

Environmental Impact Assessment Guidelines for Coastal Tourism Development in Pacific Island Countries and Territories



**SOUTH PACIFIC
TOURISM
ORGANISATION**

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This publication provides general guidance on the environmental impact assessment (EIA) process. It is designed to be tested and revised over time based on experiences in Pacific island countries and territories, and the development and progression of EIA in Pacific island countries and territories. For specific direction and guidance SPREP member countries should refer to their national legislation or consult with an EIA specialist.



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*The Pacific environment, sustaining our livelihoods
and natural heritage in harmony with our cultures.*

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**SOUTH PACIFIC
TOURISM
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ACP MEAs 2

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DISCLAIMER

This publication provides general guidance to support environmental impact assessments (EIAs) for coastal tourism development. It is designed to be tested and revised over time based on experiences in Pacific island countries and territories, and the development and progression of EIA in Pacific island countries and territories. For specific direction and guidance, SPREP and SPTO members should refer to their national legislation or consult with an EIA specialist.



Coral reefs provide coastal protection, improve water quality, attracting both marine life and tourists. Tourism developments and ventures need to protect these areas and not cause unintended impacts through increased demand for fresh fish in restaurants, souvenir trade, waste or poorly guided tours directly damaging corals. © Stéphane Ducandas / NCTPS

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Foreword

Environmental impact assessment (EIA) is the primary instrument for planning, assessing and managing development projects, to support sustainable and resilient development goals and green growth outcomes. The Secretariat of the Pacific Regional Environment Programme (SPREP) has a long history of leading EIA capacity-building across Pacific island countries and territories. For more than twenty five years SPREP has supported EIA awareness-raising and training programmes in member countries, and the publication of EIA guidelines and manuals. As the pace of development and urbanisation intensifies in our islands, the need for effective EIA processes becomes more urgent.

These Environmental Impact Assessment Guidelines for Coastal Tourism Development in Pacific Island Countries and Territories (Guidelines) represent a sector specific version of SPREP's regional EIA Guidelines first published in 1993 and recently expanded and updated in 2016. They deliver on SPREP's Strategic Plan 2017–2026 Regional Goal 2: Pacific people benefit from healthy and resilient island and ocean ecosystems, Objective 2.2 Support the conservation and sustainable use of marine, coastal, and terrestrial ecosystems and biodiversity, consistent with regional and international commitments, and Regional Goal 4: Pacific people and their environment benefit from commitment to and best practice of environmental governance, Objectives 4.1 Strengthen national sustainable development planning and implementation systems including through use of Environmental Assessments, Strategic Environmental Assessments, and spatial planning and 4.2 Improve national capacity for good environmental governance supported by technical assistance for the development of policy and legislation, and in support of the implementation of Member international and regional commitments.

These Guidelines aim to assist with the implementation of national EIA legal requirements and to promote best practice in EIA process for Coastal Tourism Development in the Pacific.

The regional Coastal Tourism EIA Guidelines complement other forms of SPREP EIA assistance such as the development and review of EIA legislation, delivery of in-country EIA training workshops, and provision of technical advice for different stages of EIA. The Guidelines will be subject to further revision as EIA thinking and processes advance.

SPREP gratefully acknowledges financial support from the European Union-funded ACP MEAs project delivered through the United Nations Environment Programme (UNEP), and from the Australian and New Zealand governments. SPREP is also thankful for technical input from partners such as the Asian Development Bank, Melanesian Spearhead Group, New Zealand Association for Impact Assessment, Pacific Community, The World Bank and UNEP. In addition, SPREP member countries must be acknowledged, for providing feedback on earlier drafts and sharing local insights during EIA training workshops.

I look forward to stronger EIA practices in Pacific island countries and territories, in line with these Guidelines and through the ongoing capacity-building efforts of SPREP and its partner agencies.



A handwritten signature in black ink, appearing to read 'Kosi Latu'.

Mr Kosi Latu
Director
General, SPREP



Message from the South Pacific Tourism Organisation

Warm Pacific Greetings!

Tourism continues to be a key economic driver for the Pacific with potential to bring further growth in employment and income opportunities for our people. Underpinned by a unique product offering that is dependent on natural and cultural resources, the Pacific Tourism Strategy 2015–2019 identifies the need to strengthen sustainable tourism planning and management through the development of environmental guidelines.

This joint-initiative is a step in the right direction, giving a clear indication of the commitment of our Pacific Island countries to ensuring that tourism development takes full account of its current and future economic, social, cultural and environmental impacts. The leadership of SPREP in this initiative is acknowledged and SPTO commits to support the uptake of these EIA Guidelines by tourism stakeholders through its sustainable tourism programmes across its member countries.

I take this opportunity to thank the European Union and the Governments of Australia and New Zealand for their generous support as well as all stakeholders who contributed to the process.

I encourage tourism planners, practitioners, private sector and prospective investors to use this as a practical resource for planning early in the development process and in complying with national EIA processes and regulations.

If these Guidelines are followed closely, there is no doubt that tourism can become a tool for positive change for the development of sustainable destinations across the region.

“Our greatest assets in the Pacific are our environment, people and culture. Let us join together to protect and preserve our unique environment.”

Sincerely,



Christopher Cocker
Chief Executive Officer
South Pacific Tourism Organisation



**SOUTH PACIFIC
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GLOSSARY

Area of influence: the area affected by a development project, which is beyond the project footprint. It may be upstream and/or downstream of the project site and include the wider catchment, watershed, coastal/ocean zone, airshed or buffer zones; an off-site resettlement zone; and areas that are culturally significant or used for livelihood activities. The area of influence is determined by a project's resource requirements and the nature and magnitude of its impacts, and it may vary across different development phases of a project.

Baseline: a description of pre-development or current environmental conditions.

Capital investment: spending by all industries directly involved in travel and tourism, and investment by other industries in tourism assets e.g. accommodation, passenger transport equipment, restaurants, leisure facilities.

Climate change: long-term changes in climate conditions, i.e. changes in the mean and/or the variability of a climate property such as precipitation, temperature or wind force. These changes persist for an extended period, typically a decade or longer. Climate change can influence and alter the scale, scope, frequency and intensity of disaster risks.

Coastal tourism development: any physical tourism development that occurs in the area from the upland forest out to the reef edge. Entire islands may be in the coastal zone, especially if they are small low-lying islands and atolls.

Cumulative impacts: changes in the environment resulting from the combined, incremental effects of past, present and future human activities; environmental change processes (e.g. climate change); and physical events. Physical events can be of natural or human origin, and may include extreme weather events and natural or human-induced disasters.

Disaster: severe, adverse disruption to the normal functioning of a community, society or ecosystem due to hazardous events interacting with vulnerable social and/or ecological conditions. Can cause widespread human, material, economic and/or environmental losses.

Ecosystem-based management: an integrated, holistic approach to achieving environmental, social and economic goals across "ridge-to-reef" or "whole-of-island" areas, combining land-use and development planning with environmental protection and production needs.

Environment: encompasses natural and biophysical, social (people, culture, health, heritage, amenity) and economic aspects, and the relationships between these different aspects.

Environmental hazard: an event or action that has the potential to cause significant impacts on a community, society or ecosystem. Environmental hazards can be natural (e.g. cyclone, flood, earthquake, tsunami, volcanic eruption, drought, landslide), human-induced (e.g. oil spill) or technological (e.g. infrastructure failure) in origin. They are not impacts (or disasters) in themselves but have the potential to cause them.

Environmental impact assessment (EIA): a process for identifying and managing a development's potential impacts on the environment, and the potential impacts of the environment on a development, i.e. the potential impacts that may arise from environmental hazards and environmental change processes, including climate change.

Environmental impact assessment report (EIA report) or environmental impact statement (EIS): the document prepared by the proponent (or their consultant) as part of the EIA process, which details the type of project, its timeframe and scale, likely impacts, risk assessment of key impacts, proposed impact mitigation measures (for negative impacts) and optimisation measures (for positive impacts).

Environmental management plan (EMP): a project-specific, written plan that describes all mitigation measures and monitoring and reporting actions to be undertaken by the proponent. The EMP includes a schedule and assigns responsibility to particular personnel for undertaking mitigation measures and monitoring and reporting on a project's environmental performance to regulatory authorities.

Environmental, social and cultural assets: tangible and intangible assets that are valued and enjoyed by tourists when visiting coastal areas in the Pacific. Examples of 'environmental assets' include areas of particular ecological or environmental significance, national parks, community reserves, protected areas, forests, mangroves, seagrass beds, coral reefs, beaches, cliffs, blowholes, rivers, waterfalls, streams, wetlands, fresh water springs, waterholes, mountain summits, ridges and volcanic craters as well as plants and animals (especially species that are native, endemic or threatened). Examples of 'social assets' include land and other resources that customary owners have given their approval to share with tourists, local businesses and enterprises, local community groups and networks, local knowledge, community facilities, utilities and transport. Examples of 'cultural assets' include cultural heritage sites and environments, physical structures, historical places, cultural knowledge and practices, museums and collections, arts and live performances.

Geographic Information System (GIS): software used to spatially analyse environmental, social, economic and engineering datasets to help identify development risks, impacts and opportunities, and assess different development options. GIS can produce informative visual materials (e.g. maps) to support stakeholder communication throughout the entire EIA process.

Impact: a negative or positive change as a result of an action, activity or event. Refers to the impact of a project on the environment, as well as the impact of the environment on a project due to an environmental hazard or environmental change process. Examples of negative impacts include degradation of ecosystem services, loss of life or injury, property or infrastructure damage, and social unrest. Examples of positive impacts include environmental recovery and restoration, increased food security, property or infrastructure improvements, and increased local job opportunities.

Mitigation: measures or actions undertaken by a proponent to address the impacts identified through the EIA process. Mitigation measures should follow the impact mitigation hierarchy and be detailed in an environmental management plan. The mitigation hierarchy, in order of preference, is avoid negative impacts, minimise negative impacts that cannot be avoided, rehabilitate or remedy negative impacts that cannot be minimised, and offset (or compensate for) negative impacts that cannot be remedied.

Noumea Convention: The Convention for the Protection of Natural Resources and Environment of the South Pacific Region (Noumea Convention) and its Protocols obliges Parties to endeavour to take all appropriate measures to prevent, reduce and control pollution

from any source and to ensure sound environmental management and development of natural resources, using the best practicable means at their disposal and in accordance with their capabilities. Ten Pacific countries are Party to the Noumea Convention.

Project footprint: the land and/or ocean area occupied by project buildings, facilities, infrastructure or activities.

Proponent: an individual, company or government ministry/department/agency planning to undertake a development.

Resilience/resilient: the ability of a community or system (human and/or natural) to sustain itself, to respond to and recover from extreme events and disturbances, and to use extreme events and disturbances as an opportunity for renewal and positive transformation.

Stakeholder: any person, organisation, institution or business who has interests in, or is affected by, a development issue or activity, including local community members and customary land/ resource owners.

Strategic environmental assessment: a higher-level assessment process that can be used to: (1) prepare a strategic development or resource use plan for a defined land and/or ocean area, (2) examine the potential environmental impacts associated with the implementation of government policies, plans and programmes, (3) produce general environmental management policies or design guidelines for different classes/types of development.

Vulnerability: the sensitivity of a development, human community or ecosystem to damage and loss resulting from a hazardous event or disturbance.

ABBREVIATIONS

CBD	Convention on Biological Diversity	SDG	Sustainable Development Goals
EBM	Ecosystem based management	SEA	Strategic environmental assessment
EIA	Environmental impact assessment	SIA	Social impact assessment
EIS	Environmental impact statement	SIDS	Small Island Developing States
EMP	Environmental management plan	SPREP	Secretariat of the Pacific Regional Environment Programme
FRDP	Framework for Resilient Development in the Pacific 2017–2030	SPTO	South Pacific Tourism Organisation
GDP	Gross domestic product	ToR	Terms of reference
GIS	Geographic Information System	UNFCCC	United Nations Framework Convention on Climate Change
IY2017	2017 International Year of Sustainable Tourism for Development	USD	United States Dollars
MEA	Multilateral environmental agreement	WTTC	World Travel and Tourism Council
SAMOA Pathway (SIDS) Accelerated Modalities of Action			



Dive sites can attract tourists to areas of sensitive habitat, environmental management plans should consider and mitigate impacts to these habitats.

