CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	National Trust of Fiji
Project Title:	Restoring the Native Vegetation of Monuriki Island, Fiji
Date of Report:	13 June 2013
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CEPF Region: Polynesia-Micronesia

Strategic Direction: 1. Invasive species prevention

Grant Amount: $35,280

Project Dates: Apr 1, 2012-Mar 31, 2013

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

Community Yanuya, Yadua – partners
Provincial Office – community liaison office
Department of National Culture and Heritage – government partner
Kula Eco Park – captive breeding facility
BI/NFMV/PII/USP Herbarium/CI/IAS/USP– technical advisors

Conservation Impacts

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

1. Prevent, control and eradicate invasive species in key biodiversity areas

Monuriki Island is an identified KBA site. This project led to the community protection of the KBA site through a Memorandum of Understanding and the development of Biosecurity protocols and Weed Management Plan for the prevention and spread of key invasive species to the KBA site.

Please summarize the overall results/impact of your project.

Following consultations and assessments with community and key stakeholders, a Biosecurity Implementation Plan was developed and commences the active prevention, surveillance and management of incursions of invasive species on Monuriki Island. Monitoring of all biosecurity activities is expected to continue over the next 3 years.

Extensive studies and mapping of the island vegetation and flora led to the selection of key species for eradication and control at select sites. A feasibility assessment was carried out to determine the feasibility of eradication and control of the identified species. Training in weed management activities, collection and preparation of seedlings for nursery management and implementation of the biosecurity protocols were carried out over the period of project.

Community and key stakeholder consultations were carried out together with island surveys to determine a tourism proposal for the island.

Project Approach (500 words)

This project has enabled a systematic approach towards the re-establishment process for 100% of the degraded native forest on Monuriki Island. The initial phase of assessment and invasive plant management has been followed by close assessment of biosecurity needs and protocols. With the close involvement of the community and key stakeholders in these two phases the implementation and monitoring of both the weed management and biosecurity protocols will become an initiative of the partnership.

Communities who have lost their source of financial livelihoods though the removal of the goats now have an opportunity to replace this income with revenue generated from eco/nature tourism on Monuriki Island. This is an incentive to communities to participate actively in the creation of new, diverse and feasible products for Monuriki Island and for Yanuya village.

Link to CEPF Investment Strategy

1. Prevent, control and eradicate invasive species in key biodiversity areas.

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

Successful re-introduction of the critically endangered Monuriki species of the Fijian Crested Iguana (Brachylophus vitiensis) onto Monuriki Island.

Actual Progress Towards Long-term Impacts at Completion:

Captive breeding of the Monuriki iguanas at Kula Eco Park has been highly successful.
Controlling invasive plant and animal incursions and establishing biosecurity controls are necessary to establishing suitable habitats for the iguanas and these activities have progressed well.
It is envisioned that the re-introduction of the captive bred iguanas into the wild should commence in 2015 as planned.

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

Re-establishment process for 100% of degraded native forest on Monuriki Island initiated by 2015.

Actual Progress Toward Short-term Impacts at Completion:
The key components to achieving re-establishment process for 100% of degraded forest on Monuriki Island are controlling invasive plant and animal incursions and establishing biosecurity controls. These activities have been completed to the following:

1. Feasibility Study for Invasive Plants
2. Commenced treatment of priority plants
3. Nursery established
4. Training for communities in nursery management, weed management and biosecurity protocols and monitoring
5. Biosecurity Plan
6. Tourism Plan

Please provide the following information where relevant:

Hectares Protected: 40ha
Species Conserved: Brachylophus vitiensis
Corridors Created:

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

To achieve the project goals over the short timeframe was an ambitious target for the NTF. Implementation of project activities was slightly delayed by the event of Tropical Cyclone Evan in December. However all members of the project team, partners and key stakeholders worked closely to ensure goals were met.

Continued monitoring for goats and rodents on Monuriki Island following earlier eradication activity has indicated positive results to the success of the program. This has encouraged the project team and stakeholders.

This project has enabled the National Trust of Fiji to maintain good partnership relationships with the following organizations: BirdLife International Fiji, Pacific Invasives Initiative and the government Provincial Administration. Having community support for the project has been critical to its success as there is a long history of conflict with landowners with respect to conservation work on Monuriki Island.

