particular areas within the country. Further, from a conceptual perspective, it is expected that the measurement of sustainable tourism will be of most applicability at a sub-national and destination level thus taking into account the location specific characteristics of environment and local communities.

In consideration of the relevant sub-national areas a number of possibilities emerged. First, in the publication of quarterly hotel and tourist accommodation statistics, FBoS presents data according to 7 tourism areas (Suva, Nadi, Lautoka, Coral Coast, Mamanuca, Northern Division and Others). Second, statistics at the provincial level (14 provinces) appear to provide a useful level of detail across Fiji. Third, the Tourism Unit at the Ministry of Industry, Trade & Tourism (MITT) presents information on 11 tourism areas (Denarau, Coral Coast, Nadi, Mamanuca, Yasawa, Suva, Pacific Harbour/Beqa/Kadavu, Lautoka, Vanua Levu, Sun Coast, Outer Islands and Unspecified).

The aim in selecting a level of spatial detail is to balance the need to ensure that spatial differences are picked up and the difficulty of compiling data for too many distinct locations. There is also the presentational issue that given the intent to provide an overall picture of sustainable tourism for Fiji, having too many classes will limit the capacity of users to easily compare and contrast between different areas.

It appears that the 11 tourism areas used by the Tourism unit at MITT would be most appropriate. This choice has the following advantages (i) the areas have been recognised by one of the key users as of relevance in the assessment and monitoring of tourism in Fiji; (ii) the number of classes is not too large; (iii) the boundaries of the 11 areas appear to be either nested within current provincial boundaries or aggregations of existing provinces – this facilitates integration of sub-national socio-economic information that is likely most readily available at provincial level; and (iv) the delineation of tourism areas below provincial level, recognizes both the very significant activity in Denarau as well as the quite distinct environmental circumstances in different parts of the province, e.g. the Yasawa Group compared to Denarau. From a sustainability perspective the carrying capacities of these different locations must be taken into account.

These 11 tourism areas should form a good starting point for the collation and integration of relevant information but should be the focus of further discussion with both different data producers and data users. Longer term, if ongoing measurement of sustainable tourism is planned, it will be appropriate for these areas to be endorsed statistically and precise measurement boundaries incorporated into relevant statistical infrastructure such as within the geo-coding and classification of businesses, the collection of visitor information and mapping and GIS capability.

It will also be relevant to examine ways in which non-FBoS data – for example environmental data – can utilize and integrate the endorsed spatial boundaries into their data structures. Of particular relevance here, building on discussions at the SEEA workshop, is the potential to utilize unit level data from the Water Authority of Fiji and the Fiji Electricity Authority concerning water and electricity use. Both of these authorities use the Fijian Tax Identification Number that also underpins the FBoS business register. It will therefore be of interest to investigate whether data can be shared or otherwise accessed for integration with existing business structure and financial data held by FBoS.

A final consideration on spatial areas is that the discussion focused on the delineation of land areas to sub-national level. Given that Fiji's tourism is so closely tied to its island characteristics (beaches, reefs, etc.), the understanding of sustainable tourism should also ensure attribution of coastal and marine areas to tourism areas. In many cases it will be the environmental quality of these areas – e.g. in terms of water quality, reef condition, etc. – that will be an important indicator of sustainability.

4. Policy and analytical context

Policy context

Tourism is a significant activity in Fiji. In economic terms it directly contributes over 10% to total GDP and has a significant indirect contribution, with estimates of the total direct, indirect and induced effect of tourism activity of over 30%. Given this large contribution, there is considerable interest in tourism policy.

Recent speeches and interviews from the Minister for Industry, Trade & Tourism , Hon. Faiyaz Koya, have highlighted that ongoing growth in tourism is a key goal but with the clear desire for this growth to occur in a sustainable fashion.[3] The newly appointed CEO of Tourism Fiji, Matthew Stoeckel, also envisages building on the current strong tourism base. A recent interview suggests a keen interest in understanding the evidence base.[4]

From a government policy perspective the precise articulation of future tourism policy is still under development with the National Development Plan and the Fiji Tourism Development Plan both to be finalized by the end of 2016. There is also discussion starting on the development of a Sustainable Tourism Policy. The Green Growth Framework for Fiji[5] underscores the national policy intention to promote sustainable tourism practices.