1 Introduction

1.1 BACKGROUND

Environmental impact assessment (EIA) is a tool that is used to assess and manage individual development projects,¹ with an aim of maximising positive benefits and minimising negative impacts for local communities and their environment. When used effectively, EIA can help to support the achievement of green growth targets, climate change resilience, and Sustainable Development Goals (SDGs).²

Across the Pacific, the Secretariat of the Pacific Regional Environment Programme (SPREP) has been promoting the use of EIA and delivering EIA capacity-building for more than twenty five years. In 2015 SPREP member countries endorsed new regional EIA guidelines, titled, *Strengthening environmental impact assessment: Guidelines for Pacific island countries and territories*.³ The regional EIA guidelines provide a detailed overview of EIA and offer practical tips and tools to support government officers with managing the EIA process.

SPREP has now partnered with the South Pacific Tourism Organisation (SPTO) to produce these EIA guidelines for coastal tourism development, which is defined as any physical tourism development that occurs in the area from the upland forest out to the reef edge. Based on this definition, entire islands may be in the coastal zone, especially if they are small low-lying islands and atolls.⁴

Both SPREP and SPTO recognise that coastal environments are biologically productive and ecologically diverse; they supply valuable resources to support Pacific island lifestyles, livelihoods and cultural practices; and they provide critical natural defences against storms, cyclones, flooding and erosion. SPREP and SPTO also recognise the importance of EIA for responsible planning, development and management of coastal tourism, to help ensure the sector does not degrade important coastal areas, and that it makes a positive overall contribution to Pacific island countries and territories.

The coastal tourism EIA guidelines have been developed to provide sector-specific information and guidance and to complement SPREP's over-arching regional EIA guidelines. The coastal tourism EIA guidelines were originally proposed and endorsed at the 11th Conference of the Parties to the Convention for the Protection of Natural Resources and Environment of the South Pacific Region (Noumea Convention), where Parties noted the relevance of the guidelines to the following Convention articles:

- Article 7: Pollution from land-based sources;
- Article 13: Mining and coastal erosion;
- Article 14: Specially protected areas and protection of wild flora and fauna; and
- Article 16: Environmental impact assessment.⁵

¹ Throughout the coastal tourism EIA guidelines the terms 'development project', 'development' and 'project' are used interchangeably.

² The coastal tourism EIA guidelines are particularly relevant to SDG target 14.7: "by 2030 increase the economic benefits of SIDS and LCDs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism". Transforming Our World: The 2030 Agenda For Sustainable Development. https://www.un.org/pga/wp-content/uploads/sites/3/2015/08/120815_outcome-document-of-Summit-for-adoption-of-the-post-2015-development-agenda.pdf

³ Secretariat of the Pacific Regional Environment Programme. 2016. Strengthening environmental impact assessment: Guidelines for Pacific island countries and territories. Apia, Samoa: SPREP. www.sprep.org/attachments/Publications/EMG/regional-eia-guidelines.pdf

⁴ The definition of 'coastal zone' varies in international literature, depending on the coastal region and the specific issues under consideration. The definition used in these Guidelines reflects the Pacific context and is sourced from: Gombos M., Ramsay D., Webb A., Marra J., Atkinson S. and Gorong B. (Eds.) 2014. Coastal Change in the Pacific Islands, Volume One: A Guide to Support Community Understanding of Coastal Erosion and Flooding Issues. Pohnpei, Federated States of Micronesia: Micronesia Conservation Trust. <http://www.reefresilience.org/wp-content/uploads/Gombos-et-al.-2014-Coastal-Change-in-the-Pacific-Islands.pdf>

⁵ *Noumea Convention (1986), Article 16: Environmental Impact Assessment 1.* The Parties agree to develop and maintain, with the assistance of competent global, regional and subregional organisations as requested, technical guidelines and legislation giving adequate emphasis to environmental and social factors to facilitate balanced development of their natural resources and planning of their major projects which might affect the marine environment in such a way as to prevent or minimise harmful impacts on the Convention Area.

The coastal tourism EIA guidelines contribute to Objective 4.1 in SPREP’s Strategic Plan 2017–2026, to “*Strengthen national sustainable development planning and implementation systems including through use of Environmental Impact Assessments, Strategic Environmental Assessments, and spatial planning*”. The guidelines also contribute to the SPTO Pacific Tourism Strategy 2015 - 2019, *Key Action: to develop and disseminate Pacific Tourism Environmental Guidelines*. Importantly, the guidelines have been designed to support Pacific island governments in meeting their obligations to undertake EIAs, as specified under multilateral environmental agreements (MEAs) to which they are party, including the Noumea Convention, the Convention on Biological Diversity (CBD), and the United Nations Framework Convention on Climate Change (UNFCCC). In addition, they are a Pacific contribution to the 2017 International Year of Sustainable Tourism for Development (IY2017), as designated by the United Nations 70th General Assembly. The focus of IY2017 includes promoting tourism’s role in key areas such as inclusive and sustainable economic growth; employment and poverty reduction; resource efficiency, environmental protection and climate change; and cultural values, diversity and heritage.⁶

BOX 1: The Convention on Biological Diversity, tourism and EIA

Under the Convention on Biological Diversity (CBD), voluntary guidelines have been adopted to promote the consideration of biodiversity in environmental impact assessments, and annotations have been added to the guidelines that are specific to marine and coastal biodiversity.⁷

The voluntary guidelines, with annotations, aim to assist national and regional authorities with promoting and facilitating a biodiversity-inclusive EIA process in marine and coastal areas.

Guidelines on biodiversity and tourism development have also been adopted under the CBD. These Guidelines highlight the importance of impact assessment and impact management and mitigation for promoting sustainable tourism development and avoiding or minimising any potential damage to biodiversity.⁸



Visitors are arriving more frequently for boutique holidays, consider the modes of transport and frequency of visitors when planning environmental management for your development.

⁶ United Nations General Assembly, Resolution 70/193, International Year of Sustainable Tourism for Development, 2017: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/193

⁷ Convention on Biological Diversity, Conference of Parties 11, Marine and Coastal Biodiversity, Revised Voluntary Guidelines: <https://www.cbd.int/doc/meetings/cop/cop-11/official/cop-11-23-en.pdf>

⁸ Convention on Biological Diversity, Conference of Parties 7 Decision VII/14, Biological Diversity and Tourism: <https://www.cbd.int/decision/cop/default.shtml?id=7751>

1.2 AIMS AND TARGET AUDIENCE

The aims of the tourism EIA guidelines are to:

1. increase awareness and understanding of the EIA process across Pacific island countries and territories' tourism sector;
2. promote best practice EIA for coastal tourism development;
3. encourage government agencies and tourism developers to comply with national EIA regulatory frameworks, and in the absence of these, to follow regional EIA guidance materials; and
4. support sustainable and resilient coastal tourism development that protects the environmental, social and cultural assets that provide a foundation for tourism.

The target audience for the tourism EIA guidelines includes:

- government officers who are responsible for managing or providing input into the EIA process e.g. officers working in areas such as environment, tourism, lands and planning, health, energy, water, climate change, transport, cultural affairs, trade and foreign investment;
- SPREP and SPTO members;
- tourism developers, businesses and operators, both small and large;
- national tourism associations;
- customary and private land and resource owners; and
- members of civil society organisations and local community groups who have an interest in tourism development and EIA.



Tourists are often looking for cultural and environmentally friendly options for their holidays. Appropriate use of low impact attractions can be a drawcard for these types of holidayers. The EIA process can help to identify environmentally sustainable options for your development.

1.3 TOURISM IN PACIFIC ISLAND COUNTRIES AND TERRITORIES

Tourism is an important economic sector within the Pacific islands region, with governments prioritising the sector for future economic growth.⁹ Through the 2011 Waiheke Declaration on Sustainable Economic Development, Pacific Islands Forum leaders committed to promoting the Pacific as an exciting and diverse tourism destination, and to supporting the sector's ability to generate income and employment.¹⁰

Data collated by the World Travel and Tourism Council (WTTC) indicate the importance of tourism for Pacific island economies and point towards its anticipated growth over the next decade Appendix 1). Key points to note for 2016:

- tourism directly contributed to more than 12% of the total gross domestic product (GDP) for Pacific island economies with Fiji 14.5% GDP or 622.2 USD million; 12.5% GDP, Vanuatu (17.2%, 133.9 USD million); and 12.6% GDP for all other Pacific Island States¹¹ in the study (or 4,592.6 USD million);
- tourism directly contributed to 13% of total employment in Fiji (42,500 jobs), Vanuatu (13.6%, 10,000 jobs) and all other Pacific Island States (17.2%, 68,500 jobs);
- visitor exports were more than 45% of total exports for Fiji (46.7%, 1,069.4 USD million), other Pacific Island States (54.1%, 8126.3 USD million), Tonga (43.8%, 45.8 USD million) and Vanuatu (59.4%, 238.5 USD million), and were approximately 20% of total exports for Kiribati (20.5%, 4.1 USD million); and
- capital investment in tourism was greater than 10% of total (economy-wide) capital investment in Fiji (24.6%, 237.6 USD million), Tonga (14.8%, 12.5 USD million), Vanuatu (14.2%, 30.1 USD million) and other Pacific Island States (16%, 631.8 USD million).

Between 2017 and 2027 the WTTC has forecast:

- the tourism sector's contribution to GDP in the Pacific will increase by 5 – 6% per annum (p.a.); in Fiji (5.3% p.a.), Other Oceanic States (5.3% p.a.), Papua New Guinea (5.4% p.a.) and Tonga (5.9% p.a.);
- the tourism sector's share of total exports will increase by more than 5% p.a. in Fiji (5.5% p.a.), Other Oceanic States (5.3% p.a.), Solomon Islands (5.4% p.a.) and Tonga (6% p.a.); and by 2027 it will represent more than 50% of total exports in Fiji (51.2%), Other Oceanic States (58%), Tonga (57.4%) and Vanuatu (68.3%); and
- capital investment spending by the tourism sector will increase across the region, with this increase being more than 5% p.a. in Kiribati (6.5% p.a.), Other Oceanic States (5.8% p.a.), Papua New Guinea (6.1% p.a.) and Vanuatu (5.8% p.a.).



Tourism developments may be privately funded or government initiatives but all are subject to the same laws governing each country's EIA process. If environmental management plans are properly developed and implemented during construction and operation. Coastal developments can lead to improved environmental outcomes such as improved water quality and coastal stability, through better waste management and erosion control. Photos: Greg Barbara

⁹ Narayan P.K., Narayan S., Prasad A. and Prasad B. C. 2010. Tourism and economic growth: a panel data analysis for Pacific island countries. *Tourism Economics*, 16(1): 169–183. Tauaa S. 2010. Tourism Issues in the Pacific. *eJournal of the Australian Association for the Advancement of Pacific Studies*, Issues 1.2 and 2.1. <http://intersections.anu.edu.au/pacificcurrents/tauaa.htm>.

¹⁰ Pacific Islands Forum Secretariat. 2013. Tourism as a Pillar of Economic Growth. Forum Economic Ministers Meeting and Forum Economic Officials meeting, 3 – 5 July 2013, Nuku'alofa, Tonga. http://www.forumsec.org/resources/uploads/attachments/documents/2013femm_femt.06.pdf

¹¹ The other Pacific Island States group is comprised of: American Samoa, Commonwealth of the Northern Mariana Islands, Cook Islands, Federated States of Micronesia, French Polynesia, Guam, New Caledonia, Niue, Palau, Republic of the Marshall Islands, Samoa, Tuvalu.

Overall, the WTTC data indicate the importance of tourism for many Pacific island countries and suggest that the sector's economic role, influence and development footprint is likely to increase over the next ten years. Increasing development and increasing visitors to the region will bring not only positive impacts but also negative impacts. Strategic planning and effective use of EIA will be critical for the Pacific's tourism sector, to promote sustainable development and climate change resilience, especially in island countries whose coastal tourism resources and assets are being threatened by sea level rise, coastal erosion and ocean acidification.