Captive breeding for crested iguanas in Kula Eco Park has been successful over the past two of the project. Beginning with twenty iguanas from Monuriki Island, the keepers have managed to facilitate breeding and the birth of 21 juveniles. The institution however has warned the National Trust that the facility built will need to be extended in order to contain the rapidly increasing number of iguanas. The Trust is currently exploring funds to accommodate this extension.

Were there any unexpected impacts (positive or negative)?

It is anticipated that invasive plants species that have been controlled by goats and rodents will appear after eradication of the two species. *Meremia sp*. – which has a highly negative impact on native forests has been identified after recent surveys. This was not anticipated. Meremia has now been included in the Feasibility Report.

The building of the nursery at the school was proposed by the local community for educational reasons. This is a great opportunity for the NTF and the community to extend reforestation work onto Yanuya Island and also exhibit to other communities in the Mamanuca Group that these islands can be reforested. The National Trust now has an opportunity to use these available resources; supportive local community and a standing nursery - to initiate Tropical Dry Forest restoration in degraded islands on the dry side of the Fiji Archipelago.

The Volunteer Ranger from Yanuya Island has attended several training workshops/activities on Yadua Island (Denimanu Village) and Yaduataba Island thus establishing a relationship with Denimanu Village community who are the custodians of Yaduataba Island Sanctuary for the crested iguana (*Brachylophus vitiensis*). This is an opportunity for a 'twining' relationship between the two villages.

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:
Active prevention, surveillance and management of incursions of invasive species on Monuriki Island.

Component 1 Actual at Completion:
Unsystematic searches in 2012 and 2013 for goats throughout the island and rat trapping at landing sites since their removal in 2011, have not revealed any re-incursion of the two species into Monuriki Island.

Previous human presence in the forested areas and high up on the ridges was only due to goat mustering by the local community and tourist visitors. In the absence of goats, the island is now only visited by tourists who mostly remain within the vicinity of landing sites.

Biosecurity measures have become an important method of control and the implementation of the Biosecurity Plan[1] by all stakeholders over the next few years will be important in maintaining the Island free of invasive plant and animals. The NTF has continued to create awareness on

[1] Thaman,B. and Niukula, J. (2013). *Monuriki Island Biosecurity Plan. Ver.1*. National Trust of Fiji Islands, Suva.

biosecurity at village meetings, district meetings and to a District Youth Workshop. 7 plants were targeted for prevention from becoming established on Monuriki Island. Sharing information on these plants is an important focus during biosecurity awareness amongst communities and stakeholders. Biosecurity resources have been designed for production to further support awareness work by the NTF.

Arrangements with the only authorized tourist travel operator to take tours to Monuriki Island, (South Sea Cruises) have progressed well with changes being implemented as recommended in the plan. The new guidebook published in March 2013, "A Mariner's Guide to Fiji Shores & Mariners" by Andree Yee and Heidi Williams-Moy includes advice provided by the NTF on biosecurity measures when visiting Yadua, Yaduataba, Yanuya and Monuriki Islands.

Component 2 Planned:
Managed Restoration Plan for Native Vegetation on Monuriki Island.

Component 2 Actual at Completion:
A vegetation survey was conducted on Monuriki Island[2] to provide the current status of the flora and vegetation of Monuriki Island, non-indigenous plants, species that may return as a result of the eradication of goats on the island, and species for priority conservation and restoration action. In addition, recommendations for conservation and recreational work were proposed to the NTF. The results of the surveys were compared to a baseline survey conducted in 2004 and a later survey in 2007. "The total reported vascular flora of the island stands at about 121 species, of which 95 are assumed to be indigenous and 26 non-indigenous introductions". Six vegetation types were identified on the island with the predominant being tropical dry forest and woodland, followed by *Casaurina* woodland and savannah, and coastal lowland and littoral forests.
A list of indigenous and introduced species of plants was produced, including identification of significant plant species for conservation and identified plant invasive species for priority action.

A total of 35 trees and plants were identified as being ecologically or culturally important and recommended to be located and mapped. These plants and trees are to be included in the list of plants and trees for replanting and measures should be taken to give them some form of protection for their ecological or cultural value.

