



Planning for  
**ecosystem-based  
adaptation** in  
**Taveuni**  
FIJI





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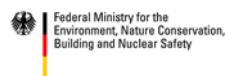
**FRONT COVER:**

Locals swimming at Tavoro Falls, near Bouma on Taveuni Island, Fiji. Photo | Douglas Peebles

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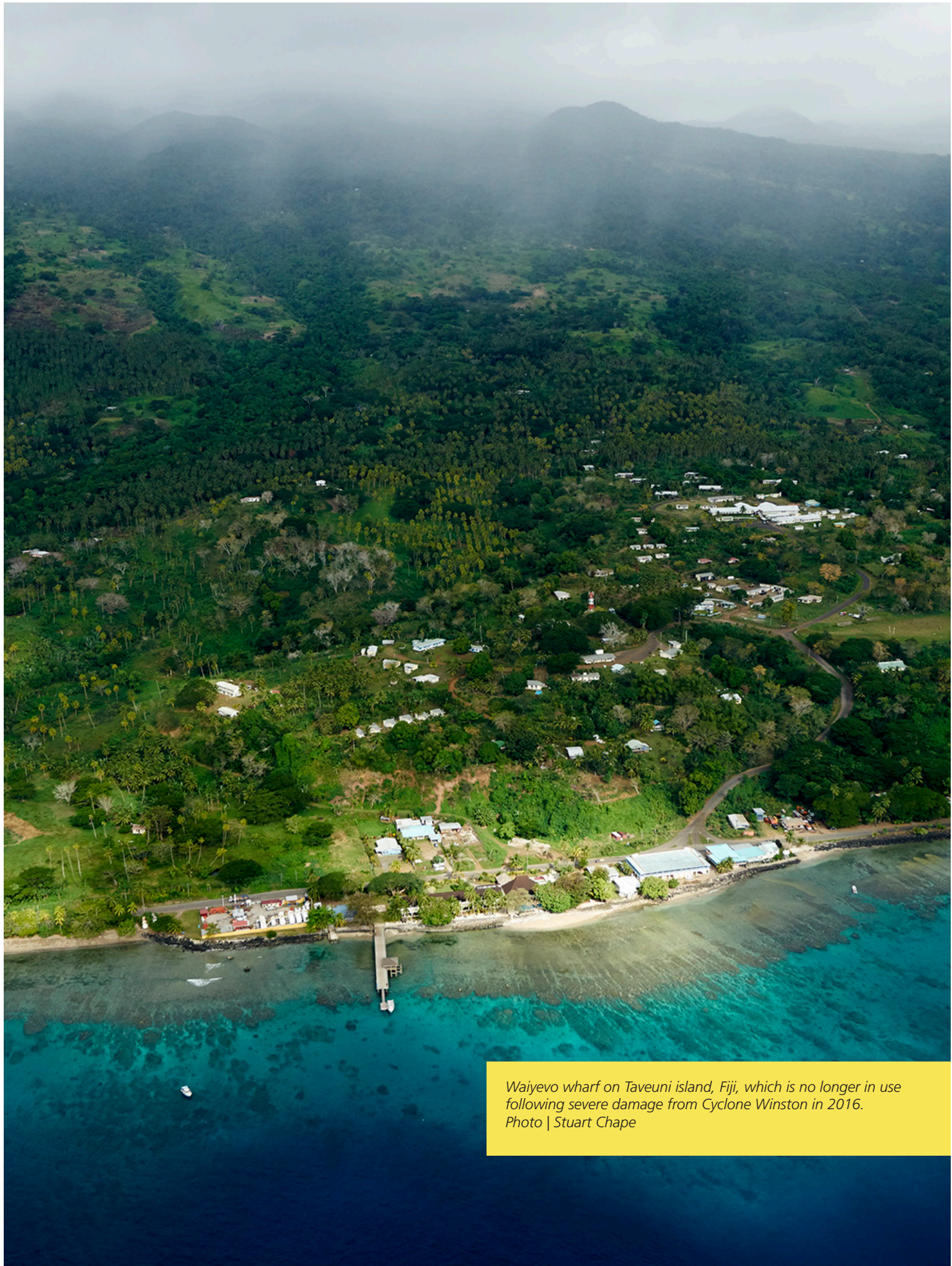
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*Wainivakaca falls near Lavena on Tavauni. Photo | Stuart Chape*







*Waiyevo wharf on Taveuni island, Fiji, which is no longer in use following severe damage from Cyclone Winston in 2016.  
Photo | Stuart Chape*



# Adapting to climate change in the Pacific

Our Pacific island countries and territories are highly vulnerable to climate change. In the next few decades, our countries will face increasing threats to sustainable development from climate change impacts on: marine and terrestrial ecosystems, human health, infrastructure, coastal resources, fresh water availability, agriculture, fisheries, forestry, and tourism.

High levels of connectedness between our socioeconomic and biophysical environments make it important that adaptation strategies include a strong focus on the management of natural ecosystems. Ecosystem-based adaptation (EbA) is an approach for building community resilience to climate change by investing in the maintenance of the ecosystem functions and services that we depend on for our survival.

The Pacific Ecosystem-based Adaptation to Climate Change (PEBACC) project provides Pacific Island stakeholders with EbA policy, planning, and implementation support, and is funded by the German government.

## Goals of this report

This synthesis report provides an overview of the first seven steps used to identify, prioritise, and implement ecosystem-based adaptation (EbA) projects in Taveuni, Fiji. The report is based on a detailed series of technical reports prepared for the PEBACC project by Watershed Professionals Network LLC in collaboration with ECONorthwest.

Local communities and stakeholders were engaged throughout the process to map ecosystem types; define key ecosystem functions and services; identify possible threats to these ecosystem services; identify and prioritise possible EbA projects to improve ecosystem health and increase community resilience; and develop an implementation plan for the selected EbA projects.