1.4 SUSTAINABILITY AND RESILIENCE CONSIDERATIONS FOR COASTAL TOURISM DEVELOPMENT

Coastal areas across the Pacific have been targeted for tourism development due to their sandy beaches, favourable climates, distinctive cultural settings and attractive snorkelling, diving, surfing, boating, wildlife watching and fishing opportunities.¹² While tourism has brought economic benefits to Pacific island countries and territories it has also resulted in negative impacts, including:¹³

- **direct destruction of or damage to coral reefs, mangrove forests, seagrass beds and coastal wetlands**, which has in turn reduced ecological and social resilience through the loss of ecosystem goods and services including food, traditional medicines, construction materials, nutrient cycling, carbon uptake and storage, pollutant filtering and storm surge protection;
- **impacts on threatened species**, through poorly-managed wildlife viewing operations and the siting of tourism developments in critical habitat areas;
- **beach and shoreline erosion**, as a result of poorly-managed construction and sand mining practices, and developments being built in unsuitable locations;
- **degradation of coastal waters and lands**, owing to inadequate management or insufficient treatment of liquid and solid wastes, and sediment run-off from poor land use practices, for example, construction of facilities on slopes or in vulnerable areas;
- **increased pressure on local energy and water supplies**, due to high demand from new tourism infrastructure;
- **competition with other land-uses**, like agriculture, village settlements and manufacturing industries, owing to the lack of land-use planning;
- **economic and/or physical displacement of communities**, who lose access to coastal areas and natural resources that support their lifestyles, livelihoods and cultural practices, particularly in situations where development proponents have not taken time to understand local community contexts, and failed to take into account local community values and needs;
- **increased or new forms of plastic wastes**, that are not able to be recycled or dealt within the island community and tourism industries leading to additional ecological and economical costs; and
- **greenhouse gas emissions**, from the operation of energy-intensive tourism infrastructure and transport services.

In addition to causing negative impacts, coastal tourism development has been affected by environmental hazards such as storm surges, flooding, cyclones, coastal erosion and saltwater intrusion in coastal aquifers. Many of these hazards are expected to intensify as a result of climate change. Coastal tourism development will also be increasingly affected by ocean acidification, through its direct impact on reef-building corals, which in turn, will reduce shoreline protection and weaken the resilience of tourism infrastructure to coastal hazards, as well as affect coastal fisheries, an important tourism resource.

This complex mix of environmental, social and economic impacts, plus climate resilience issues, highlights the need for effective EIA to help plan for and manage sustainable and resilient coastal tourism projects that will achieve long-term benefits for Pacific island communities (see Box 4).

¹² Panakera C., Willson G, Ryan C. and Liu G. 2011. Considerations for sustainable tourism development in developing countries: Perspectives from the South Pacific. *Tourism: An International Multidisciplinary Journal of Tourism*, 6(2), pp. 241–262.

¹³ Tauaa S. 2010. Tourism Issues in the Pacific. *eJournal of the Australian Association for the Advancement of Pacific Studies*, Issues 1.2 and 2.1. <http://intersections.anu.edu.au/pacificcurrents/tauaa.htm> Seidel H. and Lal P.N. 2010. Economic value of the Pacific Ocean to the Pacific Island Countries. Gland: IUCN.

BOX 2: When planning your development, consider your waste streams and how to deal with them sustainably

The great plastic soup is made up of a variety of marine debris where plastics make up around 60–80% of the mix.

Many Pacific nations are now adopting bans on single use plastics: American Samoa (Jan-2010) allows degradable alternative plastic bag; CNMI (August 2017); Palau (Nov 2017) no mandated alternatives; Yap state in FSM (2014) no mandated alternatives; Pohnpei state in FSM (Sept 2011) use alternative degradable plastic bags; Samoa (2005) allows degradable alternative plastic bag and are moving toward bans on all single use plastic including straws, drinking water bottles and takeaway containers by 2020. To date Vanuatu (2018) along with RMI (2017) are the only two Pacific countries to ban Styrofoam food packaging. RMI also bans disposable plastic cups and plates. Other countries that are intending to ban single-use plastic bags are: Kosrae and Chuuk States in FSM; Solomon Islands and PNG a full ban by 2020.

In Italy along the picturesque Cinque Terre coastline they have banned the use of single use plastic bottles because as well as enjoying the region's food, beaches and stunning views, the tourist hordes were discarding millions of plastic bottles each year, some of which tumble down the cliffs and end up littering local beaches and polluting the sea. Tourists are now charged a small fee to buy refillable metal bottles that can then be returned at the end of their visit to be recycled or reused.

The United Nations World Tourism Organization defines sustainable tourism as:¹⁴

Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

More specifically, sustainable tourism development should meet the following criteria:¹⁵

1. **environmental** – optimal use of environmental resources, maintenance of essential ecological processes, conservation of natural heritage and biodiversity, and promotion of climate resilience;
2. **social** – respect for the socio-cultural values of host communities and conservation of their living cultural heritage and traditions, and contribution to inter-cultural understanding and tolerance; and
3. **economic** – establishment of viable, long-term economic operations, providing socio-economic benefits to all stakeholders.

In line with the above, EIA legislation in Pacific island countries defines 'environment' to include natural and biophysical, social and cultural, and economic aspects, as well as the relationships between these different aspects. It is important this broad perspective is taken when working through the EIA process for new coastal tourism developments.

¹⁴ United Nations World Tourism Organization. 2017. Sustainable Development of Tourism. <http://sdt.unwto.org/content/about-us-5>

¹⁵ Adapted from: Panakera C., Willson G., Ryan C. and Liu G. 2011. Considerations for sustainable tourism development in developing countries: Perspectives from the South Pacific. *Tourism: An International Multidisciplinary Journal of Tourism*, 6(2), pp. 241–262.

BOX 3: Reference to sustainable tourism in the SAMOA Pathway

The Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway recognises that sustainable tourism represents an important driver of sustainable economic growth for SIDS. In particular, section 30 highlights the following actions for supporting sustainable tourism:

- (a) Developing and implementing policies that promote responsive, responsible, resilient and sustainable tourism, inclusive of all peoples;
- (c) Promoting policies that allow local communities to gain optimum benefits from tourism while allowing them to determine the extent and nature of their participation; and
- (g) Establishing and maintaining, where necessary, the governance and management structures for sustainable tourism and human settlements that bring together responsibilities and expertise in the areas of tourism, environment, health, disaster risk reduction, culture, land and housing, transportation, security and immigration, planning and development, and enabling a meaningful partnership approach among the public and private sectors and local communities.

Effective use of the EIA process can help to deliver on the above actions because it promotes sustainable and resilient tourism development through being responsive to local needs and preferences, and encouraging consideration of multi-sectoral issues and use of multi-sectoral expertise in tourism development planning.



Seagrass areas are important for water quality, nutrient processing, fishing, turtles, dugongs and fish nurseries as well as coastal stability. If seagrass areas are removed or impacted by the development the ecosystem function of the area will suffer. Photo: Julie Callebaut



Consider the importance of natural coastal protection by retaining mangroves. Ecosystem function can be improved along with providing wave attenuation and sediment stabilisation. Photo: Julie Callebaut



Removal of mangroves impacts on fish stocks and coastal stability, installation of stone seawalls for coastal protection needs to be carefully planned and assessed through a robust EIA prior to implementation, to ensure they will effectively protect community assets and not cause unintended impacts along neighbouring areas of coastline. Photo: Greg Barbara

BOX 4: Using EIA to promote resilient tourism development

The Framework for Resilient Development in the Pacific 2017–2030 (FRDP) emphasises the need for action to be taken at sectoral levels with regard to the implementation of resilient development measures. EIA is a tool for resilient development in sectors such as tourism, as it promotes systematic analysis of different development options; consideration of how the various development options are likely to affect the environment, and how the environment will impact on them; and the identification of mitigation and adaptation measures to minimise impacts. Well-planned and well-implemented mitigation measures ultimately help to reduce stressors on important coastal ecosystems such as coastal forests, mudflats, coral reefs, mangroves, seagrass beds, lagoons and rivers; protect ecosystem goods and services; and enhance ecological and social resilience, and promote resilient tourism development, in the coastal zone.



The Pacific coastal zone is becoming increasingly developed for tourism. It is important that EIA process is used correctly to prevent construction impacts extending beyond the construction phase. The aim is to maximise positive development outcomes while minimising adverse effects on local communities and the environment. Photo: Greg Barbara

2 Coastal Tourism Development and the EIA Process

2.1 EIA PROCESS – AN OVERVIEW

The EIA process is legislated in most Pacific island countries, as part of the development approval process. The types of coastal tourism development that will typically require EIA include hotels, resorts, bungalows and other types of tourism accommodation; golf courses and other large-scale leisure facilities; and coastal tourism infrastructure, including roads, air strips, jetties, wharves including breakwaters marinas and any associated coastal protection and land reclamation plans. Any tourism development that involves direct or indirect disturbance to local communities and their lifestyles and livelihoods; relocation of people; use of customary land or other resources; coastal dredging, excavation, sand mining or land reclamation; construction of buildings offshore or over-water; direct or indirect impacts on critical natural habitats or on threatened, endangered or migratory species, use of renewable resources, upgrades of infrastructure or waste management will need to be assessed via the EIA process.¹⁶

EIA is used to identify, predict and assess the impacts associated with individual tourism development projects during the design phase, before project construction and operation. EIA examines both the negative and positive impacts (environmental, social, economic) likely to arise from a proposed tourism development, and it identifies mitigation measures to enhance the positive and to avoid, minimise, rehabilitate or offset (compensate) for the negative impacts. EIA is also used to identify the potential impacts of the environment on tourism development projects, including impacts arising from climate change, and it identifies appropriate adaptation or risk reduction measures to avoid or mitigate these impacts. In addition, EIA has an important role to play in ensuring that tourism developments are located, designed and constructed in ways that contribute to the maintenance of ecosystem resilience, and do not increase stressors on coastal ecosystems.

SPREP's regional EIA guidelines present a detailed description of the EIA process, so this document only provides a brief overview. The key steps that are typically followed during the EIA process are outlined in Table 1 and Figure 1. Readers are encouraged to review the regional EIA guidelines to develop a comprehensive understanding of EIA.¹⁷

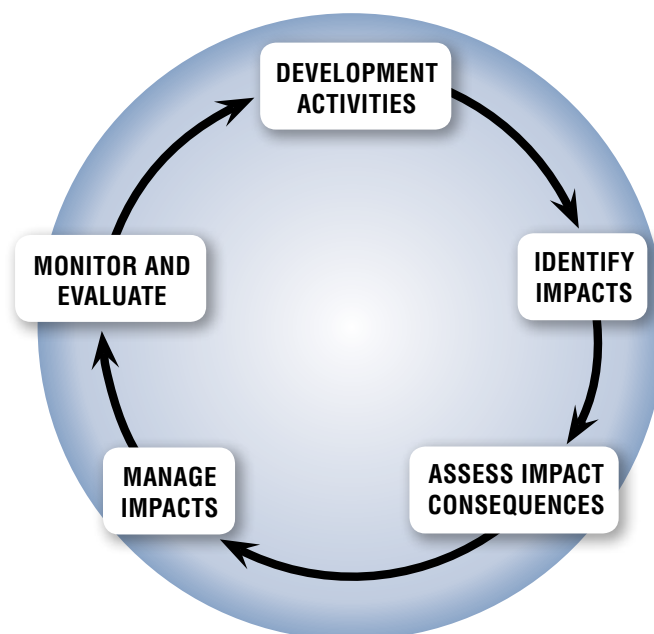


FIGURE 1: EIA is embedded in the project management cycle for tourism development

¹⁶ This is a non-exhaustive list of types of development and impacts that may need to be assessed using the EIA process. It is important to refer to national EIA laws and policies for specific guidance.