Of the identified 13 weed species, 8 were targeted for eradication due to the threats they pose to the health and regeneration of indigenous plants and to iguana and seabird habitat. The remaining 5 species were recommended to be conserved due to their non-invasive characteristics, their cultural and medicinal value and their value in ecotourism development.

A total of 7 plants and trees were identified as being priority plants for prevention from becoming established on Monuriki Island due to their threat to the health and regeneration of indigenous plants and the threat they pose to iguana and seabird habitat.

[2] Thaman, R. Niukula,J. Takeda, S. (2012). *The Flora and Vegetation of Monuriki Island, Mamanuca Islands, Fiji, with Recommendations for Conservation and Enrichment.* Technical Report. National Trust of Fiji Islands, Suva.

Based on the recommendations of the vegetation study of Monuriki Island, a Feasibility Study[3] was conducted to determine the best way to manage the invasive plants on Monuriki Island. This included ground assessments of weed patches, size and range of species distributions, and preparation of GIS vegetative maps showing perceptible species associations and distribution patterns of plant and tree species of interest. The selection of feasible invasive weeds for eradication and control was made based on their occurrence in low abundance on the island.
The two priority weeds identified for eradication: *Piper aduncum* and *Sphagneticola trilobata*.
The two priority weeds identified for control were: *Cenchrus echinatus* and *Mikania micrantha*.
Merremia spp. initially not identified on the island was discovered during the feasibility surveys. It is thought that goats grazing had kept the weed under control. At this stage exploration of the best methods for control is still being researched.

Five sites on the island were identified for monitoring and action has commenced as recommended by the feasibility study. Removal of priority invasive weeds from Monuriki Island is entirely feasible within the next 5 years and at relatively low cost. However to keep the island weed free in the future will require the concerted effort of all stakeholders involved.

One site on the island (Savusavu Beach) of approximately 2.5ha was identified as the priority site for restoration.

A nursery was constructed in the village school compound to be managed by the school teachers as a 'hands on' teaching project for students. The school community will plant a target 1500 selected native tree seedlings primarily for Monuriki Island but also for tree planting in the school compound. This will contribute to increasing number of trees on Yanuya Island and more awareness of native tree species amongst the community.

Training in collection of seedlings, potting and management was conducted by the Forestry Department Officer and the Monuriki Volunteer Ranger who had participated in the NTF training on Landuse, Nursery and Management held on Yaduataba Island in 2012.

Training on weed management was conducted over the year of the project through attendance at a formal weed training workshop[4], and hands on training in the field. In the field activities included assessment of selected sites, identification of priority species, training in treatment methods and general information sharing on wildlife of Monuriki Island, threats to wildlife and biosecurity measures.

[3] Thaman,B. and Niukula,J. 2013. *Monuriki Invasive Plant Project – Feasibility Study. Ver.1.* National Trust of Fiji, Suva

[4] PII(2012). Training Course Report: Invasive Plant Management (Samoa, 15-25 May). Unpublished report. PII, Auckland, New Zealand.

Component 3 Planned:
Sustainable nature tourism on Monuriki Island.

Component 3 Actual at Completion:
The tourism potential for the island was assessed in 2013[5]. Monuriki Island is spectacular in its aesthetic beauty, with its beautiful beaches, reefs and tree groves. The island has an interesting history, was the location of the film Castaway starring Tom Hanks, and has significant conservation and cultural values. Currently the island is visited by only one tour company and the only activity which is conducted is snorkeling. Clearly the nature tourism potential of the island is not being realized.

As a result of consultation with stakeholders over 20 activities were identified as potential tourist activities on the island. Of these the most feasibile were:
- snorkeling
- nature trails for hiking, photography, nature/bird/iguana watching

To add diversity to these, it is recommended that the following be included as part of the tourist experience:
- cultural uses of plants/ethnobotany
- ecological significance and uniqueness of selected species
- hands on contribution to reforestation or weed eradication program.

A map was produced with the four proposed tours for visitors. These were:
1. snorkel tour
2. coastal tour – nature trail with beach and ocean scenery, coastal cliff formations and coastal vegetation. Participate in reforestation or weed eradication.
3. uphill hike – upland hike through escarpments and cliff faces and upland forests and woodlands. Participate in reforestation or weed eradication.
4. shorter circular trail - upland tour, more challenging on ridges, spectacular lookouts. Participate in reforestation or weed eradication.