The process resulted in development of an island-wide master plan for implementing EbA projects on Taveuni, that will provide a test case and model for other Pacific islands. The overall goal is to support the organisation, planning, policy, capacity building, and actions that will build community resilience to the effects of climate change and other development related impacts on coastal and terrestrial ecosystems.

*The steps used to plan and implement EbA in Taveuni, Fiji. This report provides an overview of the first seven steps of the PEBACC project, from knowledge and synthesis, prioritisation, and implementation. Note that step three was not included for Taveuni, and steps eight through ten are currently underway.*

## Process to plan and implement EbA







*Ecosystem-based adaptation is "the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change."*

CBD 2009

## What is ecosystem-based adaptation (EbA)?

EbA is an approach for building the resilience of local communities to climate change through the protection or restoration of ecosystems. Sustainably-managed and intact ecosystems are critical for the future provision of ecosystem services to maintain the health, well-being, and livelihoods of island communities.

EbA often provides a primary protection goal, such as planting coastal vegetation to reduce wave impacts, or replanting stream or watershed areas to reduce soil erosion and reduce flooding; while also supporting secondary benefits including provision of food, shelter, water, medicine, or income. EbA has high potential in Taveuni which has particularly abundant natural resources and a high reliance on forests, rivers, soils, and coastal marine ecosystems for household supply of food and livelihoods.

When implemented and managed effectively, EbA can be cost-effective, with low infrastructure requirements, and has the potential to be self-sustaining. One challenge is that communities may need outside investment to ensure they can undergo transitions in livelihood or management practices while maintaining essential daily needs, but once implemented, EbA projects provide communities with more choices in the future through increased access to social, economic, and cultural benefits.

### **EBA OPPORTUNITY FOR TAVEUNI:**

*Taveuni residents have relied on intensive taro cultivation since the 1990s, which has led to soil degradation and unsustainable land use practices. Investing in EbA approaches can improve land management and therefore increase livelihood options while empowering communities, and protecting or restoring terrestrial and marine resources.*






*Restoring tropical rainforest habitat improves water quality by trapping sediments and filtering nutrients (ecosystem function) improving the quality of drinking water for people that live on Taveuni (ecosystem services). Photo | Stuart Chape*



# About Taveuni

Taveuni is the third largest island in Fiji, with a land area of 435 km<sup>2</sup> and steep slopes rising to an elevation of over 1,200 meters. It is referred to as the “Garden Island of Fiji” due to fertile soils and high rainfall. There are three protected areas on Taveuni island that comprise 43% of the total land area: Taveuni Forest Reserve, Ravilevu Nature Reserve, and Bouma National Heritage Park.

Most of Taveuni Island is considered rural, with town centres in the villages of Somosomo, Naqara, and Waiyevo. The 2017 population was 14,200 with a growth rate of 1.9 % annually over the last twenty years. The main crops are taro (*dalo*) and kava (*yaqona*). Following the outbreak of taro leaf blight in Samoa in 1993, Taveuni took over as the centre for taro production for the New Zealand export market. While taro production has dropped off due to declining soil fertility, Taveuni is currently experiencing a rapid expansion in kava growing, fuelled by high market prices in the wake of damage to the national crop caused by Cyclone Winston in 2016. The demand for fertile land places significant pressure on the island’s fragile ecosystems with a substantial amount of forest having been cleared.

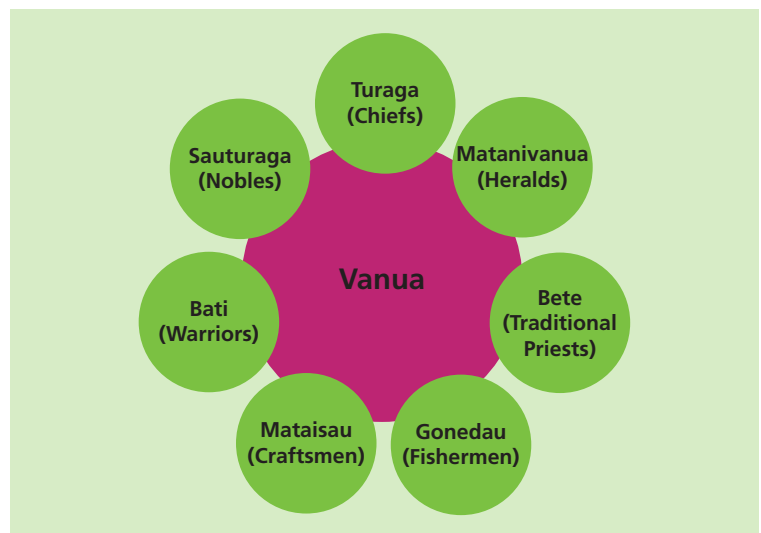
 Land area 435 km <sup>2</sup>	 Population 14,200
 Temperature 20.0–29.0°C	 Population growth up to 1.9% per year
 Rainfall 2,600 mm/year	

## Governance structure

At the sub-national level, Fiji has a pluralistic system of governance with district councils that represent indigenous landowners, working alongside district development offices and line departments. Taveuni is located within Cakaudrove Province, with the provincial seat in Savusavu on Vanua Levu. Taveuni contains one district, Vuna, and shares two districts with neighbouring islands: Wainikeli and Cakaudrove.

The traditional governance structure (*vanua*) involves responsibilities (*tutu*), represented by clans (*mataqali*), represented by families each with responsibility for one of the seven roles (*tutuvakavanua*).

Land ownership distribution on Taveuni is markedly different than the national averages: iTaukei lands represent 54% of the land area (compared to >80% nationally), with 33% in freehold and 13% as State lands. Much of the iTaukei land is leased to tenant farmers for short-term gain while some freehold land is also being intensively farmed.



