### CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	University of the South Pacific
Project Title:	Rapid Biological Assessment Survey of Southern Lau, Fiji
Date of Report:	May, 2012
Report Author and Contact Information	Marika Tuiwawa & Prof. William Aalbersberg, Institute of Applied Sciences, University of the South Pacific, Private Mail Bag, Suva, Fiji.

**CEPF Region: Polynesia-Micronesia** 

Strategic Direction: 2. Improve management of key biodiversity areas

Grant Amount: \$58,000

Project Dates: Feb 1, 2011-Dec 31, 2011

Implementation Partners for this Project (please explain the level of involvement for each partner):

**Ministry of Fisheries and Forests** – contributed 22 personnel for the survey. They were involved in the fish stock assessment within the inshore fisheries, outer reef surveys, socio economic survey, timber tree survey and the locally managed marine area awareness and management process. The Ministry also provided a support vessel (MV Tuiniwasabula) and two skiffs and its crew (at no cost from the project except for fuels) during the entire survey.

**NatureFiji-MareqetiViti** – Provided personnel to lead the reptile survey with collaborators from **USGS** (1person) and **University of Kansas** (I person). The collaborators provided own funds for the survey.

**Bird Life international** – Provided and financially supported 3 personnel to carry out bird (terrestrial and marine/ocean birds) surveys. The partner provided own funds to do the surveys.

**Fiji Museum** – Provided personnel to carry out archeological surveys (cultural significant sites like burial caves, old village sites, fortress, gardens) on the islands visited.

**Fiji Locally Managed Marine Area (FLMMA) network** – Contributed and provided financial support for food allowance for own personnel (4 people) plus an officer from the provincial office to be the protocol officer for the Expedition. The team conducted a series of workshops on all the islands visited where a community based framework for the sustainable use of their natural resources was developed. This framework is the basis for the establishment of a community driven Marine Protected Area.

**Ministry of Agriculture** - Land-use and Bio-security Fiji – The Ministry provided 3 personnel at their own cost to carry-out awareness training on the entire island visited. When not conducting awareness they would carry-out invasive species assessment and visit farmers in nearby villages from where the ships were anchored.

**Conservation International (Fiji)** - Provided a personnel (at own cost) to assist with the FLMMA work and off shore reef surveys.

**World wild Fund for Nature Conservation (Fiji)** – provided and financially supported personnel (one person) to carry out a turtle survey especially to create awareness and document nesting sites and a survey on the use of the animals as food.

Ministry of Health – Provided a nurse (at own cost) to assist with medical needs of the team.

Institute of Applied Science, University of the South Pacific (USP) – Drug Discovery Unit – provided financial support and 8 personnel to collect marine invertebrates and algae. With their collaborators from Georgia Tech University the group also assisted with some marine ecology assessment.

**Institute of Applied Science, USP, – South Pacific Regional Herbarium –** provided financial support and 4 personnel to do terrestrial work on mammals, Plants and vegetation ecology, and entomological work. A collaborator (botanist) from the University of Hawaii assisted the group with their work.

### **Conservation Impacts**

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

The survey will definitely strengthen the resolve to formally declare areas in South Lau already earmarked for protection of its biodiversity, and better management of its natural resources. This will also include other areas identified during this survey that would require protection. In term of awareness (threatened species, unique landscapes and traditional/customary sites of national significance) this has been greatly elevated during the survey. Besides the formal workshops (FLMMA) and training (e.g. parataxonomy) that various members of the island communities were engaged in there were a lot more informal discussions that took place between community leaders and senior members of the expeditions. During these discussions the importance of the islands' biodiversity and more importantly the need to sustainably use them and also to protect them is discussed at length. This together with the presentation of the research findings at the next annual Lau Provincial Council Meeting, allows or provides the opportunity to maximize information sharing to the whole of southern Lau community. This latter meeting is where both the traditional and current (government appointed) leaders meet to discuss development plans for the entire province.

Please summarize the overall results/impact of your project.

See attached report summary

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

Natural resources, habitats and threatened species in the Southern Lau group will be appropriately managed.

#### **Actual Progress Toward Long-term Impacts at Completion:**

Plans are in place for islands in the S Lau group for future conservation and management of their natural resources. These include habitat mapping of terrestrial and marine resources (i.e. fish spawning areas, intact forest systems, IBAs, invasive species etc.). FLMMA has indicated that they would have established an MPA on all habited Islands in the next 5 yrs.

### Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

A most recent biological diversity and ecological report for Southern Lau is available that can be used to better manage current and future development in the various areas surveyed.