These national policy directions are of clear priority for the government and give a substantive basis for pursuing the measurement of sustainable tourism. The development of official statistics in this area is essential to ensure that the government had a robust evidence base to inform future directions. The development of official statistics was also endorsed by industry representatives who were keen for the significance of tourism to be independently evaluated and recognised.

Fiji has a considerable amount of information on tourism from a visitor or demand perspective. Details on arrivals, accommodation and visitor expenditure are impressive. Aside from informing on the trends in tourism activity, at least from an economic perspective, these data are fundamental in understanding the balance of payments position for Fiji since 75% of tourism activity is from international visitors. The Reserve Bank of Fiji has a particular interest in these data in assessing associated international financial flows and exposures.

However, key users expressed that they had a limited understanding of the supply side of tourism activity and any associated risks about the carrying capacity. The concerns were largely focused on potential environmental constraints or impacts including water, energy, solid waste, GHG emissions and exposure to the effects of climate change. There was also limited understanding of the structure and dynamics of tourism businesses in Fiji in terms of business size and location. Industry representatives further highlighted the potential for community concerns over tourism development to be a factor to consider in sustainable tourism.

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[3] http://fijisun.com.fj/2016/09/19/2-2-billion-tourism-industry-a-target-for-2020/
[4] http://www.fijitimes.com/story.aspx?id=372420
[5] Ministry of Strategic Planning, National Development and Statistics (2014) *A Green Growth Framework for Fiji*

Measurement priorities

Given this policy and information context, a clear rationale for the measurement of sustainable tourism in Fiji exists. Further, a clear focus for the development of measurement lies in providing information about the tourism supply side and providing an effective link to the wide range of demand side information already available. The following statistical areas are considered to be of highest priority:

- Characteristics of tourism businesses including industry, size, location, ownership and employment;
- Tourism activity (e.g. visitor numbers, visitor expenditure, tourism output) by sub-national tourism areas;
- Environmental flows for tourism businesses and visitors primarily water, energy and solid waste; and
- Land cover and land use data for Fiji encompassing key tourism features such as beaches, reefs, and national parks.

The directions and proposals described in section 7 address these areas of statistics. In the medium to longer term there would be the opportunity to develop other areas of statistics of relevance to measuring sustainable tourism including cultural aspects of tourism, ecosystem services and community perceptions of tourism.

International context

Beyond the national focus for measuring sustainable tourism, this topic can be placed in a wider context. Fiji's policy settings operate with a range of different international lines including the 2015 UN Sustainable Development Goals and the 2030 Development Agenda, the 2014 SAMOA Pathway concerning development for small island developing states (SIDS), and the UNEP 10YFP for Global Action on Sustainable Production and Consumption [6]. In addition, specifically related to tourism, the South Pacific Tourism Organization (SPTO) has a strategy to build capacity in the region on sustainable tourism.[7]

In part, related to these various policy objectives there is ongoing work across the Pacific to develop the national statistical systems of countries, including leading work by UNESCAP, the Pacific Community and the Pacific Financial Technical Assistance Centre. The work on measuring sustainable tourism in Fiji thus has the potential to support advances in many other countries.

There is policy momentum at present to support work on the measurement of sustainable tourism, but it is important that work on the production of statistics continues to engage actively with key users to ensure that data compilation continues to be relevant to the likely changes and modifications to policy settings. Further, there may be additional policies that come into play that provide support for work on measuring sustainable tourism, for example in the environmental sector or in relation to culture and tradition. Maintaining a connection to policy developments across the range of statistical domains is an essential element in ensuring the ongoing relevance of measurement activity.

5. Key stakeholders and institutional arrangements

The success in developing integrated statistical approaches, especially when it concerns crossing the economic, environmental and social domains, will depend primarily on the

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[6] http://www.unep.org/10yfp/
[7] SPTO Pacific Tourism Strategy 2015-16

success in managing the variety of stakeholders. Two primary groups of stakeholders are relevant – producers of statistics and users of statistics. Both groups need to be engaged in the process of developing measures of sustainable tourism.

Overall, the relationships between the lead measurement agency, FBoS, and key stakeholders seem sound but further and regular engagement and communication with all stakeholders is important. The forthcoming release of the next edition of the Fiji TSA might be an opportunity to re-engage on the issue of sustainable tourism management. It is important that time and resources be allocated to the task of communication.

While a number of tourism related policies and plans are in place, a specific role for FBoS in the development of these plans and policies to provide statistical advice, particularly in relation to monitoring and assessment of policy objectives, may help raise the demand for more evidence to inform policy making.

6. Current status of statistics for measuring sustainable tourism

The feasibility of measuring sustainable tourism is a key consideration. While a detailed assessment of the data quality of all relevant datasets needs to be completed, the general understanding of data availability and of the potential for extensions to the currently available data to support the measurement of sustainable tourism appears feasible. This section discusses the relevant issues.

Tourism data

As noted earlier in this report there is a substantial amount of information on tourism activity available for Fiji. FBoS is committed to continue to support the maintenance and refinement of relevant datasets over time. The datasets include:

- Visitor arrivals (monthly by country of residence, age, occupation, length of stay, and purpose);
- Hotel and tourist accommodation collection (quarterly by number of rooms and beds, nights, occupancy rates, takings, employment, location, visitor country of residence);
- Earnings from tourism (quarterly expenditure[8] by non-residents by length of stay, purpose of visit and country of residence);
- International visitor survey (collected by Tourism Unit at MITT); and
- Surveys of tourism businesses as part of annual business survey program (annual data on sales, intermediate costs, wages and salaries, investment, employment, ownership status).

Fiji also compiles a Tourism Satellite Account (TSA). The first TSA report was compiled for 1995 by the Ministry of Tourism and Transport. A second accounts was released for 2002 by FBoS and a third account was published for 2008. Currently, final steps are underway to release benchmark TSA for 2011 and 2014 and indicator based accounts for 2012 and 2013. The most recent TSA are comprehensive covering 8 of the 10 TSA tables recommended by UNWTO. Significantly, the compilation of TSA information on tourism products and tourism industries has been fully integrated within the standard annual supply and use table used to benchmark estimates of GDP. Consequently, there is direct inter-play between these two national accounts outputs that ensures that the estimates within the TSA are fully reconciled during national accounts compilation and that the national accounts take on board the full range of information about tourism activity.

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[8] Estimated using a quarterly survey of prices paid by non-residents used to derive an estimated daily expenditure allowance and then scaled using visitor arrivals and departures data.

The TSA utilizes the full range of visitor data and tourism business data as listed above and thus provides a framework for examining and ensuring data coherence.

Economic data

Beyond the economic data on tourism activity there is a range of standard economic data available for Fiji including data from the national accounts and balance of payments, annual business censuses and surveys, prices statistics and employment data. Together these provide a complete story of the Fijian economy and support an assessment of tourism activity in a broader, cross industry perspective.

Environmental data

At this stage the organization of environmental data within the Fijian official statistics program is in its infancy. Work has started recently, in the context of the development of SEEA based accounts, to investigate potential data sources and to identify key information needs. A recent SEEA workshop facilitated by UNESCAP highlighted four initial focus areas: water, energy, solid waste and land. The collection of data in all of these areas seems possible and initial contacts have been made with relevant data custodians. These same four areas of focus are also of most relevance in the assessment of sustainable tourism and hence there is a clear rationale to compile SEEA based accounts with tourism businesses in mind.

In the short term, a focus on water use, electricity use and solid waste generation by tourism businesses provide a good start. The collection and organization of information on land use and land cover would be excellent but initial discussions suggest developing the relevant data may take more time.

The development of other areas of environmental data, for example measures of ecosystem condition and ecosystem services, will take more time to develop but should be able to build on current discussions particularly with data custodians for water and land.

Other data for sustainable tourism measurement

The initial effort is focused on the development of data linking tourism activity and the environment. Consequently, focus was not placed on investigating the current data situation with regard to social and cultural information of relevance to tourism, but this may be considered in future work.

Statistical infrastructure and the data environment

A key feature of the official statistics in Fiji is the use of a business register to provide a comprehensive list of all businesses in Fiji together with information on their characteristics such as size, ownership status and industry. Since the collection of data on tourism industries is undertaken using the business register as a base, there is an underlying quality imposed on the resulting data, provided that the business register is appropriately maintained.

Importantly for the measurement of sustainable tourism, the information stored on the business register can be used to provide a rich picture of the structure of the tourism industry in Fiji. Although not yet developed, the business register contains address information on all establishments in Fiji meaning that it is possible to geo-code each establishment and hence develop a good mapping of where tourism businesses are located. This will be fundamental in understanding the tourism carrying capacity of local areas.

Investigation is still required to determine the extent to which tourism, economic and environmental data can be produced and disseminated at sub-national levels although the

initial indications are positive for many of the variables given the potential to utilize the geo-coding data on the business register. Some tourism data are already compiled by sub-national tourism areas.

The availability of time series of information is developing. There has been a particular focus on developing annual time series for TSA with the associated requirement for component tourism and economic data. Sub-annual data are also available for a range of tourism indicators that should provide a good basis for assessing seasonality in tourism activity. For environmental data the time series potential is yet to be explored.

In the socio-economic information space, FBoS has good capacity to collect data directly and to access data from relevant sources, for example the International Visitor Survey information from the Ministry of Tourism. For environmental data, a working group for environmental statistics has been formed to advance data collection and co-ordination. It includes representation from various custodians of environmental data, such as data on water and electricity, potential users of environmental data and statistical experts from FBoS. It will be important to continue to invest in these relationships.

FBoS has taken a clear lead among the various national institutions on the measurement of sustainable development. Nonetheless, since sustainable tourism is a multi-agency measurement challenge an important issue to be agreed is the process for signing off relevant data and publications. Ongoing discussion and collaboration is needed to make clear the relevant roles and responsibilities of different agencies and organisations in terms of the collection, organization, dissemination and ownership of data.

7. Proposed data tables and next steps

Given the policy context for sustainable tourism in Fiji and the current data situation, this section proposes some MST data tables – referred to in the SEEA as combined presentations - that could be compiled to support analysis and monitoring of sustainable tourism. The proposals take into account the initial design of a statistical framework to measure sustainable tourism and were presented at the Working Group meeting of the MST project in Madrid on 20 and 21 October 2016.[9]

The design of the tables is, in many senses, an extension of the TSA framework to capture various environmental flows, to incorporate information on the characteristics of tourism industries and to support an understanding of the location of tourism activity. Ideally, the information on the environmental flows – water use, electricity use and solid waste generated – would emerge from the compilation of associated SEEA based physical flow tables. Indeed, the information from SEEA tables is needed to provide an understanding of the supply side situation with respect to these different environmental flows.

Both tables are structured such that they record flows for one time period only. Ideally, a time dimension would also be incorporated and for regular monitoring a database containing the information in the tables over time would need to be established.

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[9] http://statistics.unwto.org/wg_meeting

Table 1: Key characteristics for tourism businesses

Key MST variables

	Output ($)	Value added ($)	Tourism industry ratio (%)	Employment (# of people)					Business size (# businesses)				Ownership		Environmental flows		
				Total	Male	Female	Full time	Part time / Casual	Total	Small (<20 employ.)	Medium (20-100 employ.)	Large (>100 employ.)	Fiji	Foreign	Water use	Electricity use	Solid waste
Tourism industries *																	
Accommodation **																	
Food and restuarants **																	
Transport																	
Road																	
Water **																	
Air																	
Rental cars **																	
Travel agents & tour operators **																	
Recreation **																	
Other industries																	
Total tourism																	

* The description of tourism industries follows the classes used in the Fijian TSA

** It is proposed that information for these industries is also compiled for the 11 Fiji tourism areas

Table 2: Visitor and accommodation data by tourism area

	Key MST variables					
	Visitor numbers *	Visitor expenditure *	Accommodation			
			# businesses	# beds/rooms	occupancy rate	water use
Touism areas						
Denarau						
Coral Coast						
Nadi						
Mamanuca						
Yasawa						
Suva						
Pacific Harbour/Beqa/Kadavu						
Lautoka						
Vanua Levu						
Suncoast						
Outer islands and other						
Total Fiji						

* For these variables information might be cross-classified by purpose, country of residence, length of stay

Some data for these tables are available currently, pending the release of the current TSA. For other data, the findings from discussion during the mission indicated that data are reasonably readily available although some work in the short term will be required to collate the information. Finally, there are some data for which significant additional work will be required to collect and process the relevant information. This section concludes with a summary of next steps indicating how progress might be made.

The proposals for MST data tables also point to the potential to develop indicators for monitoring progress towards the national development plans, the SAMOA Pathway and UN SDGs in relation to tourism. The current focus of indicators under discussion in the SDG monitoring context are tourism GDP and tourism employment both of which can be derived from the TSA and are included in the MST data tables. As yet no indicator for the environmental dimension of sustainable tourism has been determined. Possible candidates relate to water use and energy use by tourism industries and visitors and both of these indicators can be derived from the MST data tables described above.

Beyond SDG indicators, discussion in the broader MST project will seek to describe the most relevant indicators for the assessment of sustainable tourism based on much previous discussion in this area. Initial investigations suggest that the statistical and accounting approach that underpins the MST project, and as applied in Fiji, provides a framework that supports the derivation of a large proportion of the sustainable tourism indicators that have been considered in past research.

Next steps

To move forward on measuring sustainable tourism, the following next steps are proposed. A feature of the steps is that each should be able to generate a set of statistical outputs hence progressively building a set of sustainable tourism information. The statistical outputs can be released for broader discussion on a progressive basis, perhaps as exploratory or experimental estimates. This will contribute to broader awareness of sustainable tourism issues but also be a source of feedback to support the further development and refinement of the information set.

1. Using the tables above as a starting point, "first cut" MST data tables should be compiled using currently available information, including from the TSA and the business register. This work should encompass the compilation of time series of information, including at sub-annual level to assess seasonality.

2. Building on the first cut tables and using information from the business register, the location of tourism business and the associated characteristics should be developed to provide a richer picture of tourism activity in Fiji. In the short term, a focus on one tourism industry – e.g. accommodation – would be useful to test the potential to use the business register information. If successful, more permanent solutions to the geo-coding of establishments on the business register could be developed. More broadly, efforts should be made to integrate a location perspective into other economic and social data – a particular focus here would be developing methods for estimating tourism output and associated variables by location.

3. To assess the environmental dimensions on sustainable tourism, the first focus should be on the collation of data on water use and electricity use by tourism industries. Where possible, potentially using connections to the business register, these measures should be developed for the various tourism areas. Where possible time series of these data should be compiled, including at sub-annual level to assess seasonality. Over time, these data should be integrated with information on water and energy for other industries and for both supply and use perspectives, i.e. in the framework of SEEA water and energy accounts. Other environmental flows to be developed should be estimates for solid waste and GHG emissions.

4. The second perspective on environmental data is land data. Here work should focus on mapping different land and marine areas according to different land cover and land use classes. This information should then be overlaid with information on key tourism features including reefs, beaches, national parks, heritage sites, golf course and hotels. Measurement of changes over time should be considered in the development of these data.

5. Using land maps as a starting point, measures of environmental condition or health can be developed for priority tourism areas using indicators of, for example, water quality, beach condition and biodiversity. Again, measurement of changes over time should be considered in the development of these data. Ultimately, the flows of ecosystem services from these areas would also be measured, in many cases using information from existing data sources, for example on number of visitors to national parks or beaches.

Beyond these five steps other measurement dimensions could be developed to integrate social and cultural perspectives. Also, as the MST Fiji project progresses some clearer ideas of future pathways will emerge which take into consideration the key concerns of the local industry.

8. Conclusion

Overall, there is a very strong case that the development of a statistical framework for the measurement of sustainable tourism is relevant for Fiji and that the compilation of data within such a statistical framework is feasible in Fiji. The Fiji Bureau of Statistics is well placed to pursue ongoing developments in this area. In the short term, work to prepare initial MST data tables is necessary as these tables will support ongoing discussion among key stakeholders and reveal new ideas and inputs for the advancement of the work.

More broadly, considerable advantages are envisaged from applying statistical and accounting approaches to the organization of tourism related information from multiple sources for coherence and consistency of data.

Further, this Fiji assessment report on sustainable tourism will contribute directly to the development of an international statistical framework for measuring sustainable tourism by providing a country level application.

Annex 1 –Acknowledgement and Stakeholders Consulted

Various discussions led by FBoS, with technical support from Mr Carl Obst, were convened from 19-23 September 2016 with key stakeholders including:

- Ministry of Economy: Department of Strategic Planning & National Development and Climate Change;
- Ministry of Industry, Trade and Tourism: Tourism Unit;
- Reserve Bank of Fiji;
- Fiji Hotel and Tourism Association;
- South Pacific Tourism Organisation; and
- staff within the Fiji Bureau of Statistics.

The meetings and inputs for this assessment report were co-ordinated by Mr Bimlesh Krishna (Principal Statistician – Economic Statistics Division, FBoS), with support from Ms Litia Kurisaqila-Mate (Assistant Statistician – Economic Statistics Division, FBoS), under the leadership of Mr Kemueli Naiqama (Deputy Government Statistician, FBoS). Mr Carl Obst and Mr Sanjesh Naidu (UNESCAP - Pacific office) participated in the various discussions and provided technical input and support. Ms Clara Van Der Pol of the UNWTO also provided strategic inputs on the overall approach and direction, as well as, significant programming support for this assessment report.

A list of the various agencies and experts consulted were as follows:

Organisation	Contact Person	Position Description	Email Contact	Telephone
External Stakeholders				
Ministry of Industry, Trade and Tourism	Alanieta Blakelock	Senior Tourism Officer	alanieta.blakelock@govnet.gov.fj	[679] 3305411 ext: 356156
	Jacinta Lal	Tourism Officer	jacinta.lal@govnet.gov.fj	[679] 3305411 ext: 356127
	Nanise Odrovakavula	A/Director	nodrovakavula@govnet.gov.fj	[679] 3305411 ext: 356154
Reserve Bank of Fiji	Isoa Wainiqolo	Senior Economist - Domestic Activity & Forecasting	isoa@rbf.gov.fj	[679] 3223 312
	Devendra Narain	Economist - Domestic Activity & Forecasting	devendra@rbf.gov.fj	[679] 3223 312
National Planning office	Paula C Planning	Principal Economic Planning Officer	pcirikiyasawa001@planning.gov.fj	[679] 3221310
	Tui L. Sikivou	Senior Economic Planning Officer	tui.sikivou@planning.gov.fj	[679] 3221208
	Ovini Ralulu	Director - Climate Change	oralulu@economy.gov.fj	[679] 3221308
Fiji Hotels & Tourism Association	Michael Wong	CEO Fiji Hotels & Tourism Association	exec@fhta.com.fj	[679] 3302980 / 9926980
	Peter Gee	General Manager - GPH		
	Tarun Patel	Director Vision Group of Hotels		
	Dixon Seeto	President Fiji Hotels & Tourism Association		
University of the South Pacific	Dr. Dawn Gibson	Senior Lecturer	gibson_d(at)usp.ac.fj	
	Dr. Alexander Trupp	Senior Lecturer	trupp_a@usp.ac.fj	
South Pacific Tourism Organisation	Alisi Lutu	Acting Manager - Planning & Statistics	alutu@spto.org	
	Jennifer Butukoro	Tourism Research Officer	cbutukoro@spto.org	
Internal Stakeholders				
Social Statisics Division - Tourism & Migration Unit	Aesali	Assistant Statistician - Tourism & Migration		[679] 3315822 Ext: 386221
	Jovesa Tagavakatini	Statistician - Tourism & Migration	jtagivakatini@statsfiji.gov.fj	[679] 3315822 Ext: 386223
Economic Statistics Division - Balance of Payments Unit	Radhika Kumar	A/Senior Statistician - External Sector	radhikak@statsfiji.gov.fj	[679] 3315822 Ext: 3862235
	Ashish Chand	A/Statistician - BOP	achand@statsfiji.gov.fj	[679] 3315822 Ext: 386246
	Talica Naivota	Statistical Officer - (BOP unit -Tourism Earning)	tnaivota@statsfiji.gov.fj	[679] 3315822 Ext: 386246
Economic Statistics Division - Establishment Survey Unit	Amelia Tungi	A/Senior Statistician - Surveys & Business register	ameliat@statsfiji.gov.fj	[679] 3315822 Ext: 386249
	Priya Mala	Asitstant Statistician - Surveys	pmala@statsfiji.gov.fj	[679] 3315822 Ext: 386245
	Salome Madranicava	Asitstant Statistician - Surveys	smadraniceva@statsfiji.gov.fj	[679] 3315822 Ext: 386245
Economic Statistics Division - National Accounts Unit	Artika Devi	Senior Statistician - National Accounts Unit	artikad@statsfiji.gov.fj	[679] 3315822 Ext: 386237
	Alivereti Tawake	A/Statistician - National Accounts Unit	atawake@statsfiji.gov.fj	[679] 3315822 Ext: 386237