Top: Selling fruit and vegetables harvested from a backyard garden in Somosomo village, Taveuni. Photo | Douglas Peebles

Middle: Due to poor management practices, the yield of dalo (taro) on Taveuni has decreased significantly in recent years. Photo | Sean Sprague

Bottom: Representation of traditional Fijian governance structure (*vanua*).





## Community engagement

Workshops were held in Somosomo, Naselesele, and Vuna to focus on the different ecosystems and communities across Taveuni. Using a participatory mapping approach, key stakeholders identified eleven watersheds to best capture ridge-to-reef, ecosystem-based planning that transcends social and political boundaries.

Working as watershed groups, stakeholders self-organised around mapping activities where they discussed the current condition of resources by sector (agriculture, fishing and marine resources, forests, freshwater, tourism, community leadership, etc.) and identified vulnerabilities, strengths, opportunities and gaps. A “desired future condition” was discussed by these groups with key priorities to meet that future condition. The maps and summaries developed were used by watershed groups at community meetings for outreach to a broader group of stakeholders to solicit input and clarify the community vision, priorities, capacity, strengths, and needs.



### STAGES OF COMMUNITY ENGAGEMENT

1. Watershed delineation based on geographic and cultural features;
2. Identification of stakeholder groups to help guide watershed management;
3. Development of key goals and values for each watershed;
4. Self-evaluation of natural resources within each watershed to identify vulnerabilities;
5. Prioritisation of key drivers of ecosystem degradation, and potential for improvement with intervention;
6. Identification and design of EbA options to address identified drivers of ecosystem degradation;
7. Site visits, mapping of locations, and development of criteria for site placement;
8. Assessment of community capacity to fulfill the work;
9. Development of an island-wide EbA options map.
10. Outline of how full implementation of EbA options could help achieve the “desired future condition” for Taveuni ecosystems.



*Top: Community engagement workshop in Vuna village.  
Photo | Herman Timmermans*

*Middle: Reporting back to stakeholders at Somosomo.  
Photo | Jilda Shem*

*Bottom: Naqeru communities develop a priority list for coastal ecosystems. Photo | Chris Heider*



**13 workshops in 5 communities**



**292 workshop participants**



**83% male and 17% female participants**



## Mapping key ecosystems

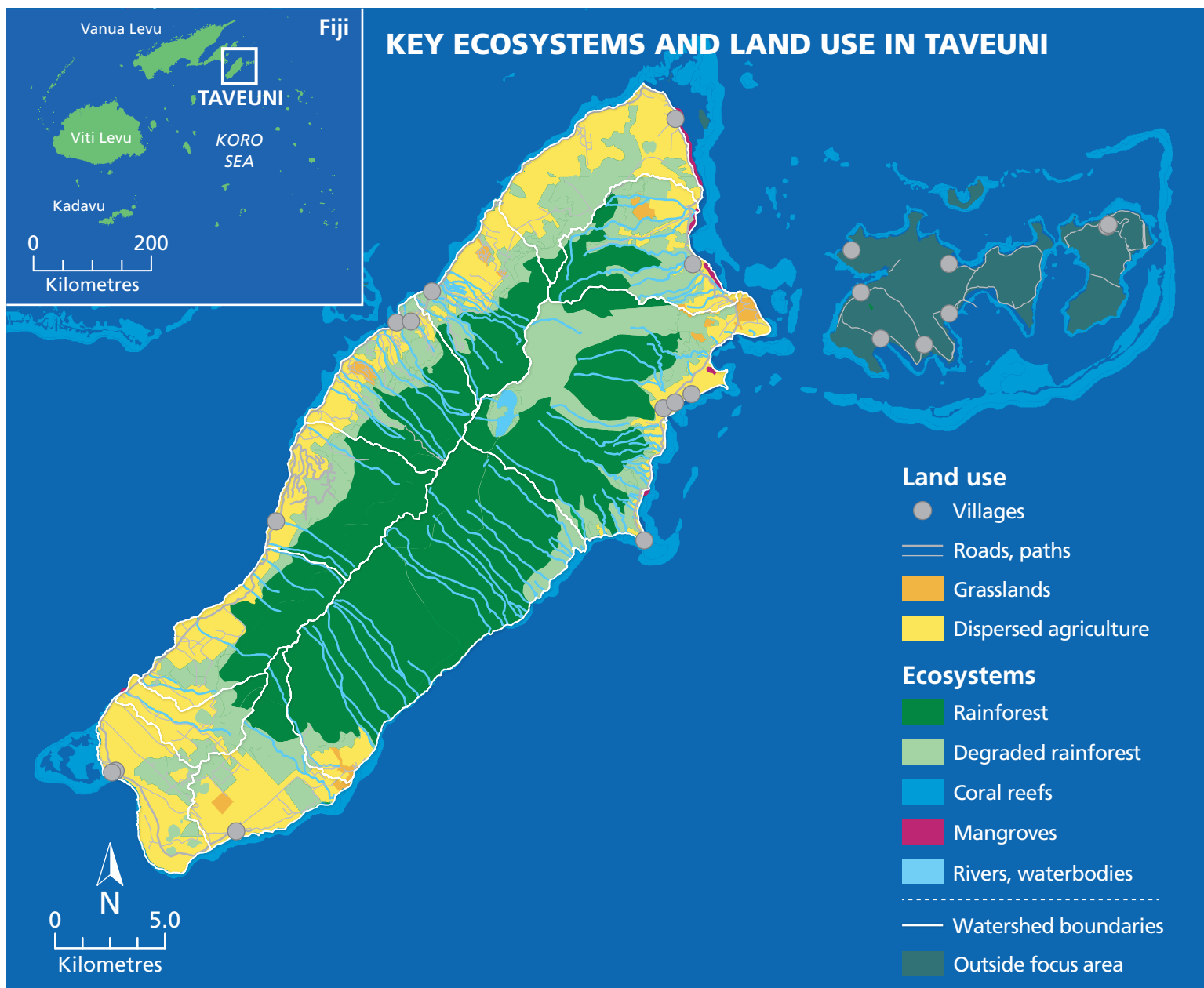
Current land use and ecosystems were identified and mapped for Taveuni using existing information from relevant government departments and non-governmental organisations (see map below). Additional information was provided through locally-based workshop activities, interviews, field site visits, and rapid assessments to fit the needs and scale of the PEBAACC project.

Through its mapping work, the project has established a comprehensive data library for the island. This is a valuable resource to support the implementation and monitoring of EbA implementation going forward. However, some of the existing land cover maps that were used are dated and, in light of the rapid expansion of agriculture in recent years, it is recommended that these be updated.

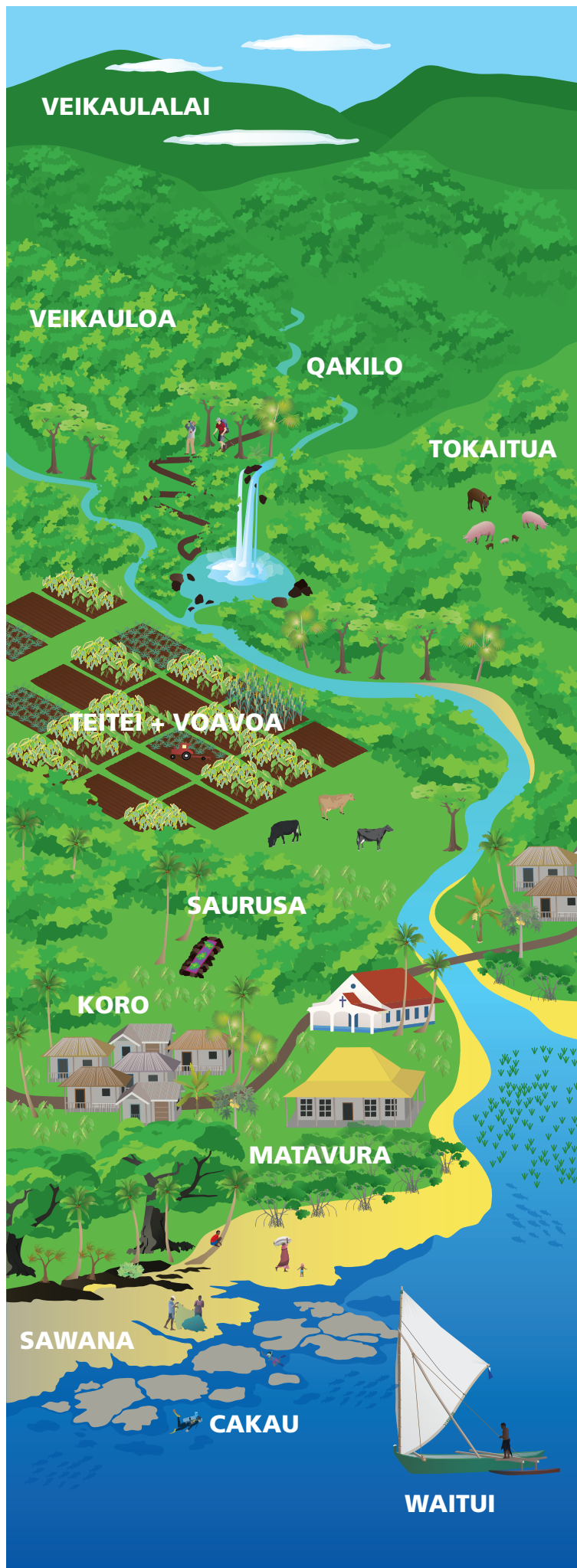
## Ecosystem functions and ecosystem services

An ecosystem is a set of plant and animal communities, plus the physical environment that supports them. Ecosystem functions are natural processes within an ecosystem—for example, the processes leading to healthy coral reefs provide essential habitat for fish and many other species.

When ecosystem functions are actively used by communities they become ecosystem services that provide economic, social, or cultural benefits—for example, a biodiverse and plentiful fish population (ecosystem function) can support a sustainable artisanal or commercial fishery that provides food, generates income, and supports cultural values and societal well-being (ecosystem services).







## Ecosystem functions and services from ridge to reef

Stakeholders identified 12 ecosystems corresponding to traditional Tua, which are based upon social, ecological, elevational, and topographic features. Working in watershed groups, stakeholders identified and defined ecosystem functions and services provided by each of the traditional Tuas below:

### VEIKAULALAI | CLOUD FOREST

Cloud-water interception, source of water, chiefly location

### VEIKAULOA | DEEP FOREST

Rain interception, tourism (hiking, bird watching)

### QAKILO | INTER-VALLEYS

Protection from landslides, wind, hunting, erosion protection, water infiltration, spring water

### TOKAITUA | INTERMEDIATE RIDGE TOPS

Hunting (pigs, chickens)

### TEITEI + VOAVOA | FARMS + FALLOW AREAS

Food for village and commerce, sustainability

### SAURUSA | EMPTY SPACE

Burial areas, expansion, food and nourishment, firewood, construction material, light timber production, material for thatching

### KORO | VILLAGES

House and home, dwellings, community, schools, church, commerce, rest and relaxation

### MATAVURA | COASTAL STRAND & MANGROVES

Protection, filtration (protects reef), buffers reef from runoff, access to the sea, gateway to the sea, tourism, family area

### SAWANA | INTERTIDAL AREA

Food, fishing grounds

### CAKAU | CORAL REEF

Food, fish, protection from storms, nursery area, tourism (diving) income

### WAITUI | DEEP SEA

Food, income, air, wind, storms



## Threats to ecosystem services







Human impacts from subsistence living and agricultural practices threaten the health of Taveuni's ecosystems, and therefore the ecosystem functions and services that they provide. Community stakeholders identified the following specific threats affecting the delivery of ecosystem services for Taveuni:

-  Land clearing for cultivation of taro and kava;
-  Unsustainable land use practices;
-  Chemical contamination of soils;
-  Land-based pollution and runoff from wastewater, erosion, and fertilizer;
-  Invasive species;
-  Overharvesting of coastal fisheries;
-  Destruction and degradation of mangrove and seagrass habitats;
-  Mining of sand, rock, and coral from streams and coastal areas.



## Climate change projections

Climate change will influence the delivery of ecosystem functions and services, and further exacerbate the human impacts listed above. The following climate change projections for Fiji were identified in the PACCSAP (2014) report:

-  **Sea level** is projected to rise 8–18 cm by 2030, and 41–88 cm by 2090 (very high confidence);
-  Annual mean **temperatures** and extremely high daily temperatures are projected to increase by up to 1.0°C by 2030, and up to 4.0°C by 2090 (very high confidence);
-  Little change in annual **rainfall** but an increase in the November–April season (low confidence), with more extreme rain events (high confidence);
-  Decreased frequency but increased intensity of **tropical cyclones** (medium confidence);
-  Continued **ocean acidification** (very high confidence);
-  Increased **coral bleaching** (very high confidence).



*Top: Clearing land to cultivate kava and taro threatens fresh water resources, changes species assemblages, and increases run-off of land-based pollution. Photo | Sean Sprague*

*Middle: Loss of mangroves following road construction reduces nursery habitat to support fisheries. Photo | Chris Heider*

*Bottom: Community members stand where the shoreline used to be at Sunrise Beach, Qeleni. Shoreline erosion has been compounded by human activities such as sand mining, as well as sea level rise and increased intensity of storms. Photo | Tim Carruthers*



## Identifying EbA options

The central approach to developing EbA options for Taveuni involved community-based decision-making, where priorities identified in steps one through four of the EbA implementation process were translated to activities that could increase the delivery of ecosystem services currently at risk, and build investments in ecosystem services for the future.

EbA options that were identified fit within three major categories:








1. Watershed-based EbA options;
2. Governance EbA options;
3. Capacity building EbA options.

## Prioritising watershed-based EbA options

Action-driven EbA options identified at the watershed level were designed through the interaction of stakeholders, site visits, remote sensing and best principles. Watershed-based EbA options were developed in consideration of both socioeconomic and ecological benefits, as well as stakeholder capacity for successful implementation.

Watershed-based EbA options were prioritised based on readiness of watershed groups to successfully implement each option using the criteria in the table below:

*Evaluation criteria used to prioritise watershed-based EbA options. Scores were tallied across all criteria and the EbA options with the lowest scores were preferred.*









Prioritisation criteria		Factors considered	Evaluation score		
	<b>Organised vision</b>	<ul style="list-style-type: none"> <li>Community has identified clear needs and vulnerabilities affecting ecosystem services;</li> <li>Unified in approach to priorities within community;</li> </ul>	Very organised 1	Somewhat organised 2	Not Well organised 3
	<b>Broad stakeholder involvement</b>	<ul style="list-style-type: none"> <li>Communities have involved stakeholders in development of needs and priorities;</li> <li>Input and questions have been addressed;</li> </ul>	High 1	Moderate 2	Low 3
	<b>Participation in PEBACC process</b>	<ul style="list-style-type: none"> <li>Stakeholders/ representatives have attended all workshops and activities;</li> <li>Have completed and participated in follow-up activities to workshops;</li> <li>Offered solicited and unsolicited feedback;</li> </ul>	High 1	Moderate 2	Low 3
	<b>Durability of process &amp; implementation</b>	<ul style="list-style-type: none"> <li>The approach, vision, stakeholders, and outcomes of managing for resilience are likely to persist after PEBACC project is completed;</li> </ul>	Highly likely 1	Somewhat likely 2	Not likely or unknown 3
	<b>Feasibility of implementation</b>	<ul style="list-style-type: none"> <li>Willingness to implement with few social barriers;</li> <li>Within current capacity or current capacity growth;</li> <li>Stakeholders can be autonomous;</li> <li>Project areas are accessible;</li> </ul>	Ready to go 1	Some barriers 2	Many barriers 3
	<b>Cost of project (per unit)</b>	<ul style="list-style-type: none"> <li>Combined factors of implementation, infrastructure required, ongoing management and maintenance;</li> </ul>	Low <\$10K 1	Moderate \$10K–50K 2	High >\$50K 3
	<b>Project prerequisites or dependencies required</b>	<ul style="list-style-type: none"> <li>Few project dependencies or requirement exist prior to implementation;</li> </ul>	No dependencies 1	Dependencies low cost 2	Dependencies high cost 3



# Prioritising governance and capacity building EbA options

A prioritisation process was established to identify those projects that have the highest likelihood for success, within the budget and timeframe parameters of the PEBACC project. EbA options that involve governance or capacity building activities were broadly evaluated using the criteria in the table below:

Scoring matrix used to prioritise governance and capacity building EbA options. Scores were tallied across all criteria and the EbA options with the lowest scores were preferred.

Prioritisation criteria	Factors considered	Evaluation score		
 <b>Socioeconomic benefits</b> How the project provides alternative choices to build family and community resilience.	<ul style="list-style-type: none"> <li>Project improves community wellbeing and builds high levels of resilience to environmental or market changes;</li> <li>Protects important community or family resources;</li> <li>Provides richness in choices and provides socioeconomic buffers;</li> </ul>	High 1	Moderate 2	Low 3
 <b>Ecological benefits</b> The extent by which a project improves the quality and quantity of ecosystem services, minimises loss of ecosystem services.	<ul style="list-style-type: none"> <li>Provides protection or enhancement of key ecosystem services;</li> <li>Supports a range of ecosystem services;</li> </ul>	High 1	Moderate 2	Low 3
 <b>Timing of benefit delivery</b> The length of time required before tangible benefits are realised.	<ul style="list-style-type: none"> <li>Benefits are achievable within short timeframe;</li> </ul>	Near-term (2020) 1	Mid-term (2020–2030) 2	Long-term (>2030) 3
 <b>Duration of benefit delivery</b> The timeframe the project will provide or contribute to tangible benefits.	<ul style="list-style-type: none"> <li>Benefits are long-lasting with minimal inputs or maintenance;</li> </ul>	Long (>20 years) 1	Intermediate (5–20 years) 2	Short (<5 years) 3
 <b>Durability of project</b> The resilience of the project to social or environmental changes.	<ul style="list-style-type: none"> <li>Project is resilient to environmental and social change with little intervention required;</li> </ul>	Highly resilient 1	Moderately resilient 2	Sensitive 3
 <b>Cost of project (per unit)</b> Categorical cost of implementation, on a per unit basis.	<ul style="list-style-type: none"> <li>Combined factors of implementation, infrastructure required, ongoing management and maintenance;</li> </ul>	Low <\$10K 1	Moderate \$10K–50K 2	High >\$50K 3
 <b>Feasibility of implementation</b> The capacity, stakeholder engagement, and external factors that constrain the project's success.	<ul style="list-style-type: none"> <li>Willingness to implement;</li> <li>Few social barriers;</li> <li>Within current capacity or current capacity growth;</li> <li>Project is autonomous;</li> <li>Project area is accessible;</li> </ul>	Ready to go 1	Some barriers 2	Many barriers 3
 <b>Project prerequisites or dependencies required</b> Infrastructure, training, policy, or engagement required before any action can be taken.	<ul style="list-style-type: none"> <li>Few project dependencies or requirement exist prior to implementation;</li> </ul>	No dependencies 1	Dependencies low cost 2	Dependencies high cost 3



# Developing an EbA implementation plan

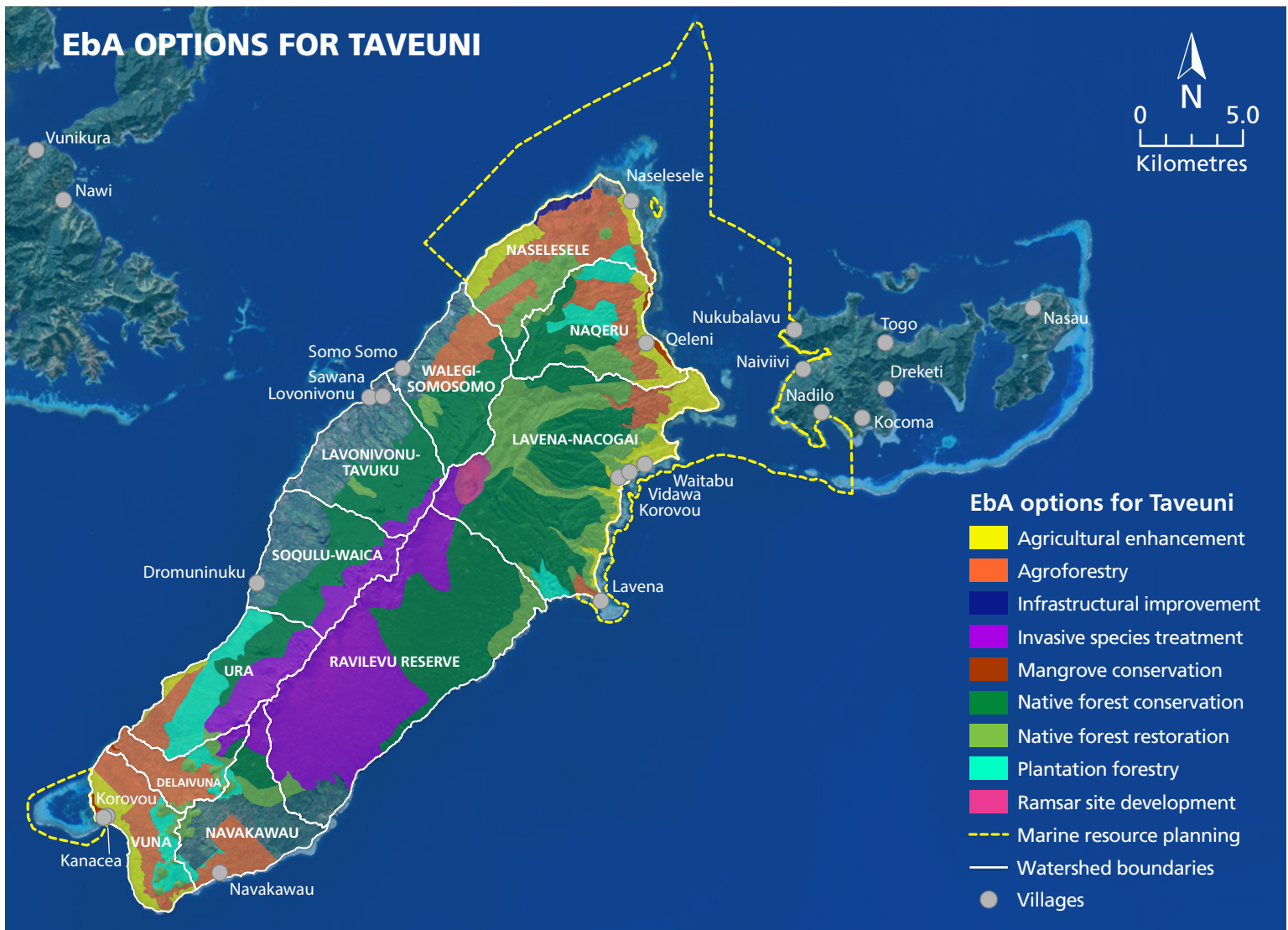
Following the prioritisation process, the highest ranking EbA options were selected to develop an EbA implementation plan, working within the currently available budget and timeframe for the PEBACC project. Implementation of the remaining prioritised EbA options is dependent on future funding.

In the following pages, two example EbA options are highlighted for Taveuni in each category:

1. Watershed-based EbA options;
2. Governance EbA options;
3. Capacity building EbA options.

Right: Village of Somosomo on Taveuni. Photo | Tim Carruthers

Below: Overview of possible watershed-based EbA options for Taveuni and the surrounding marine areas.





# Watershed-based EbA options

**Description:** Specific physical actions and interventions that change the landscape and improve sustainability by changing practices or restoring resources that have been damaged through previous land use practices. Actions are directly linked to terrestrial, coastal, and marine ecosystems and involve materials and labor to achieve a measurable outcome.

**Threat:** Strong financial incentives to continue clearing land and use unsustainable agricultural and fishing practices threaten intact ecosystems; these threats are predicted to become even worse with climate change.

**Aim:** To build community resilience to climate change impacts through EbA actions that provide alternative economic opportunities, and protect or restore plants and animals, increasing the area of intact ecosystems.

**Example activities:** Improving agricultural productivity, removing invasive species, conserving and restoring native forests. These activities were mapped according to ecological and socioeconomic potential and needs (see map on page 10).

## VUNA: URA WATERSHED

**Watershed-based EbA option ranking = 1**

- Develop agroforestry options in lower elevations;
- Rehabilitate deforested lands with plantations of native species;
- Increase native forest areas via out-planting;
- Participate in native forest health monitoring in upland areas;
- Participate with neighboring watersheds in upper elevation restoration activities.

*Vuna communities with extensive deforestation in upper elevations due to agricultural expansion. Photo | Chris Heider*



EbA EXAMPLE #1

## WAINIKELI: NASELESELE WATERSHED

**Watershed-based EbA option ranking = 2**

- Develop spring water sources and improve forest cover to protect springs;
- Develop an ecotourism site on a freshwater and coastal lagoon;
- Improve tree cover through agroforestry, mixed plantations and native species plantations;
- Work with community and neighboring areas to minimise deforestation in upper elevations.

*Aerial photo of Naselesele spring. Photo | Chris Heider*



EbA EXAMPLE #2



# Governance EbA options

**Description:** Sustainable management and successful climate change adaptation requires input of community knowledge and engaged community participation in planning and implementation that is being coordinated by government or non-governmental organisations.

**Threat:** A lack of mechanisms for community coordination and discussion currently limits local community engagement in ecosystem management, as well as adaptation planning and implementation on Taveuni.

**Aim:** Community identification of watersheds provides a framework for discussion and increased participation in EbA planning.

**Example activities:** monitoring fishery harvest, establishment of protected areas, developing business plans for creative lease agreements that promote sustainable land use, and developing new markets for products (agriculture, forestry, non-timber forest products).

## CREATE ISLAND-WIDE WATERSHED COORDINATION NETWORK

**Governance EbA option ranking = 1**

- Establish an island-wide network of supported watershed coordinators;
- Provide financial support, transport, and a location for quarterly meetings for watershed coordinators to discuss natural resource management issues; seek guidance and assistance; and review outside support from government, NGO, or other organisations in executing watershed management plans;
- Provide financial support for communications for each watershed coordinator to conduct community outreach and education.

## YOUTH STEWARDSHIP PROGRAM: LIVING CLASSROOMS

**Governance EbA option ranking = 2**

- Provide for curricula development and materials to support local schools in learning about ecosystems and stewardship, with a plant nursery and opportunity for youth to increase their connections with the environment at an early age.

Stakeholders map watersheds on Taveuni. Photo | Tim Carruthers

Local school at Lavena on Taveuni. Photo | Tim Carruthers





# Capacity building EbA options

**Description:** Implementing EbA actions requires specific skills and knowledge for success. This suite of EbA activities are stand-alone options designed to train and reinforce actions directly related to land and sea-based interventions (i.e., physical change) or correspond to land uses.

**Threat:** Household immediate financial needs, and use of leasehold land, often incentivise unsustainable agricultural practices, rather than EbA approaches that assist in retaining or restoring intact ecosystems.

**Aim:** To train communities in approaches to EbA, to make this a revenue raising opportunity for households and incentivise sustainable land use practices.

**Example activities:** Training and guidance in design and maintenance of agroforests and plantations, native seed collection, construction and management of tree nurseries, and other prerequisite skills, knowledge and experience that are attached to watershed-based activities promoting physical change.

## TRAINING TO BUILD PLANT NURSERIES

**Capacity building EbA option ranking = 1**

- Training in plant nursery construction and management with funds to build a central nursery and others to be distributed throughout Taveuni's watershed communities.
- Training in native plant seed collection with specific interest in conservation of genetic and species diversity and building a network among watershed groups to source and distribute seed stock across the island.

## AGRICULTURAL IMPROVEMENT AND DIVERSIFICATION TRIALS

**Capacity building EbA option ranking = 5**

- Support farmers with experimental trials to emphasise productivity and yield associated with different soil amendments and diversified cropping systems, including agroforestry options.
- Build upon the body of work to address soil fertility, resource intensive agriculture, gaps in income generation, and diversity of crops to improve sustainability goals.

An example native plant nursery in Fiji. Photo | Tracey Saxby

Stakeholders visit a kava field on Taveuni. Photo | Tim Carruthers





## Summary: EbA in Taveuni

### NEED

Taveuni has a wealth of terrestrial and marine resources that are relied upon by many households for sustenance, livelihood, and wellbeing. In addition, the island has extensive and productive agriculture that has grown rapidly since the 1990s in response to market forces. A large percentage of leased freehold land on the island does not come under traditional or government regulation, reducing sustainability of land use practices.

### THREAT

Agricultural practices including land clearing and intensive crop rotation have caused land degradation and soil erosion on Taveuni. Overharvesting of coastal fisheries has impacted fish abundances. Predicted climate change impacts from changing temperature and rainfall patterns will worsen these threats to the island ecosystems.

### SOCIO-ECOLOGICAL RESILIENCE BENEFITS

The identified range of EbA options aim to reduce the vulnerability of communities on Taveuni, increasing sustainability and community level planning by linking traditional practices and land management processes to current watershed planning approaches. Through increased livelihood opportunities and empowered communities, these EbA options can protect or restore terrestrial and marine resources.

*Below left: Taveuni is currently experiencing a rapid expansion in growing kava. Photo | Tim Carruthers*

*Below right: Creating rush mats to sell as a source of income. Photo | Jilda Shem*

## Policy context

While there is a need to strengthen ecosystem-based adaptation policy in Fiji, the National Climate Change Policy, Green Growth Framework, Integrated Coastal Management Plan Framework, and the National Disaster Risk Reduction Policy provide enabling policy frameworks at the national level. The National Adaptation Plan (currently under development) provides an opportunity to elaborate and firmly embed ecosystem-based adaptation as a climate change adaptation strategy in Fiji.

At the sub-national level, the Cakaudrove Provincial Development Plan and district-level development plans for Cakaudrove, Wagina and Vuna districts provide the policy and planning context relevant to ecosystem-based adaptation planning at Taveuni.

At the regional level, enabling policy frameworks for ecosystem-based adaptation in the Pacific islands are:

- Framework for Resilient Development in the Pacific;
- Framework for Nature Conservation and Protected Areas in the Pacific Islands;
- Pacific Regional Action Plan for Sustainable Water Management (Pacific RAP); and
- Framework for a Pacific Oceanscape.

At the international level, the ecosystem-based adaptation approach is strongly advocated by:

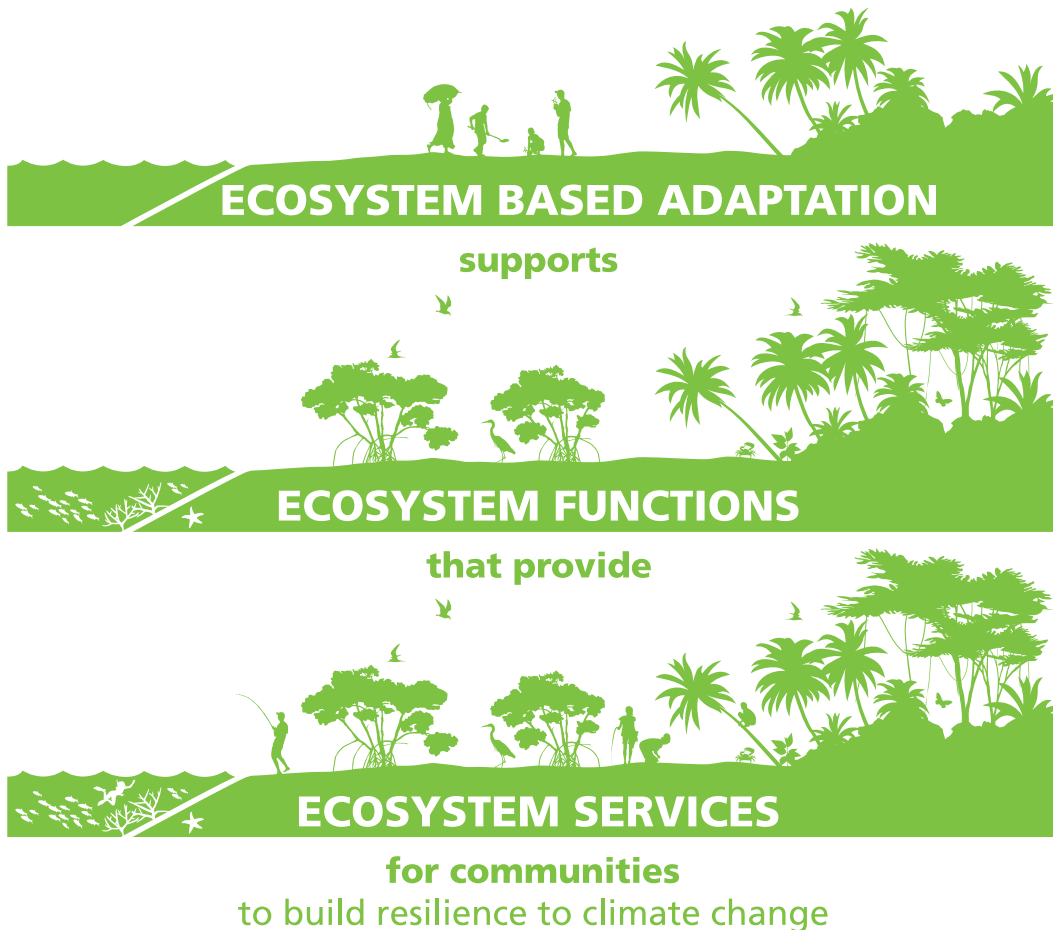
- UN Framework Convention on Climate Change;
- Sendai Framework for Disaster Risk Reduction (2015–2030); and
- Convention on the Conservation of Biological Diversity (CBD).





# Benefits of EbA implementation in Taveuni

Based on the vulnerable ecosystem services identified, EbA options have been proposed to protect, restore and strengthen ecosystems to increase the resilience of Taveuni's communities and economies. Building environmental resilience to give ecosystems the best chance to adapt will, in turn, increase the ability of communities to adapt to the adverse impacts of climate change. Healthy ecosystems buffer communities from the impacts of climate change.



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