### **Actual Progress Toward Short-term Impacts at Completion:**

- 1. A full biodiversity report of the Southern Lau will be available to stakeholders in June 2012, coinciding with the Lau Provincial Council meeting.
  - FLMMA: workshops carried out in the islands have drafted better management of the "qoliqoli" areas. This ties in with the work of the Department of Fisheries, Fiji in efforts for better management of the inshore fisheries resources.
  - Department of Forestry, Fiji: Mapped forests systems of S Lau in efforts to set up forest reserves, management of exotic species (e.g. pine and mahogany wood lots on Ono-i-Lau, Namuka I lau, Totoya, Moala.), reforestation and aforestation projects on some islands and high value plant species (yasi sandalwood) projects in S Lau.
  - Department of Agriculture and Biosecurity, Fiji: Pest and disease surveillance for food security. Awareness on effects of pests/ introduced species. Land-use planning.
  - Biodiversity: Conduct baseline, inventory of terrestrial and marine resources and identify islands of biological importance for future detailed biological investigations and conservation.
  - Ministry of Fisheries, Fiji: Mapping of resource areas and rehabilitation.
    Raise awareness regarding fisheries plan and socio-economic surveys and
    conduct surveys to assess fish stock, especially spawning grounds for
    some important fish species.
  - Important sites of cultural significance were assessed, mapped and documented for all islands visited. Most of these will be included in the directory of Cultural Sites of National Significance.
  - Some of the only known primary coastal and limestone vegetation were visited during the survey and together with its landlocked seawater lakes (with little known aquatic fauna and flora) would be recommended to be part of Fiji's network of Protected Areas.

All baseline data collected for future long-term management plans for S Lau group to conserve and sustainably manage natural resources.

### Please provide the following information where relevant:

Hectares Protected: NA Species Conserved: NA Corridors Created:

None as yet- assessment still at preliminary stages.

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

- <u>Success:</u> the baseline survey of S Lau group for terrestrial and marine resources completed within the planned timeframe of 1 month
- Challenges: Logistics and management of the entire team (80 members) to cover 14 islands within 1 month; travel throughout 14 isolated islands where 40% of time was spent on inter-island travel; Captain of the main vessel passed away 1 week into the expedition; fuel was underestimated for the entire trip which required a re-order half way into the survey-fuel was mainly consumed by the outboard motors that transported people from the larger vessel to the island; keeping a balanced meal was not easy esp. vegetable supplies so supplements were taken via multivitamin C tablets and tinned stuff; water supply for the entire team on board was insufficient- water had to be rationed and because the S Lau group also has problems with their supply of fresh water, water had to be collected from rain; accessibility to some islands weren't easy, there weren't any boat passage and access depended on the tide thus not all islands were surveyed with an equal effort which was also affected by the adverse weather conditions.

### Were there any unexpected impacts (positive or negative)?

The Captain of the vessel accidentally passed away which almost cancelled the expedition.

### **Project Components**

**Project Components**: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.

### **Component 1 Planned:**

Organize and secure inter and intra-island transportation

### **Component 1 Actual at Completion:**

Completed

### **Component 2 Planned:**

Updated biodiversity information for Southern Lau

### **Component 2 Actual at Completion:**

In progress

### **Component 3 Planned:**

Reports

### **Component 3 Actual at Completion:**

In progress- June 2012

Were any components unrealized? If so, how has this affected the overall impact of the project?

No

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

Final report in progress and to be completed end of June 2012.

#### **Lessons Learned**

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Manage a smaller team on such an expedition so that more effort is spent on actual surveys rather than planning logistics; More background research of the sites before actual work e.g. water availability, accessibility to islands etc.; Involvement and the participation of relevant stakeholders i.e. govt. reps, scientific community, provincial council, local community.

# Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The RAP survey was a success; it enabled the compilation of baseline data and checklist for different taxa within the short timeframe.

# Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

The majority of team members of the survey were quite familiar with the RAP survey approach. Those that did not especially (individuals from other organizations) caused delays in the completion of their report.

### Other lessons learned relevant to conservation community:

- RAP surveys on islands to cover both terrestrial and marine taxa in order to identify hotspot areas i.e. all taxa covered
- Awareness to the community
- Assist land owners set up their own management plans for sustainable development and use of natural resources.