¹⁷ Secretariat of the Pacific Regional Environment Programme. 2016. Strengthening environmental impact assessment: Guidelines for Pacific island countries and territories. Apia, Samoa: SPREP. www.sprep.org/attachments/Publications/EMG/regional-eia-guidelines.pdf

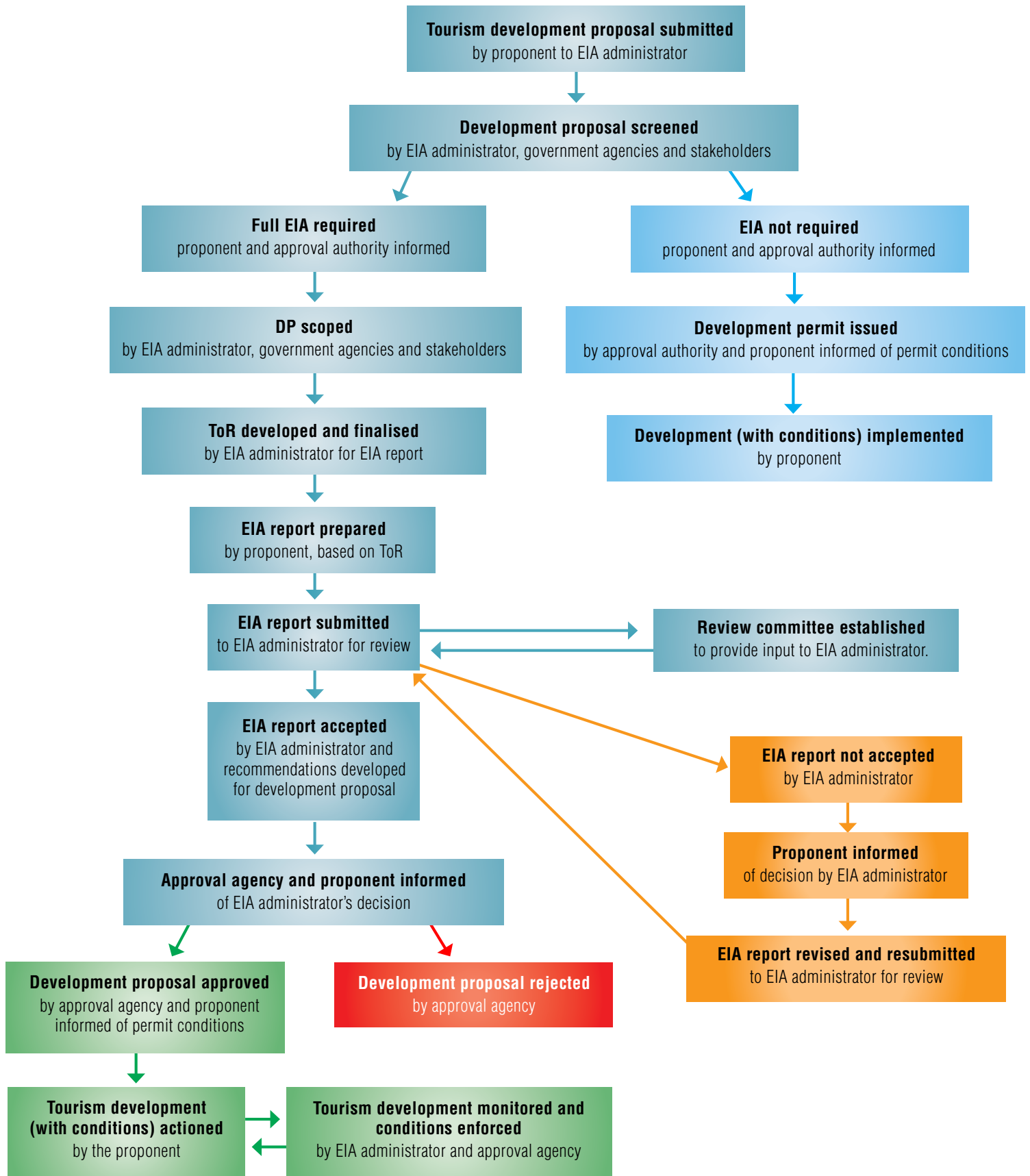


FIGURE 2: Outline of a typical EIA process, colour-coded to highlight the different paths that can potentially be followed. The term ‘stakeholders’ includes the local community and customary land/resource owners.

BOX 5: EIA and the project management cycle for new tourism development

People often view EIA as a linear process, which ends once an approval has been granted for a tourism development. However, EIA is actually part of the tourism project management cycle which should also cover the end of life or decommissioning of developments. Project management is an ongoing process of identifying impacts from tourism development, assessing the consequences of those impacts, putting in place management measures to mitigate the impacts, monitoring and evaluating the effectiveness of the management measures by assessing them against agreed impact thresholds (usually set as part of the approval conditions and in line with national guidelines), and then making changes to the tourism development, if required. This cyclical process should continue throughout the construction, operation and final closure of the tourism development.

TABLE 1: Key steps in the EIA process, presented from a tourism development perspective¹⁸

EIA STEP	DESCRIPTION
Screening	Initial assessment of a tourism development proposal, including its objectives, site selection and justification for development, to determine if an EIA is required, led by the government EIA administrator who is sometimes assisted by other government agencies (e.g. agencies responsible for biodiversity, climate change, tourism, lands and planning, health, energy, water, cultural affairs, trade and foreign investment), interested or affected people, and tourism development stakeholders.
Scoping	Identification of key issues and potential impacts for the tourism development, and preparation of terms of reference (ToR) to guide impact assessment and EIA report preparation, led by the government EIA administrator and/or the proponent, and sometimes assisted by other government agencies, interested or affected people, and tourism development stakeholders.
Impact assessment	Assessment of a tourism development's impacts on the environment and the environment's impacts on a tourism development, undertaken by the proponent or their consultant using methods such as field surveys, review of relevant literature, modelling studies, and consultation with interested or affected people and tourism development stakeholders.
EIA report preparation	Preparation of a report by the proponent or their consultant in line with the ToR, which describes the proposed tourism development, the existing environment, potential impacts, and mitigation measures which are detailed in an environmental management plan (EMP). ¹⁹ Mitigation measures should follow the mitigation hierarchy and be designed to avoid negative impacts, minimise negative impacts that cannot be avoided, rehabilitate or remedy negative impacts that cannot be minimised, and offset (or compensate for) negative impacts that cannot be remedied.
EIA report review	Review of the EIA report by the EIA administrator, other relevant government agencies, interested or affected people and tourism development stakeholders to evaluate if it addresses the ToR, is complete and accurate, is based on appropriate impact assessment methods, addresses stakeholder concerns, and proposes reasonable mitigation measures to address the tourism development's likely impacts.
Development approval/rejection	Approval or rejection of a tourism development proposal by the relevant government decision-making/approval authority, based on their own review of the EIA report, the recommendations of the EIA administrator, and comments from other government agencies and stakeholders. If a tourism development is approved there are usually conditions attached to the approval, which describe the environmental management or mitigation measures that need to be followed by the proponent.
Monitoring and enforcement	Environmental monitoring and reporting is undertaken by the proponent and compliance monitoring is undertaken by government, to determine if approval conditions are being met and to identify any unnecessary or unexpected impacts from the tourism development. Enforcement action may be required by the EIA administrator if monitoring shows that approval conditions are not being met, or if mitigation measures are failing to work.

¹⁸ May also be referred to as an environmental and social management plan.

2.2 EIA REPORTS – TERMS OF REFERENCE

The preparation of terms of reference (ToR) provides an important foundation for the EIA process because ToR guide tourism development proponents and their consultants when they undertake impact assessment and EIA report writing, and they guide government officers, interested or affected people and tourism development stakeholders during the review of EIA reports. ToR may be written by government EIA officers, or by the proponent working in collaboration with EIA officers.

Appendix 2 outlines a ToR template for coastal tourism development, to assist EIA officers and proponents when they are doing EIA scoping and preparing project-specific ToR. The template provides general guidance on the structure of an EIA report, the type of information that may need to be collected, prepared and presented, and the key impacts that may need to be assessed and managed for tourism developments. A tips/advice column has been included to assist proponents with the preparation of EIA reports and to support government officers with EIA report review. The ToR template can be modified and adapted for different types of tourism development to support the preparation of relevant and effective EIA reports. ToR preparation should be guided by a country's EIA legislation, regulations and policies, and the final ToR should be agreed to by the EIA administrator and proponent, prior to moving forward with the EIA process.

Tourism developments that pose a high level of risk, with significant, anticipated impacts, will have a more expansive ToR and should be required to provide more detailed information compared to low risk, low impact developments. The type of information and level of detail to be included in an EIA report also depends on the type and scale of tourism development that is under assessment; the development's location, in particular, its proximity to sensitive environmental, social or cultural areas or features; the development's natural resource requirements, especially energy and water; the amount of liquid and solid waste outputs the development is likely to generate; the extent to which the development may impact on local communities; the types of environmental hazards (e.g. storm surge, flooding) that might affect the development; and the likelihood of the development increasing stressors on important ecosystem features, and in turn, affecting ecological and social resilience in the coastal zone.



Waste management and pollution control remains one of the most pressing environmental issues in Pacific island countries and territories. Tourism is dependent on a beautiful Pacific so it is vital new developments give consideration to waste management. Photo: Paul Anderson

2.3 RECOMMENDATIONS FOR EFFECTIVE EIA FOR COASTAL TOURISM DEVELOPMENT

Key recommendations are provided below, to promote effective EIA for coastal tourism development. These recommendations can guide government officers, development proponents and other tourism stakeholders with their use of EIA as a planning and decision-making tool.¹⁹

- a. **Promote adequate and meaningful stakeholder engagement and public consultation.** Good public consultation is crucial for a successful EIA, it is not something that can happen overnight, but needs concerted, ongoing effort. The approach taken is critical. There is a need to respect and align the process and implementation of activities with customary institutions and norms (such as land tenure).



Stakeholder engagement can take many forms; it needs to be an inclusive process with documented outcomes while building and maintaining constructive relationships between all parties. Photo: Greg Barbara

- b. **It needs to engage stakeholders in a meaningful manner that empowers them.** It should be an iterative process and include some bottom-up approach to gather inputs from key community stakeholders to identify existing conflicts of interest with regard to resource use, and the vision of stakeholders in relation to maintaining a healthy coastal and marine environment that will continue to support livelihoods in the future.

Coastal tourism EIA stakeholders may include customary land and resource owners, people directly affected by a development, businesses, non-government organisations and civil society, including women's, men's, leaders, youth and church groups. Stakeholder engagement in the EIA process can be promoted through EIA administrators making announcements of tourism developments requiring EIA, inviting public review of ToR and of EIA reports for tourism developments, publishing statements of reasons for approving or declining approval of tourism developments, and providing regular updates on tourism developments and their environmental performance. Tourism development proponents can also be required to translate summaries of EIA reports into local languages, ensure that full EIA reports are easily accessible for review and comment, hold consultation meetings with project stakeholders, and clearly communicate how they will address stakeholder concerns.

Stakeholder engagement and consultation should be adequate, which means the people who are going to be affected by a tourism project should know what the project is about and what the project's timeframe for construction and operation will be, how the project will affect them, what benefits they can expect, and what types of compensatory actions will be taken by the proponent. Stakeholder engagement and consultation should also be meaningful, in other words, it should be properly planned and advertised by the proponent; be a transparent and easy to understand

¹⁹ A more extensive list of recommendations for effective EIA is provided in SPREP's regional EIA guidelines "Strengthening Environmental Impact assessment: Guidelines for Pacific Island countries and territories." Apia, Samoa: SPREP 2016

process; recognise and respect local governance structures, traditions, languages, timeframes, consultation protocols and decision-making processes; and it should give recognition to all relevant groups, paying appropriate attention to the different economic and social contexts found amongst the range of affected persons/groups and to gender equality issues (see Box 7: Gender equality considerations in EIA for coastal tourism development).

The nature and frequency of stakeholder engagement should reflect a project's level of risk and its anticipated impacts and it should be designed to ensure communities have an opportunity to learn about, and participate in, decision-making processes that will affect them. Effective stakeholder engagement should meet four objectives, to:

- i. familiarise stakeholders with the project planning and approval process;
- ii. get input from stakeholders on potential project impacts, which may be perceived or actual impacts;
- iii. get feedback from stakeholders on project design and impact mitigation measures; and
- iv. build and maintain constructive relationships between all parties.

Early, effective and well-targeted stakeholder engagement can help to promote transparent, objective environmental assessment; allow for the identification of significant stakeholder issues and concerns; encourage a proponent to be responsive to local needs; help to build credibility and trust between the proponent and directly affected communities; and reduce the likelihood of misinformation, tension and social conflict. In turn, this can promote social acceptance of the project and support smoother construction and operation processes. In contrast, poor quality or inadequate engagement is likely to result in greater fear, anxiety and opposition towards a project.

Engagement with the local community, land/resource owners and other stakeholders should be a requirement under EIA legislation (and is mandated in several Pacific Island states, such as Solomon Islands, Tuvalu and Vanuatu). This legal requirement should be supported by national guidelines that outline appropriate methods and timeframes for engagement and consultation, and that provide recommendations for ensuring adequate participation by, and representation of, affected communities.

Stakeholder engagement and consultation may be part of a process of social impact assessment (SIA), which aims to assess the positive and negative social impacts likely to result from tourism developments, and to develop strategies for the ongoing management and monitoring of those impacts. SIA should be undertaken by appropriately qualified and skilled personnel who have experience with identifying interested and affected groups of people, facilitating stakeholder participation in development planning processes, and collecting and analysing social data.²⁰

The benefits of SIA and effective stakeholder engagement and consultation include community assistance with identifying, avoiding and minimising impacts and risks associated with tourism developments; the fostering of social acceptance of tourism projects, which helps to avoid development objections, delays or disruptions; the establishment of a sense of shared responsibility and ownership for the health of a tourism destination; and the achievement of more sustainable and equitable tourism development outcomes.

c. Ensure ToR are written to guide EIA report preparation for proposed tourism developments. Refer to Section 2.2 and Appendix 2: Terms of Reference Template for EIA Reports – Coastal Tourism Development for more detail. This recommendation reinforces the importance of ToR to support effective EIA. If the scoping step of the EIA process is neglected and if ToR are not prepared, this can lead to poor quality EIA reports that contain insufficient or irrelevant information, and that do not support effective government decision-making. Poor quality EIA reports also delay the EIA process and waste the time and resources of government officers and tourism development proponents. Scoping and ToR production should be undertaken for all physical tourism developments subject to EIA. Project-specific ToR are an important reference document for both EIA officers and proponents, which guide them in fulfilling their EIA roles and responsibilities.

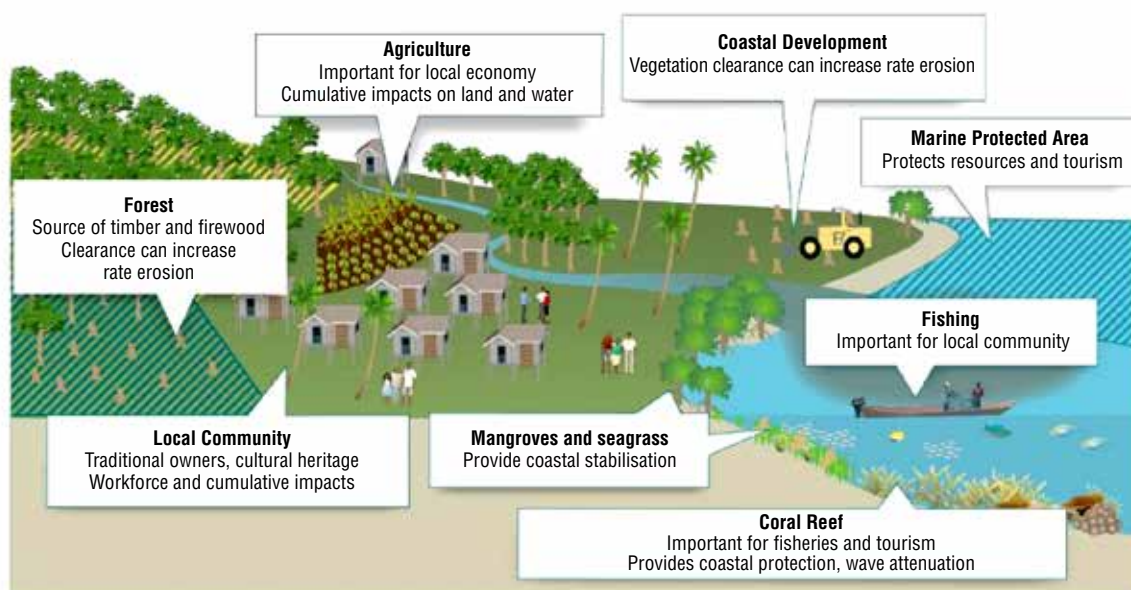
d. Institute ongoing environmental management, monitoring, reporting and enforcement. The EIA process does not end once an approval is issued for a tourism project; it continues for the life of the project through environmental management, monitoring, reporting and enforcement. The EIA administrator must ensure that a tourism development proponent prepares, implements, monitors and reports accurately on the effectiveness of a project-specific environmental management plan (EMP) (see Appendix 2, section 10 for an EMP overview). An EMP should include

²⁰ Vanclay F. 2003. International Principles for Social Impact Assessment. *Impact Assessment and Project Appraisal*, 21(1): 5–12. <http://www.tandfonline.com/doi/pdf/10.3152/147154603781766491?needAccess=true>

performance objectives and targets; describe all mitigation measures to be implemented to address the identified impacts of the tourism project; and outline a monitoring and reporting schedule to assess the effectiveness of the mitigation measures (see Box 6). EMP mitigation measures may sometimes need to be adjusted and enhanced to ensure compliance with development approval conditions and relevant legislation.

The EIA administrator has an important role in overseeing the EMP and coordinating independent monitoring to ensure mitigation measures are being effectively implemented. The EIA administrator will need to use enforcement provisions under relevant legislation if the proponent fails to apply mitigation measures, if mitigation measures are not working well, or if environmental impacts are occurring. Sometimes a number of government agencies may need to be involved with the monitoring of a tourism development, which means it is important for the EIA administrator to establish clear guidelines regarding who is responsible for different areas of monitoring, when the monitoring should be undertaken, how compliance will be determined, and how enforcement should be carried out.

GOOD COASTAL DEVELOPMENTS TAKE ACCOUNT OF INTERDEPENDENCIES



Source: Jupiter et al. (2013)²¹ Symbols used are courtesy of the Integration and Application Network, University of Maryland Centre for Environmental Science (ian.umces.edu/image/library/)

e. Use EIA within the context of ecosystem-based management and strategic environmental assessment. When applying EIA to tourism developments it is important to remember that coastal marine and terrestrial ecosystems are physically and biologically interdependent. For example, production of sediment-laden runoff or liquid and solid waste flows from a tourism development site can adversely affect coastal lagoons and nearshore waters, which in turn, can affect the health of mangroves, seagrass beds and coral reefs, and ultimately, increase the exposure of tourism facilities to storms, extreme weather events and coastal erosion. This example serves to emphasise that in the coastal zone, EIA should be applied through the lens of ecosystem-based management (EBM), which is an integrated ‘ridge-to-reef’ or ‘whole of island’ approach for achieving environmental, social and economic goals. EBM combines land use and development planning with environmental protection and production needs.²² It can be particularly useful for guiding coastal tourism development in Pacific island countries and territories because it recognises the physical and biological linkages between land and sea, encourages the use of scientific knowledge in combination with traditional and local knowledge, promotes coordination across all government and non-government agencies who manage different aspects of the coastal zone, and encourages the use of participatory approaches with local stakeholders to achieve increased climate resilience, healthier ecosystems, enhanced natural resource management and improved livelihoods.

²¹ Jupiter S.D., Jenkins A.P., Lee Long W.J., Maxwell S.L., Watson J.E.M., Hodge K.B., Govan H. and Carruthers T.J.B. 2013. Pacific integrated island management: Principles, case studies and lessons learned. Apia and Nairobi: Secretariat of the Pacific Regional Environment Programme (SPREP) and United Nations Environment Programme (UNEP).

²² UN Environment and Secretariat of the Pacific Regional Environment Programme. 2017. Pacific ecosystem-based management (EBM) and adaptation (EbA). <http://www.sprep.org/attachments/Publications/FactSheet/Oceans/pacific-ecosystem-based-management-adaptation.pdf>

Strategic environmental assessment (SEA) is a tool that can be linked with EBM. SEA is defined as a systematic process that promotes the consideration of all relevant environmental, social and economic aspects in the development and implementation of government policies, plans and programmes. In other words, SEA helps to mainstream sustainability into government planning processes. For example, SEA can be used to prepare a strategic development or resource use plan for a defined coastal area (see Box 8). In turn, this plan can inform EIAs for individual coastal tourism developments by pinpointing preferred locations for particular types of development, stipulating desired characteristics of developments, and identifying ecosystem assets that need to be protected to support coastal zone resilience.

SEA can also be used to understand and evaluate the likely environmental, social and economic impacts of a government policy, plan or programme. SEA has been previously used in this way to identify the likely impacts of Fiji's Tourism Development Plan. One of the key conclusions from this particular SEA was: "*The full implementation of institutional and regulatory frameworks for environmental assessment and management, including capacity building and enforcement is a prerequisite for tourism expansion to be sustainable. Impact assessments therefore must guide tourism development, and a fully effective system for enforcing their conclusions must be in place.*"²³ This conclusion is relevant to these EIA guidelines as it emphasises the importance of the EIA process for sustainable tourism development, and in particular, it stresses the need for effective EIA compliance and enforcement.

f. Utilise spatial data and geographic information systems to fully understand the risks, impacts and opportunities of development. Geographic information systems (GISs) are computer systems that allow us to view, question, analyse and interpret data related to positions on Earth's surface.²⁴ Many different types of data can be compared and contrasted using GIS, for example, environmental data (e.g. vegetation types, habitat areas, soil types, location of waterbodies, coastal erosion risk, landslide risk, tsunami zones), social and economic data (e.g. population, occupations, income levels, educational levels, village/settlement areas, access to drinking water, access to electricity, access to telecommunications), and built environment data (e.g. location of factories, schools, churches, roads, bridges, power lines, cultural heritage sites).

GIS allows different types of data and information to be overlaid on a single map, which can help to reveal relationships between different environmental, social and economic variables, as well as reveal patterns and trends in the variables. For example, using GIS a single map could be produced for a section of coastline that includes sites that produce sediment run-off (e.g. cleared areas), sites that produce liquid and solid waste (e.g. factories, frequently-visited tourism zones), and sites that are sensitive to run-off and pollution such as wetlands, mangroves, seagrass beds and marine protected areas. This map would assist with determining the coastal features that are most at risk from development.

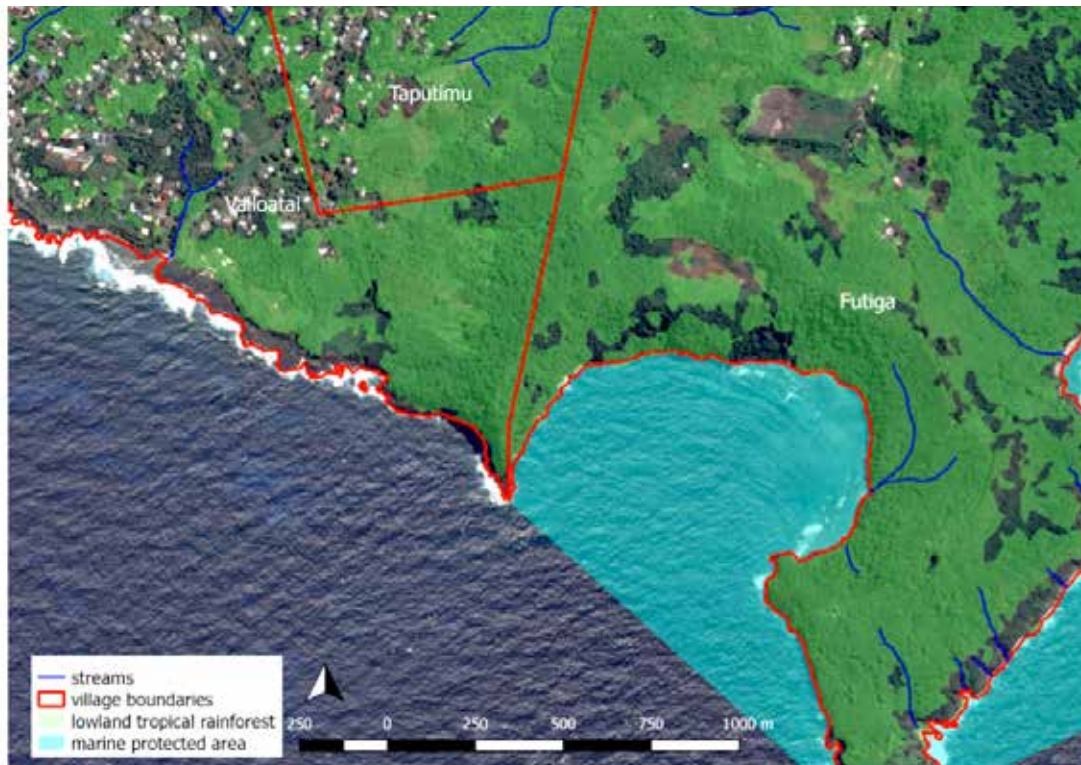
GIS is an important tool that can support the EIA process, especially during the concept design stage for a new tourism development. GIS can be used to identify a proposed development's footprint and area of influence, which can then be cross-referenced with relevant environmental, social, economic and engineering datasets in order to visualise and identify risks, impacts and opportunities associated with the development. GIS can also be used for the spatial analysis of a range of tourism development options and an assessment of their respective impacts, to help select the 'least impact' alternative. It is in the best interests of all tourism development stakeholders (proponents, government, land/resource owners, local community) for GIS to be used to identify potential impacts and mitigation options early on, so as to avoid additional financial, environmental and social costs during the construction and operational phases of a coastal tourism development.

Additionally, GIS is a powerful tool for analysing spatial data that is collected at the same location over a number of years (e.g. aerial photographs, satellite imagery), for the purpose of identifying changes in environmental conditions (e.g. changes in vegetation cover, coastal shorelines, coral reef cover, seagrass bed distribution, sedimentation of coastal waterways, tourism development footprint). GIS can thus support environmental monitoring efforts throughout the construction and operational phases of coastal tourism development.

GIS map outputs are useful aids for supporting stakeholder engagement and consultation. Maps can clearly illustrate where a proposed development will be located in relation to local community infrastructure and assets, what coastal resources will be used or affected, and what coastal resources will be protected, which helps to support well-informed discussion and decision-making.

²³ Levett R. and McNally R. 2003. A Strategic Environmental Assessment of Fiji's Tourism Development Plan. World Wide Fund for Nature. http://api.commissiener.nl/docs/os/sea/casestudies/fiji_tourism_development_plan_0305_wwf.pdf

²⁴ <https://oceanservice.noaa.gov/facts/gis.html>



An example map of how GIS can be used to show surrounding land/resource uses and ecosystem features e.g. forestry, fresh water stream, MPA and villages to give context to a proposed coastal tourism development

g. Establish a registration scheme for EIA consultants. Some Pacific island countries have established a formal process for assessing the credentials of, and registering, EIA consultants who must abide by a code of practice. A register of consultants can be referred to whenever external EIA expertise is required by government or proponents. Consultants' credentials should be thoroughly scrutinised (e.g. by an independent assessment panel comprised of technical/scientific experts from environmental and social backgrounds) before they are eligible for listing on the register, and they should be required to pay a prescribed fee to the government EIA administrator that can be used to support EIA process management. The development of a registration scheme increases regulatory control of consultants, ensures proponents use the services of suitably qualified personnel, helps to minimise bias, and improves the quality of EIA reports. Through the registration process countries may be able to identify consultants who have EIA experience that is relevant to, or appropriate for, tourism developments. This may further help to ensure that development proponents engage the services of well-skilled and effective consultants.

BOX 6: The 'five Ws' for guiding environmental management plans

Tourism proponents (or their consultants) are encouraged to follow the 'five Ws' when preparing an environmental management plan for a tourism development. This means they should provide information about:

1. **What** mitigation measures will be implemented – the on-ground management measures that will be used to avoid, minimise, rehabilitate or offset development impacts;
2. **Who** will do the implementing and reporting – the officer(s) or employee(s) that will be responsible for implementing the mitigation measures and reporting on outcomes to senior managers and relevant government authorities;
3. **When** the implementing will be done – during the construction, operational or closure phases of a development;
4. **Where** the implementing will be done – the location within the development's footprint or area of influence where the mitigation measures will be implemented; and
5. **Which** environmental performance standards or requirements will be met – these standards or requirements may be specified under national regulations, specific development approval conditions, company policies, industry guidelines or donor policies.

BOX 7: Gender equality considerations in EIA for coastal tourism development

Gender equality is recognised as being essential for achieving a sustainable and resilient future for Pacific islands.²⁵ Gender equality means ensuring that the perceptions, interests, needs and priorities of women and men are given equal weight in planning and decision-making, especially for future development.²⁶ In the context of EIA for coastal tourism development, gender equality can be achieved through actions such as:

- identifying gender issues during EIA scoping and the development of ToR for EIA reports;
- drawing on the experiences and knowledge, and addressing the concerns of women and men of different socio-economic and age groups, during stakeholder engagement and consultation;
- ensuring that women and men contribute to the identification of mitigation measures to help avoid or minimise negative impacts from tourism developments;
- using gender-sensitive indicators to monitor both the impacts of tourism developments and the progress of mitigation measures; and
- hiring women and men with gender expertise as EIA consultants, to help ensure that consultancy teams have broad capacity to comprehensively assess the implications of planned tourism developments.



²⁵ The Pacific Gender and Climate Change Toolkit: Tools for Practitioners. <https://www.pacificclimatechange.net/document/pacific-gender-climate-change-toolkit-complete-toolkit>

²⁶ Office of the Special Adviser on Gender Issues and the Advancement of Women, United Nations. 2001. Important concepts underlying gender mainstreaming. <http://www.un.org/womenwatch/osagi/pdf/factsheet2.pdf>

BOX 8: SEA and coastal tourism development

SEA can support well-informed design and decision-making for coastal tourism, by evaluating alternative development scenarios and identifying the best broad-scale development options at an early planning stage. By way of example, an SEA process for coastal tourism might include the following steps:²⁷

1. Screening – to determine if an SEA is required to support the preparation of a new national, provincial or local tourism development plan or policy.
2. Scoping – to identify a clear geographic boundary for the tourism SEA, and also the key environmental, social and economic issues that need to be addressed. This information should be captured in the terms of reference for the SEA.
3. Assessment, for a defined geographic area, of –
 - the baseline situation, including a broad description of the coastal area that is being targeted for tourism development, and the environmental, social and economic assets (including ecosystem goods and services) that currently exist;
 - key environmental, social and economic targets/objectives;
 - reasonable tourism development alternatives or scenarios;
 - likely impacts (both positive and negative) from different tourism development scenarios, including impacts on environmental, social and economic assets; impacts arising from environmental hazards and environmental change processes; and cumulative impacts; and
 - viable tourism development options and mitigation measures that can support sustainable development.
4. Reporting – to detail the findings of the assessment to government agencies, local communities and other stakeholders. These findings should include specific recommendations to directly inform the development of a new coastal tourism development plan or policy.
5. Monitoring – to examine the implementation of the coastal tourism development plan or policy, to ensure that any unforeseen impacts are identified, that appropriate mitigation measures are being undertaken, and that the plan or policy is contributing to sustainable and resilient tourism development.

It is important to note that an SEA process should be participatory, in other words, it should involve and inform all interested stakeholders including tourism developers, customary and private land and resource owners, and local government, businesses and community groups. Tourism stakeholders can potentially be included in every step of the SEA process.



²⁷ Adapted from: Abaza H., Bisset R. and Sadler B. 2004. Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. Geneva: United Nations Environment Programme. Legislative Council Secretariat. 2015. Information Note: Strategic Environmental Assessment. <http://www.legco.gov.hk/research-publications/english/1415in02-strategic-environmental-assessment-20150105-e.pdf>. Accessed 15 March 2016.

2.4 CONCLUSION: BENEFITS OF EIA FOR COASTAL TOURISM DEVELOPMENT

EIA is an internationally-recognised process, legislated in most Pacific island countries, that supports well-informed development planning, decision-making and management. EIA can benefit coastal tourism because it assists with designing development projects in a way that addresses the concerns of customary and private resource owners, as well as local communities, and it helps to ensure that a tourism project is better suited to its local environmental and social context. This can contribute to smoother project construction and operation, allow projects to be aligned with local values and needs, promote greater social acceptance of tourism development, and ultimately mean that developments do not increase stressors on important coastal ecosystems such as coastal forests, mudflats, coral reefs, mangroves, seagrass beds, lagoons and rivers.

EIA encourages efficient use of valuable resources such as energy and water; helps to pinpoint opportunities for minimising and controlling waste outputs; and can identify options for sourcing local, environmentally-friendly materials for the buildings, infrastructure and services that contribute to tourism development. This means lower operating expenses and avoidance of environmental remediation or clean-up costs for tourism developers.

In addition, EIA establishes a framework for managing, monitoring and reporting on environmental performance over the lifetime of a tourism development. This promotes the implementation of good environmental practices, and in turn, the achievement of positive environmental outcomes that can be linked with tourism sector initiatives, such as green rating or ecotourism certification systems, which can enhance a tourism developer's environmental credibility.

Overall, EIA can help to ensure that tourism developments contribute to the protection of important environmental values and assets that support local livelihoods and lifestyles, and positive visitor experiences. Effective use of EIA will promote the long-term interests and success of coastal tourism in Pacific island countries and territories, and help countries to achieve their sustainable and resilient development goals.



Pacific island communities are vulnerable to climate change and natural disasters. The EIA process should give consideration to climate change and disaster risk management, to promote resilient development. Photo: Melanie Bradley

3 Appendices

APPENDIX 1 ESTIMATED AND PROJECTED ECONOMIC IMPACT OF TOURISM IN PACIFIC ISLAND COUNTRIES AND TERRITORIES

TABLE 2: Estimated economic impact of tourism in Pacific island countries and territories in 2016.¹

Country	Direct contribution to GDP (USD million) ²	% of total GDP ³	Direct contribution to employment ('000 jobs)	% of total employment ³	Visitor exports (USD million) ²	% of total exports ³	Capital investment (USD million) ^{2, 4}	% of total capital investment ³
Fiji	622.2	14.5	42.5	13.0	1,069.4	46.7	237.6	24.6
Kiribati	15.0	9.1	2.0	7.5	4.1	20.5	1.7	2.3
Other Oceanic States ⁵	4,592.6	12.6	68.5	17.2	8,126.3	54.1	631.8	16.0
Papua New Guinea	113.2	0.7	18.0	0.6	1.6	0.0	117.8	3.8
Solomon Islands	43.1	3.9	6.5	3.3	61.7	9.8	9.6	8.3
Tonga	25.8	6.7	2.5	6.8	45.8	43.8	12.5	14.8
Vanuatu	133.9	17.2	10.0	13.6	238.5	59.4	30.1	14.2

1 Data source: World Travel and Tourism Council. 2017. <https://www.wttc.org/research/economic-research/economic-impact-analysis/country-reports/>. Note: where there are differences in reported figures within the WWTC reports, the lower figures have been conservatively reported in Table 1

2 016 constant prices and exchange rates

3 Refers to each indicators' share of the relevant whole economy indicator. Visitor exports is relative to total exports of goods and services

4 Includes capital investment spending by all industries directly involved in travel and tourism, plus investment by other industries in tourism assets e.g. accommodation, passenger transport equipment, restaurants, leisure facilities

5 Other Oceanic States: American Samoa, Commonwealth of the Northern Mariana Islands, Cook Islands, Federated States of Micronesia, French Polynesia, Guam, New Caledonia, Niue, Palau, Republic of the Marshall Islands, Samoa, Tuvalu

TABLE 3: Forecast contribution of tourism to Pacific island countries and territories in 2027.¹

Country	Direct contribution to GDP (USD million) ²	% of total GDP ³	Growth, contribution to GDP ⁵	Direct contribution to employment ('000 jobs)	% of total employment ³	Growth, contribution to employment ⁵	Visitor exports (USD million) ²	% of total exports ³	Growth, visitor exports ⁵	Capital investment (USD million) ^{2,4}	% of total capital investment ³	Growth, capital investment ⁵
Fiji	1,133.8	16.9	5.3	59.0	16.8	2.8	1,993.8	51.2	5.5	329.7	21.8	3.4
Kiribati	19.4	9.8	2.6	3.0	7.9	3.0	6.0	21.4	4.0	3.4	3.9	6.5
Other Oceanic States ⁶	8,133.0	13.6	5.3	81.0	18.8	1.6	14,369.0	58.0	5.3	1,166.6	18.0	5.8
Papua New Guinea	197.7	0.7	5.4	24.0	0.6	3.0	2.6	0.0	3.6	224.3	3.8	6.1
Solomon Islands	70.8	4.2	4.3	10.0	3.6	3.0	114.5	12.8	5.4	13.7	7.9	3.4
Tonga	49.1	9.9	5.9	3.0	9.0	3.2	88.1	57.4	6.0	18.7	18.1	4.0
Vanuatu	209.6	18.7	4.1	14.0	14.7	3.3	371.0	68.3	4.0	55.8	18.0	5.8

1 Data source: World Travel and Tourism Council. 2017. <https://www.wttc.org/research/economic-research/economic-impact-analysis/country-reports/>. Note: where there are differences in reported figures within the WWTTC reports, the lower figures have been conservatively reported in Table 2

2 2016 constant prices and exchange rates

3 Refers to each indicators' share of the relevant whole economy indicator, such as GDP and employment. Visitor exports is relative to total exports of goods and services

4 Includes capital investment spending by all industries directly involved in travel and tourism, and investment by other industries in tourism assets e.g. accommodation, passenger transport equipment, restaurants, leisure facilities

5 2017–2027 annualised real growth adjusted for inflation

6 Other Oceanic States: American Samoa, Commonwealth of the Northern Mariana Islands, Cook Islands, Federated States of Micronesia, French Polynesia, Guam, New Caledonia, Niue, Palau, Republic of the Marshall Islands, Samoa, Tuvalu



Coastal walks and lookouts can be important tourism attractions that may need review under the EIA process if walkways require access through or are adjacent to sensitive areas. Photo: Jope Davetanivalu

APPENDIX 2 TERMS OF REFERENCE TEMPLATE FOR EIA REPORTS – COASTAL TOURISM DEVELOPMENT

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 1 – Executive summary Present a concise, non-technical outline of the proposed tourism project and each chapter of the EIA report. Summarise the results of impact and risk assessments, and key environmental management and mitigation measures.</p>	<ul style="list-style-type: none"> • The executive summary should be written in such a way that it can be read as a stand-alone document. • Translate the executive summary into relevant local language(s) to support community participation in the EIA process. • Information provided in the executive summary and other sections of the EIA report should be objective, clear, and easily understood by the reviewer, so they can comprehend the tourism development’s consequences for coastal environments and communities.
<p>Section 2 – Table of contents</p>	<ul style="list-style-type: none"> • A table of contents is particularly important for long EIA reports with many chapters, sub-sections, appendices etc. • The sections in this ToR template can be combined or re-ordered, if this supports clearer presentation of project information. Where appropriate, information should be cross-referenced in an EIA report to avoid unnecessary duplication of text.
<p>Section 3 – Glossary, list of acronyms/ abbreviations</p>	<ul style="list-style-type: none"> • A glossary and a list of acronyms/abbreviations can greatly assist the reader if an EIA report includes technical terms. Technical jargon should be avoided where possible, but if it is necessary it should be accompanied by a clear, understandable explanation.
<p>Section 4 – Introduction Provide an overview of the tourism project and the proponent, including information such as:</p> <p>4.1 Project name, background and general description</p> <p>4.2 Project purpose and objectives (including environmental performance objectives)</p> <p>4.3 Project justification</p> <p>4.4 Profile of project proponent</p> <p>4.5 Contact details for the proponent/project manager</p>	<ul style="list-style-type: none"> • The introductory section should briefly outline the tourism project and explain why the EIA report has been prepared. • The project proponent should be clearly identified so government knows who to issue a project permit to, and who will be responsible for environmental management once a project commences. • It is important to explain the project proponent’s motivations for the development, its justification and the capacity and resources they have available to effectively manage the project. • The justification and objectives are possibly the most important information to provide early. If the project has no clear objective and environmental performance goals, or lacks appropriate justification for why the site and the particular development needs to go ahead, it can quickly get dismissed or lead to lengthy approval delays. • Provide a quick summary of the site selection and alternatives options discounted in the concept phase. More detail is then to be provided in Section 6.
<p>Section 5 – Policy and legal framework</p> <p>5.1 Outline relevant government policies, guidelines, laws and multilateral environmental agreements that apply to the tourism project</p> <p>5.2 Specify all approvals that need to be obtained from different government agencies and if consent is required from land/resource owners</p>	<ul style="list-style-type: none"> • Before a development permit is issued for a tourism project, proponents may need to obtain approvals under other legislation alongside an approval via the EIA process. • The development approval authority may be the Minister for environment or it may be another Minister, depending on the allocation of regulatory responsibility within a country. • The proponent should provide proof of land ownership or demonstrate they have followed appropriate procedures and undertaken adequate and meaningful consultation to obtain consent from land/resource owners. Consultation details can be included in other sections of the EIA report (e.g. sections 8 and 11). • Multilateral environmental agreements that may be relevant include the Convention on Biological Diversity (CBD), Convention on the Conservation of Migratory Species of Wild Animals, Noumea Convention, United Nations Framework Convention on Climate Change, and United Nations Convention to Combat Desertification. Note: biodiversity-inclusive EIA guidelines have been produced under the CBD: https://www.cbd.int/doc/publications/cbd-ts-26-en.pdf

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 6 – Tourism project description and justification</p> <p>Present a detailed description of the tourism project and provide justification for its development, covering:</p> <p>6.1 Project details</p> <ul style="list-style-type: none"> • Project location, project footprint and area of influence, described in text and illustrated with clear maps • Project activities, components, infrastructure and design, including a description of the construction process • Predicted resource and material requirements for project construction and operation • Expected workforce size, whether workers will be sourced locally or from overseas, and where workers will be accommodated • Predicted type and quantity of waste outputs (liquid and solid wastes, gas/air emissions) • Schedule for project construction and operation, and the expected project lifespan • Project cost estimates and funding sources <p>6.2 Analysis of alternatives</p> <ul style="list-style-type: none"> • Alternative tourism project sites, designs, technologies and development schedules, and other project alternatives that address specific concerns raised by stakeholders • Advantages and disadvantages of alternatives (e.g. cost, availability of technology) • Rationale for selection of preferred options <p>6.3 Project benefits</p> <ul style="list-style-type: none"> • Benefits accruing to the local community, island, country • Relevance of the project to local or national development plans 	<ul style="list-style-type: none"> • This section should provide the reader with a clear understanding of the scale and type of tourism project, its proposed location, any constraints associated with the location, and the activities that will take place during construction and operation, especially those activities that are likely to produce environmental impacts. The project description provides a foundation for the impact assessment (section 8). • ‘Project footprint’ is the land and/or ocean area occupied by project buildings, facilities, infrastructure or activities. It will be particularly important to show that careful consideration has been given to the siting of buildings, infrastructure and activities in order to minimise impacts (e.g. coastal erosion) and to avoid damage or disruption to tourism operations during extreme weather events. It is also important to assess if the environment has the capacity to support the planned tourism development and the increase in visitor numbers. • ‘Area of influence’ is the area affected by a development project, which is beyond the project footprint. It may be upstream and/or downstream of the project site and is determined by a tourism project’s resource requirements and the nature and magnitude of its impacts. • Maps and diagrams included in the EIA report should ideally be prepared using GIS at an appropriate scale, resolution and clarity that clearly display the project location, the area of land and/or sea required for the project, the siting and layout of tourism buildings and infrastructure, the project’s proximity to environmental features (e.g. waterways, villages, settlements, natural and cultural assets, sensitive habitats), project components and their design elements. Ideally, spatial data presented in the report should be provided to government as importable GIS shape files to enable officials to make their own assessments and to support information gathering for the region. • The description of resource requirements for the tourism project should include an estimate of public utility requirements (e.g. energy, water), and any source limitations or competition for resources that may occur with other projects or the local community. • The analysis of alternatives should not only include the ‘no development’ alternative but should also consider alternative options that help to minimise environmental impacts or that address environmental hazards. This may include outcomes of early consultation with customary landowners for site selection or reference to regional SEAs for appropriate land use.



Photo: Greg Barbara

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 7 – Description of the baseline environment</p> <p>Provide a description of the baseline environment (i.e. current or existing environmental conditions) that is relevant to the tourism project site and the project's area of influence.</p> <p>Where relevant, the following aspects of the environment should be described:</p> <p>7.1 Climate (e.g. temperature; rainfall; winds; frequency of flooding, drought, cyclones; climate change projections)</p> <p>7.2 Topography, geology and soils (e.g. significant landscape features; landscape gradient; physical and chemical properties of soils; land capability and availability – including a coastal soils map; earthquake and volcanic potential; areas vulnerable to landslides, rock fall, erosion)</p> <p>7.3 Land tenure, zoning and current and adjacent land uses (e.g. community food gardens, agriculture, national parks, sensitive habitat, community or public reserves, village settlements, cemeteries, local industry)</p> <p>7.4 Social/cultural resources and heritage (e.g. objects or sites of social/cultural significance, cultural and archaeological assets)</p> <p>7.5 Water (e.g. surface and groundwater quantity and quality; site hydrology; local catchment area; upstream and downstream water uses/users; areas vulnerable to flooding, inundation or storm surges)</p> <p>7.6 Marine (e.g. condition of existing foreshore, coastal hydrology, tides, wave action, currents, sediment movement, storm surge, salinity, sea water quality, sea water temperature, seabed bathymetry)</p> <p>7.7 Air (e.g. existing sources of air emissions; ambient air quality; location of nearest sensitive receptors)</p> <p>7.8 Noise (e.g. baseline noise levels and noise pollution, including baselines for underwater noise; location of nearest sensitive receptors; key animal species that may be affected by increased underwater noise)</p> <p>7.9 Flora (e.g. terrestrial and marine plant species and communities within the project site and surrounding area, with an emphasis on endemic, rare, threatened or invasive species, and species used for traditional/cultural purposes)</p> <p>7.10 Fauna (e.g. terrestrial and marine animal species within the project and surrounding area, with an emphasis on endemic, rare, threatened or invasive species, and species used for traditional/cultural purposes)</p> <p>7.11 Human communities (e.g. towns/villages/settlements; population numbers and local demographic profiles; literacy levels; educational access and levels achieved; housing; energy and water resource access and use; land use, gardens and subsistence dependency; natural resource use; transport and other infrastructure; cultural traditions; community structure and governance systems; marginalised groups; community health status; social infrastructure and services; landscape and visual amenity; vulnerability to environmental hazards and environmental change)</p> <p>7.12 Local and national economy (e.g. skills, livelihoods and formal/informal employment; availability of local labour; economic and business conditions; distribution of income; major sectors and industries)</p>	<ul style="list-style-type: none"> • The description of the baseline environment must be specific to the tourism project's footprint and area of influence, rather than be a broad and generalised description of the wider coastal or island environment. It should help to develop awareness and understanding of local environmental features, patterns and trends; support identification of potential impacts of the project on the environment and potential impacts of the environment on the project (section 8); and assist with the formulation of appropriate impact mitigation measures. • The presence of archaeological or historical sites may need to be determined through careful site survey work undertaken in consultation with customary landowners, the national museum etc. • In detailing the baseline environment it is important to state what is known or unknown, what assumptions have been made, what methods have been used for data collection and how reliable the data/information is. Studies or surveys undertaken by the proponent, their consultant, or third party researchers, should be adequately described and referenced (section 14). • Depending on the type and size of development, its location, and likely impacts, specialist consultants may need to be hired to examine different aspects of the environment, in order to establish sound baselines and conduct effective impact assessments (section 8). It is particularly important that assessments of social impacts are done by appropriately qualified and experienced personnel, who can help to promote community development and empowerment, build community capacity, and develop social networks and trust. • Sometimes it may be necessary to identify the need for further baseline data collection or other specialist studies, especially if important aspects of the baseline environment have not been surveyed or if they are poorly understood. • Water quality parameters that may need to be measured for coastal tourism developments include temperature, pH, salinity (electrical conductivity), turbidity/suspended solids, dissolved oxygen/ biochemical oxygen demand, heavy metals, nutrients (total nitrogen, total phosphorus), faecal coliforms.

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 8 – Impact assessment</p> <p>8.1 Assess and describe potential impacts of the tourism project on the environment, including negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the impact assessment give consideration to all relevant aspects of the environment (section 7) and how they are likely to be changed or affected by the project; the type of changes or affects; over what area, or on what scale, the changes or affects are likely to take place; and when the changes or affects will occur (e.g. during project construction or operation)</p> <p>8.2 Assess and describe potential impacts of the environment on the tourism project, including negative and positive; immediate, short-term and long-term; unavoidable, irreversible and reversible impacts. In conducting the impact assessment give consideration to all relevant environmental hazards and environmental change processes, and how they are likely to change or affect the project, either directly or indirectly; the type of changes or affects; and over what area, or on what scale, the changes or affects are likely to take place.</p> <p>Explain the methods used for impact assessment, such as site or field-based surveys, modelling studies, or reviews of similar situations or previous studies.</p>	<ul style="list-style-type: none"> • This section should focus on the main impacts of the proposed tourism project, both in the project area and in the surrounding area, i.e. the ‘area of influence’. • In detailing impacts it is important to acknowledge what is known or unknown, what assumptions have been made, how reliable the data and analyses are, and whether any information deficiencies or uncertainties have influenced the conclusions reached. • Project impacts should be explained in a culturally-appropriate format, using graphics and illustrations to assist with interpretation, where relevant. • Key negative impacts that might arise from coastal tourism development include:² <p>Environmental</p> <ul style="list-style-type: none"> – land-reclamation, land-moving, excavation and dredging works, coastal protection and potential coastal erosion and siltation of waterways – direct loss of or damage to coastal and marine habitats – unsustainable extraction or harvest, removal or loss of species, especially threatened or migratory species – production of solid and liquid waste (including sewage), and release of pollutants to land and water – stormwater discharge into waterways – production of greenhouse gas emissions – release of hazardous substances to the environment, through poor use and storage practices – noise generation during construction and operation affecting local communities; and where the noise is generated or transmitted underwater, affecting sensitive animals such as whales, dolphins, turtles, sharks and rays. [Note: the Convention on the Conservation of Migratory Species of Wild Animals is currently developing Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities] – dust generation affecting air quality, especially during construction – introduction and spread of invasive species e.g. exotic species used in garden landscaping <p>Social/economic</p> <ul style="list-style-type: none"> – physical displacement or involuntary resettlement of local communities – restrictions on, or loss of access to, culturally/socially significant sites or natural resources that support subsistence lifestyles and livelihoods – social tension and unrest, linked with land ownership, access and use issues – damage to or destruction of cultural heritage – introduction of new work and lifestyle patterns to the local community, influencing traditional customs and social patterns – competition for energy/water supplies with the local community – increased traffic on local roads <ul style="list-style-type: none"> • Potential impacts the environment may have on coastal tourism developments include: <ul style="list-style-type: none"> – impacts from environmental hazards, such as climate-related hazards (heavy rain, cyclones), water-related hazards (flooding, tidal waves), geological hazards (landslides, ground failure, earthquakes, tsunami) – impacts from environmental change processes (e.g. climate change and associated processes such as sea level rise and increased cyclone intensity; ocean acidification; loss of land from coastal erosion and shoreline change)

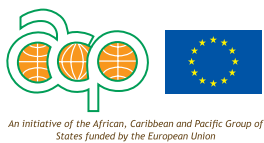
EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 9 – Cumulative impacts</p> <p>Examine the tourism project in the context of previous, existing and known future developments. This will help to ensure that the project’s potential impacts are not considered in isolation and that cumulative impacts have been adequately considered in the development of the EIA report and EMP.</p> <p>Cumulative impact assessment can include an evaluation of changes in:</p> <ul style="list-style-type: none"> 9.1 Land and coastal processes and functions (e.g. landscape hydrology, coastal stability) 9.2 Natural resource quality and availability (e.g. water, energy, fisheries, critical habitat for important flora and fauna) 9.3 Social and community dynamics (e.g. population growth, traffic volumes, in-migration) 9.4 Economic conditions (e.g. industry development, job opportunities, cost of living) <p>For identified cumulative impacts, assess if they will be permanent. If they are not likely to be permanent, specify what steps will be taken to minimise their long-term effects.</p>	<p>Cumulative impacts are changes in the environment resulting from the combined, incremental effects of human activities, environmental change processes (e.g. climate change), and physical events (e.g. extreme weather events and natural disasters).</p> <p>Cumulative impacts are evident in many coastal zones where there has been progressive clearing of mangroves and other types of coastal vegetation for tourism and housing developments. Cumulative impacts may be evident through coastal erosion, coral reef degradation, and increased vulnerability to extreme weather events, storm surge and sea level rise.</p> <p>Apart from the physical impacts to reefs cumulative impacts to water quality and decreased biodiversity are also common in areas where multiple developments have been placed along the coastal zone. Tourism itself can place direct cumulative pressure on natural resources such as fisheries in order to feed the associated population increase and demands of tourism for locally sourced menus.</p>



Coastal developments need to be carefully assessed, even boat moorings and walkways can introduce biosecurity, waste, erosion and other risks. Photo: Julie Callebaut

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 10 – Environmental management</p> <p>Provide a draft environmental management plan (EMP), including a detailed discussion of the mitigation measures that can be feasibly undertaken, and explain how these mitigation measures will address the identified impacts.</p> <p>The draft EMP should cover all phases of the tourism project, from construction through to operation and closure (where relevant). It should be further developed and refined following the conclusion of the EIA process. Provision should also be made for periodic review of the EMP once the tourism project becomes operational.</p> <p>Recommended topics to be included in the EMP document:</p> <p>10.1 Environmental performance objectives for the tourism project</p> <p>10.2 The proponent’s environmental management framework, i.e. who will have responsibility for overseeing the EMP, the implementation of different mitigation measures, incident response, environmental monitoring and reporting</p> <p>10.3 Specialised management plans with a high level of operational detail for sensitive or high-risk aspects of the project (e.g. a waste management plan, water management plan, erosion and sediment control plan, emergency/accident/disaster management plan, social impact management plan)</p> <p>10.4 A detailed monitoring plan, including performance criteria for measuring the extent of environmental impacts or the success of mitigation measures, and for ensuring early detection of impacts. The monitoring plan should also include a schedule for reporting on project activity outcomes and monitoring results to regulatory authorities, and it should list the regulatory authorities that will be reported to</p> <p>10.5 Environmental management and stakeholder consultation requirements that will need to be met by project contractors</p> <p>10.6 Provisions for independent auditing (especially in the case of high-risk tourism projects)</p> <p>10.7 Staffing and equipment requirements, allocated budget, and any training programmes or capacity development necessary to ensure successful EMP implementation</p> <p>10.8 A process for responding to accidents and emergencies</p> <p>10.9 A process for managing and responding to stakeholder concerns or complaints</p>	<p>A draft EMP should be submitted with the EIA report, with the EMP to be finalised after the EIA report has been reviewed, so that it can incorporate modified or additional mitigation measures, where necessary. The final EMP should be submitted to government at least one month prior to the construction of the tourism project, to allow adequate time for EMP review and approval.</p> <p>It is advisable to cross-reference specific parts of the EMP to relevant text in the EIA report.</p> <p>The tourism project proponent can refer to the impact mitigation hierarchy to guide their choice of mitigation measures. In order of preference, the impact mitigation hierarchy is: enhance positive impacts; avoid negative impacts; minimise negative impacts that cannot be avoided; rehabilitate or remedy negative impacts that cannot be minimised; and offset (or compensate for) negative impacts that cannot be remedied.</p> <p>The EMP can identify best practices or industry standards the proponent intends to commit to.</p> <p>Important issues that may need to be covered in an EMP for a coastal tourism development include:</p> <ul style="list-style-type: none"> • protection of key habitats e.g. mangroves, seagrass beds, coral reefs • energy and water conservation measures • green building design (especially for large resorts, e.g. installation of energy and water efficient appliances, use of natural lighting and ventilation, use of solar power, sustainable sourcing of local construction materials, use of environmentally-friendly construction materials) • solid waste management, including measures to reduce, reuse and recycle wastes • liquid waste management, including installation of a sewage treatment system that is appropriate for the size of the development and its location • erosion and sediment control measures • proper use and storage of chemicals and other hazardous substances (e.g. fertilisers, pesticides) • building set-back and design solutions that reduce the vulnerability of the project to environmental hazards and natural disasters • green procurement practices e.g. purchase of non-toxic, biodegradable, organic cleaning and garden maintenance products; use of reusable cups, plates and utensils, or banana and breadfruit leaves and coconut shells for serving food • creation of new economic opportunities for local communities that are sensitive to community development aspirations • social impact management, which may cover specialised matters such as a benefit sharing agreement, resettlement plan, in-migration management plan, climate change adaptation plan, and which should be developed by a social impact assessment specialist • a grievance redress mechanism, which is made operational before a project starts, is accessible to all stakeholders, and includes a method for screening and prioritising complaints <p>Sometimes an EMP may be referred to as an environmental and social management plan (ESMP), to emphasise that it addresses social impacts and issues.</p>

EIA REPORT SECTIONS	TIPS/ADVICE
<p>Section 11 – Local community, land/resource owner and wider stakeholder engagement and consultation</p> <p>Include details of engagement and consultation activities such as:</p> <p>11.1 Stakeholder mapping and identification of key stakeholders</p> <p>11.2 Dates, types and methods of engagement and consultation, and outcomes to date</p> <p>11.3 Key findings from engagement and consultation, including a summary of issues and concerns raised by various stakeholder groups and how these will be addressed or have been incorporated into tourism project design and mitigation measures</p> <p>11.4 Future engagement and consultation activities planned to ensure stakeholders remain informed about the tourism project</p> <p>11.5 Information on negotiation and agreements with directly affected persons and land/resource owners</p>	<p>Information about stakeholder engagement and consultation can be included in this section or earlier in the report, e.g. in section 8, or section 10.</p> <p>It is important to clearly identify the groups who are likely to benefit and those who are likely to be disadvantaged by the tourism project.</p> <p>Sometimes it can be helpful to hold meetings with stakeholders in the presence of relevant government agencies. Minutes of meetings can be attached to the EIA report.</p>
<p>Section 12 – Conclusions and recommendations</p> <p>Present the main conclusions of the EIA report and the suggested recommendations for progressing the tourism project, including key environmental management and mitigation measures that should be undertaken.</p>	<p>This section provides an overall evaluation of the positive and negative impacts of the tourism project. It typically provides justification for project approval, on the basis of identifying a range of feasible environmental management and mitigation measures.</p>
<p>Section 13 – Disclosure of consultants</p> <p>State the names, contact details and expertise of all consultants responsible for preparing the EIA report, and the services or work they completed.</p>	<p>This information is often best presented in a table, especially if a number of consultants have contributed to the EIA report.</p> <p>This section helps to verify that the EIA report has been prepared by people with appropriate qualifications and expertise.</p>
<p>Section 14 – References</p> <p>Appropriately reference all information sources that have been used or consulted during EIA report preparation (e.g. using the Harvard referencing system). Possible information sources include studies or surveys undertaken by the proponent, their consultant, or third party researchers; published or unpublished reports and papers.</p>	<p>A reference list is particularly important for large-scale tourism projects that involve detailed environmental baseline descriptions and impact assessment studies.</p> <p>The reference list allows the reader to check and validate the information sources that have been used.</p>
<p>Section 15 – Appendices</p> <p>Include appendices that support the main text and that do not contain unnecessary information. Appendices may present:</p> <ul style="list-style-type: none"> • Relevant environmental studies and reports, including raw data • Detailed technical information • Draft management plans • A table that indicates how the ToR have been addressed, cross-referenced to relevant sections of the EIA report • A table listing environmental mitigation/management commitments made by the proponent • Evidence of support for the tourism project from stakeholders 	<p>Appendices are likely to be important for large-scale tourism projects that involve detailed environmental baseline and impact assessment studies.</p> <p>Appendices may include engineering reports (e.g. for excavation work or major soil disturbance); detailed flora and fauna survey reports; hydrological studies; letters of support from land/resource owners, local community groups and other relevant stakeholders.</p> <p>Plastic waste substitutions and alternatives can form part of the draft EMPs with reusable metal straws, wooden or corn starch takeaway spoons/forks/ knives, paper takeaway bags, <i>mailo</i> (coconut frond plates).</p>



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