A potential ethnobotanical tour of cultural trees, plants and animals is proposed for Yanuya village. This would tie in well with the nursery as more trees would be planted in the school and village compounds which would add value to the tour.

Component 4 Planned: Successful documentation of CEPF funded project.

Component 4 Actual at Completion:
Completed.

[5] Ravuso,J. 2013. *Tourism Proposal for Monuriki Island*. Unpublished Report. NTF. Suva, Fiji. (In Progress)

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

All components were realized though some activities of the component have not been fully completed. At this stage of the project, consultations and studies for biodiversity and weed management have been completed whilst finalization of the tourism proposal is in progress. Implementation of the study recommendations have commenced and project monitoring frameworks will in due course become active.

This is in line with the project proposal and has not affected the overall impact of the project.

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

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.

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

Project Logical Framework was clearly articulated with project activities leading to clear project deliverables and component objectives. Implementation and monitoring of the project against these clear directions was easier for the project team.

The project emphasized prior assessments and feasibility studies for implementation. Perhaps it was overly ambitious to expect thorough studies of three key aspects to be completed, implemented and monitored in the one year period of the project.

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

In order to ensure the project activities were carried out and completed, it was necessary to engage more staff on the project and engage partners to complete the assessment reports - which led to over-expenditure on the corresponding budget lines.

The NTF was able to reduce travel expense by conducting some of the required consultations whilst on project travel through other projects, conducting training at other project sites and funded by other project grants, and through carrying out multiple activities on single trips.
The NTF benefitted greatly through its technical partnerships with PII and BI. Conducting weed training at other NTF sites apart from Monuriki helped to establish a lateral impact of the

project, train a cadre of weed management practioners and expose the Monuriki community to 'sister' sites and communities.

Other lessons learned relevant to conservation community:

The fact that this project was continuing from an earlier project was an advantage as the initial community approvals had been attained. Protocols for community engagement were strictly followed nonetheless. The project was able to expand on the community relationship by ensuring community members were involved in training and in field visits and activities. Selecting the school as the key partner to the nursery project was a wise choice as this will involve the children.

Having regular community consultations, exposing community members to other NTF sites and communities, and involving community members in field activities supported greater community ownership in the project.

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
National Trust of Fiji			
Pacific Invasives Initiative			

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.

Captive breeding of crested iguanas at Kula has assured the re-introduction of a viable population to the island which is the overall goal of this project.

The production of a biosecurity plan and feasibility study for the project and its endorsement by stakeholders should ensure the sustainability for most other sections. The plan protects the island from re-incursion of invasive species that could lead to further eradication or control expeditions. It is the responsibility of the stakeholders, especially the local community, tour operators and hoteliers to abide and continue to implement biosecurity and weed eradication/control measures. Activities have been proposed at a low cost budget which makes it feasible to carry out over a long term period.

The ownership of the local community in this project will sustain the project over the long term. The NTF will continue to work in partnership with the community and create enabling opportunities, partnerships and linkages to brindge the gap between the communities and partners.

Summarize any unplanned sustainability or replicability achieved.

Newly identified risk - population of *Meremia sp*. identified. This will need to be addressed as part of the feasibility study.

Safeguard Policy Assessment

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

Treatment of weeds for eradication or control as per feasibility report will need to take into account environmental best practice if involving the use of chemicals.

Given the rough terrain of the island, all hiking trails developed for Monuriki Island will need to take into account OHS and safety issues for trekking.

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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*****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				
(Enter Grant Term) **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 July 1, 2007 to June 30, 2008. (Attach annexes if necessary)**
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No			
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	70%	80%	
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes			

5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	No			

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	Community Characteristics								Nature of Socioeconomic Benefit													
									Increased Income due to:													
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	sustainable natural resources management	Ecotourism revenues	Park management activities	Payment for environmental services	due to the adoption of sustainable fishing, hunting, or agricultural	More secure access to water resources	Improved security of land or other natural resource due to titling, reduction	disasters (fires, landslides, flooding,	More secure sources of energy	public services, such as education, health, or	traditional knowledge for environmental	decision-making due to strengthened civil society and	Other
Total																						

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