## **Additional Funding**

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
Conservation	Cash	900	Provided a person to
International (Fiji)	In-kind	1200	assist with inshore
			fisheries assessment
Fiji Locally Managed	Cash	5000	5 personnel including a
Marine Areas	In-kind	8000	provincial rep. rations
			for trip
Institute of Applied	In-kind	15000	Salaries and wages for
Science, University of			10 Scientific and
the South Pacific			technical personnel.
MacArthur Foundation	Cash	10000	For payments of
			equipment and
			consumables for the
			survey.
Natural Product	Cash	24000	Equipment and supplies
Research-	In-kind	6000	for the trip; .
Bioprospecting, IAS, USP			. ,
Georgia Tech	Cash	4000	Ration and perdiems for
University, USA	In-kind	5000	4 Scientific personnel
Ministry of Forest	Cash	10000	24 personnel and per
and Fisheries	In-kind	8000	diems for trip, and
and i isriches		0000	salaries and wages
Ministry of	Cash	3600	4 Scientific personnel
Agriculture	In-kind	2500	and ration for trip, and
rigiliculture		2300	salaries and wages
Birdlife	Cash	2700	3 Scientific personnel
international	In-kind	3000	and ration for trip, and
Intornational		0000	salaries and wages.
World wild Fund		900	A Scientific personnel
for Nature		1000	and per diem for trip.
USGS	Cash	900	A Scientific personnel
	In Kind	1500	and ration for the trip.
University Kansas	Cash	1800	2 Scientific personnel
T.II. S. S. C. T. Carload	In Kind	2000	and cost of rations.
University of	Cash	900	Rations and perdiem for
South Australia	23011	1000	Scientific personnel.
23dii / taotiana			Colonial porconilon
	1	l	

<sup>\*</sup>Additional funding should be reported using the following categories:

- A Project co-financing (Other donors or your organization contribute to the direct costs of this project)
- **B** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)
- C Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

### Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

The documented (reports) outcome of the data collated and analyzed during the survey will provide the most recent and updated status of plants and animals found in the islands visited. It will also provide information on the status of the environment (both marine and terrestrial) for these rarely visited groups of islands. This is very useful information for development plans for this group of Islands.

Local personnel involved in the survey have now continued to carry-out other surveys of such nature in various parts of Fiji. This is especially true for personnel that work in various government departments.

Summarize any unplanned sustainability or replicability achieved.

The training workshop on sustainable use of natural resources continues to be followed in other sites provinces in Fiji since the South Lau expedition. The same applies for the biodiversity rapid survey where at least three RAPs have been planned for three provinces in 2012.

### **Safeguard Policy Assessment**

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

NA

### **Additional Comments/Recommendations**

## **Information Sharing and CEPF Policy**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

### Please include your full contact details below:

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E-mail: tuiwawa\_m@usp.ac.fj

\*\*\*If your grant has an end date other than JUNE 30, please complete the tables on the following pages\*\*\*

## **Performance Tracking Report Addendum**

## **CEPF Global Targets**

## (Feb 1 2011- Dec 31 2011)

Provide a numerical amount and brief description of the results achieved by your grant.

Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from Feb 1 2011- Dec 31 2011
Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No- aim of this RAP survey was to identify potential protected areas.			
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No			
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	Yes		Ogea Is (site 78) 1350ha & Vuaqava (site 88) 990 ha	RAP for all terrestrial taxa and vegetation mapping in these two islands identify them as still being intact – will be proposed as protected areas.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No- Initial stages of establishin g marine protected areas.			
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	Awarenes s in progress in each island and the setting up/ developme nt of managem ent plans for sustainabl e use of resources.			

If you answered yes to question 5, please complete the following table

## **Table 1. Socioeconomic Benefits to Target Communities**

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

Name of Community/ Island	С	om	mur	nity	Cha	ract	eristic	S	Nature of Socioeconomic Benefit												
				Se			the		Increased Income due to:			e ble	ter	other g, c.			, É	l tal	- 50 8		
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below t poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision- making due to strengthened civil society and governance	Other
Ono- I- Lau	×	×	×						×										×	×	
Vatoa	×	×	×						×										×	×	
Ogea	×	×	×																×	×	
Namuka	×	×	×						×										×	×	
Fulaga	×	×	×																×	×	
Kabara	×	×	×																×	×	
Moala	×	×	×						×					×				×	×	×	
Matuku	×	×	×						×					×					×	×	
Totoya	×	×	×		igspace				×					×					×	×	
(NB: only inhabited islands comprising 1-8 villages/island)																					
Total	9	9	9	0	0	0	0	0	6	0	0	0	0	3	0	0	0	1	9	9	0

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: