Pacific Community
Communauté du Pacifique

RESCCUE

FINAL PROJECT REPORT

RA AND KADAVU PROVINCES, FIJI

AFD

Kerēvaka na Kalou ka doka na Tui

FFEM FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL

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Overview of the objectives and components of RESCCUE project:

The *Restoration of ecosystem services and adaptation to climate change* (RESCCUE) project is a regional project implemented by the Pacific Community.

The overall goal of RESCCUE is to contribute to increasing the resilience of Pacific Island Countries and Territories (PICTs) in the context of global changes. To this end RESCCUE aims at supporting adaptation to climate change (ACC) through integrated coastal management (ICM), resorting especially to economic analysis and economic and financial mechanisms.

The RESCCUE project operates both at the regional level and in one to two pilot sites in four countries and territories: New Caledonia, Vanuatu, Fiji and French Polynesia.

RESCCUE is funded primarily by the *French Development Agency* (AFD) and the *French Global Environment Facility* (FFEM) for a duration of five years (2014-2018). The project budget is 8.5 million Euros from AFD/FFEM.

It is structured around five components:

Component 1: Integrated coastal management – supporting ICM implementation through ICM plans, ICM committees, and management activities concerning both terrestrial and marine ecosystems, capacity building and income generating activities.

Component 2: Economic analysis – using economic analysis to support coastal management and policy decisions.

Component 3: Economic and financial mechanisms – setting up economic and financial mechanisms to generate additional and sustainable funding for ICM: review of options (payment for ecosystem services, taxes, user fees, trust funds, quota markets, offsets, labels…); feasibility studies; implementation; monitoring.

Component 4: Capitalization, communication, dissemination of project outcomes in the Pacific – going beyond pilot sites activities in order to have impacts at the regional level, by fostering experience sharing between sites, cross-sectoral expertise, and communication and dissemination of the project outcomes.

Component 5: Project management – implementing and coordinating the project, by providing technical assistance, organizing local and regional steering committees, conducting audits and evaluations (mid-term and ex-post), etc.

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List of Abbreviations

ADB	Asian Development Bank
CI	Conservation International
EIA	Environment Impact Assessment
FELA	Fiji Environmental Law Association
IAS	The Institute of Applied Sciences
ICM	Integrated Coastal Management
KYMST	Kadavu iYaubula Management Support Team
LMMA	Locally Managed Marine Areas
PEBACC	Pacific Ecosystem Based Adaptation to Climate Change
RESCCUE	Restoration of Ecosystem Services and Adaptation to Climate Change
SPC	Pacific Community
TC	Tropical Cyclone
WCS	Wildlife Conservation Society
YMST	iYaubula Management Support Team

EXECUTIVE SUMMARY

The Restoration of Ecosystem Services and adaptation of Climate Change (RESCCUE) project addressed the following key environmental problems in the two pilot sites, Kadavu and Ra:

- Uncontrolled burning of grassland primarily for yam and kava plantation;
- Development activities such as logging and clearing forestland for agriculture;
- infrastructure development such as roads;
- dumping of solid waste along the waterways and coastal areas;
- Gravel extraction;
- Overfishing;
- Poaching;
- Use of indiscriminate fishing methods.

There were also major issues related to extreme weather and climatic events that have had enormous negative impact on the livelihood of communities and natural resources of the provinces of Ra and Kadavu. TC Winston was devastating in the province of Ra in 2016 and TC Keni caused major damages in Kadavu in 2018. The recovery periods delayed the implementation of some on-ground field activities

RESCCUE interventions had to address the existing locally human induced problems and issues as stated above. Furthermore, climate change impacts such as cyclone and flooding events needed to be addressed within the timeframe of the project.

The development and endorsement of the ICM Plans for the provinces of Ra and Kadavu provided a systematic road map of addressing the poor environmental management practices, the ecologically and socially unsustainable development activities and the negative impacts of climate change. Having the ownership of ICM plans at the provincial levels has helped in implementing most of strategies and actions successfully. This is evident in all of the on-ground ecologically restoration, sustainable resource management and waste management initiatives.

Identifying and establishing a sustainable financial mechanism such as the Vatu-I-Ra voluntary payment system for marine conservation and improving livelihood are among key RESCCUE achievements.

1. CONTEXT AND OBJECTIVES OF THE FINAL REPORT

The two RESCCUE pilot sites in Fiji are the provinces of Ra and Kadavu. The objectives of this report are as follows:

- **Monitoring and evaluation -** To illustrate the changes that the RESCCUE project activities have made on the community livelihood, local and national policies and the ingredients to improve the resilience of important biophysical systems to the impacts of climate change;
- **Capitalization/learning** - The lessons from the implementation of on-ground activities and whether it has been or can be replicated within the provinces or elsewhere in the country, the type of governance system that make and break initiatives such as RESCCUE and the sharing of knowledge from other RESCCUE pilot sites including similar initiatives implemented regionally under the SPREP PEBACC project;
- **Communication/dissemination -** The communication of achievements, major RESCCUE events, innovations arising from RESCCUE project intervention within the conservation and climate change adaption space; and
- **Strategic** - The scaling up of RESCCUE best practices in Fiji, practical application of lessons learned and innovative approaches in other Pacific Island Countries and Territories which could substantiate the continuation of AFD-SPC partnership.

2. PRESENTATION OF THE RESCCUE PROJECT IN FIJI

2.1. Introduction to the pilot sites

The two RESCCUE pilot sites in Fiji are the provinces of Kadavu and Ra. Kadavu is located in the south of Fiji and it is the fourth largest island in the entire Fiji island group.

Kadavu province has nine districts with a total land mass area of 471.89 km^2. Kava production has been the main source of earnings for the villages over the years. The other major sources of earning are fishing and taro. Kadavu's economy is based on agriculture and fishing with no major secondary industry. There are few small-scale tourism resorts around the island with the only exception of Kokomo Resort on Yaukuve island in the District of Ono.

Ra province covers a total land mass area of 1,292.14 km^2 or about 12% of the total land area of Viti Levu. Ra has 19 districts and has an urban center, Rakiraki town. The economic base of the province over the years has been sugar cane production. Vast areas of land have been leased for sugarcane farms. Commercial fishing has been a main source of income for the coastal villages. Fijians of Indian origin have been involved more in offshore fishing. They have had many years of experience as well as the appropriate type of fishing gear to carry out deep sea or off-shore fishing.

2.2. Main environmental issues

The key environmental problems for Kadavu and Ra can be broadly categorized into land use related activities and marine resource utilization. For the land use activities the common issues are uncontrolled burning of grassland primarily for yam and kava plantation; logging and clearing forestland for a timber and infrastructure development such as roads; dumping of solid waste along the waterways and coastal areas.

2.3. Climate Change related events

Kadavu is located on tropical cyclones pathways that pass through Fiji. Recent Tropical Cyclone Keni destroyed houses, crops and sparse forest areas. Storm surges we devastating on the eastern and southern parts of Kadavu. These storm surges were more harmful than the strong cyclone winds. In

Ra apart from Tropical Cyclone Winston prolong drought periods have affected potable water sources and agriculture. Flooding incidences have been a frequent adversary to communities in lower parts of Ra particularly communities who reside close to waterways.

2.4. Issues affecting the two Pilot RESCCUE Fiji sites, Provinces of Kadavu and Ra

2.4.1. Kadavu Province

Improper land-use methods

The use of slash and burn technique (fire) to clear land for agricultural activities is an issue of concern for the province. The increasing population on the island and high demand for agricultural produce (Kava & Dalo) from mainland Viti Levu has led to unsustainable methods of farming. Fire coupled with the use of pesticides and fertilizers for farming has led to decreased water quality on the island. The clearing of forest on the island has also exacerbated soil erosion and water pollution across the nine districts.

Figure 1 Clearing of forest areas caused severe erosion

Figure 2 Uncontrolled and indiscriminate burning threatening biodveristy and soil fertility

Waste disposal

The absence of a proper waste collection and disposal system in the entire island of Kadavu island is a huge solid waste problem. Littering is a problem and lack of civic pride on the island has been also identified as a key environmental. The growing litter problem along the coast lines of Kadavu has been stressed by the 9 districts during the ICM meeting back in 2017.

Figure 3 Litter issue is becoming a major solid waste problem

Overfishing, Poaching and Illegal methods of fishing

Apart from the land-based activities highlighted above that are inextricably linked to the marine environment, three common key issues highlighted by the 9 districts were:

a) Overfishing;

b) Poaching; and

c) Illegal methods of fishing.

The high demand for fish has led to overfishing and poaching from other districts' villagers and some poachers are known to come all the way from Viti Levu on fiberglass boats and high powered outboard engine. These activities have been demoralizing current marine conservations efforts in the province. The use of *Derris* roots (traditional fish poison) is another growing concern highlighted by most districts.

Climate change effects

Increased incidence of tidal inundation has led to the construction of a number of seawalls along the coastlines. The recent Tropical Cyclone Keni rampaged eastern coast and southern tip of the island. Kadavu is located within the cyclone track that comes from the northwest of Fiji. The more recent prolonged dry weather for several months affected water sources and agriculture. There were bush and grassland fire mainly on the eastern part of the island.

Figure 4 TC Keni impact on RESCCUE Nurseries

Figure 5 TC Keni devastating eastern coastal areas

2.4.2. Ra Province

Being one of the sugar producing provinces in Fiji, the majority of the environmental threats in the province are related to anthropogenic land-based activities.

Unplanned land-based development

Most commercial farmers rely on agrochemicals, which include NPK fertilizers and pesticides (weedicides, insecticides, fungicides). This has environmental and health impacts on the community wellbeing. Land degradation specifically sugarcane cultivation on slopes more than 5° has been responsible for the incidence of severe erosion in the middle and lower catchments in Ra. The practice of burning sugarcane fields to accelerate harvesting process, minimize labor costs, increase crop weight, and advance milling has contributed to the irreversible loss of soil nutrients.

Apart from deforestation and unsustainable agricultural practices foreshore reclamation for land development purposes has exposed coastal areas to storm surges and eradicated natural filtration system and coastal protection provided by mangroves. With an increase in sedimentation and

agrochemical run-off from farms, the aquatic and marine systems have been adversely affected. Recruitment of many fish stocks is reliant on mangrove and other near shore habitats. Furthermore, some developments have ignored requirement to have an environmental impact assessment (EIA) conducted on the extraction of gravel from waterways. So they did it illegally.

Pollution

In the province of Ra, community wastewater management was identified in all of the ICM districts management action plans as one of the main issues faced for coastal management. Village toilet systems in Ra still use drums for septic tanks which over time rusts and the holes on the sides of the drums tend to clog and plug up causing it to flood. There is no management of grey and black water run-off in villages. Contaminants of concern that are present in wastewater include pathogens, suspended solids and nutrients.

Prior to TC Winston the discharge of untreated or inadequately treated wastewater from villages and the Penang sugar mill and sewage increased the nutrient levels in waterways, the coastal estuaries and inshore areas resulted to macro-algal outbreaks. This has been devastating to corals through the loss of settlement sites for coral larvae, as well as a loss of habitat heterogeneity necessary to support a diverse range of organisms.

Gravel extraction

Gravel extraction from waterways has been happening in Ra for over 10 years. Demand for gravel has increased post-TC Winston due to infrastructure rehabilitation specifically road maintenance and road construction. Boom in the building industry in recent times has also added to this high demand on gravel. Gravel extraction has been a controversial form of development. Income communities receive from gravel extractions is marginal compared to the profit gained by the gravel extractors. Furthermore, disturbance and damages caused to the biological system and physical stability of streams, creeks and rivers is irreversible.

Overharvesting of coastal resources

Subsistence fishing is an important source of protein at household levels. However, the reduction of fish catch with an increase in population and use of more efficient fishing gears can only be explained by the reduction of fish stocks. The harvest of undersize catch is widespread. Due to increasing scarcity of fish (IAS 2012), the reliance on the natural marine environment for traditional subsistence sometimes comes in conflict with commercial fishery and at times, with industries and tourism.

Destructive Fishing Methods and Poaching

In the province of Ra, destructive fishing methods are also prevalent in fresh water surface sources such as rivers and streams. A freshwater ecosystem includes all living and nonliving things within and immediately surrounding freshwater sources, vegetation, animals and birds that share the area as their habitat.

In fresh water streams and creeks, pesticides and insecticides are also used to poison fish. In Ra, the pesticide is mixed with bleach and this solution is poured through plastic pipes to fish, eel and prawn holes in the creek. Every other living creature in the vicinity and downstream is poisoned. Any object, matter or chemical carried down rivers and streams, or seeping into the ground, either gets deposited on the banks of rivers as a potential threat to surrounding wildlife, or finds itself in the sea or reefs.

At the Ra ICM Planning meeting held in November 2012 and the Ra ICM Turaga ni Koro (Village headmen) workshop held in May 2013, destructive fishing methods was identified in both marine and fresh water systems in Ra. Some examples of these destructive fishing methods were:

- Use of Derris roots (*duva*) in streams, creeks and sea with catches sold
- Use of fertilizer NPK mixed with bleach to suffocate prawns

- Use of crow bars to take apart coral houses of fish
- Use of nets less than 2 inches
- Use of underwater breathing apparatus
- Catches less than the legal sizes

Poaching was highlighted as a major issue. Poachers are mainly the resource owners themselves from either within or outside their districts and province and also those fishers from outside the province.

2.5. Project focus

The Fiji RESCCUE project focused on similar issues in Ra and Kadavu. Overall, the project focus was strengthening capacity and resilience of people's livelihood and restoring ecosystem services that support them. The key issues addressed were internal and external factors. Internal factors are namely the socio-ecological impacts of the current resource based development such as gravel extraction, commercial agriculture, in-shore fishing, tourism development and coastal infrastructure development. External factors are impacts of extreme weather events and impacts of climate change. The Integrated Coastal Management framework supported with appropriate financial instruments and economic tools were the means to achieve the desired outcome, objectives and goals. The other important aspect of the project is communicating the lessons learned which includes achievements and challenges over the duration of the project.

3. KEY PROJECT OUTCOMES

3.1. Integrated Coastal Management (ICM) Plans

The Fiji National Integrated Coastal Management framework is the principle guide used for the formulation of the respective ICM plans of Ra and Kadavu. The ICM plan is one of the effective means of addressing multiple coastal and resource management issues involving different stakeholders and entities who may have their own values and interest. An important aspect of the ICM plan is that it provides people a means to strengthen their decision-making capacity on the management of their resources and adapting to the impacts of climate change.

The underlying coastal issues in Fiji including the two RESCCUE Pilot sites of Kadavu and Ra are complex. The increasing demand on inshore fisheries, clearing of mangrove for development, increase in sedimentation due to soil erosion from deforestation, increase in nutrients run-off into inshore domestic and agriculture activities related water use areas are the major coastal issues. The need for an ICM plan is to systematically address the issues and their underlying factors involving all stakeholders as appropriate.

3.1.1. *RESCCUE Intervention*

RESCCUE provided the technical and financial support to complete the ICM plan in Ra that started with seed funds provided through the ADB Coral Triangle Initiative (CTI) in 2012. With the support of the Ra Provincial office RESCCUE facilitated series of meetings at the village and district levels on the finalization of the key ICM priority issues and related actions and strategies.

For Kadavu RESCCUE conducted and facilitated initial community engagement in reviewing all the villages' resource management action plans in nine districts. There were three major meetings in each district to finalize the key priority issues and its strategies. The Kadavu Bose Vanua (Kadavu Traditional Chiefs meeting) endorsed the final ICM draft before the final approval at the Kadavu Provincial Council meeting.

Figure 7 Participatory session on the ICM Plan

Figure 6 Kadavu Provincial Council Members and the nine Traditional Paramount Chiefs

ICM process and key steps

Consultation and community engagement using participatory approaches such as root-cause analysis and development of a consolidated village action plan at district level were critical to listen to the voice of all the people in the community. This participatory process was conducted taking into account the cultural protocols and respecting traditional leadership and decision-making processes. So RESCCUE facilitated the community deliberations and cautiously ensured there was community consensus on the actions and priorities that were collectively identified.

3.1.2. *Results and achievements*

The endorsement of the ICM plan in the Ra Provincial meeting in October 2017 was a major achievement. The primary output was the publication of the ICM plan which was circulated to all the key stakeholders and relevant government line ministries. The iTaukei version of the ICM Plan has been completed through co-funding from ADB CTI phase 2. It has been circulated to all the district representatives and village headmen

The Kadavu Provincial Council Meeting endorsed the Kadavu ICM plan on the 26th of September 2018. This is a major milestone for Kadavu. The process of ICM Plan endorsement in Kadavu had to be approved first by the traditional chiefs and elders meeting (*Bose Vanua*) before it was submitted to the Kadavu Provincial Council for the final endorsement. The iTaukei version of the ICM Plan was presented at both the *Bose Vanua* and the Kadavu Provincial Council meeting.

Both for Kadavu and Ra, their respective Provincial Council Offices and the Provincial Administration Offices have been tasked to take lead role in coordination of all government activities. The ICM plan provides a clear road map of how development, resource management, conservation measures and climate change mitigation and adaptation initiatives can be systematically carried out.

3.1.3. *Key output(s) and contribution(s) to expected outcomes*

The ICM Plan allowed all the key stakeholders to exchange and share their views, activities and experience on the management of coastal and natural resources in the Ra province. All of these stakeholders had their own priorities. The indigenous communities were interested in the communal management of their resources. The key needs were food, water, housing, education and a regular source of income.

For Kadavu the ICM plan provided a structured system for the deliberation and strategizing key activities to address environmental, climate change and development issues. The traditional cultural system or the vanua system is the platform for the implementation of the ICM priority actions and activities.

Overall, the ICM plan and process merges of the vanua system and modern decision-making processes. It is a resource management tool that other provinces in Fiji can adopt and adapt to effectively address their respective complex environmental and development issues and priorities.

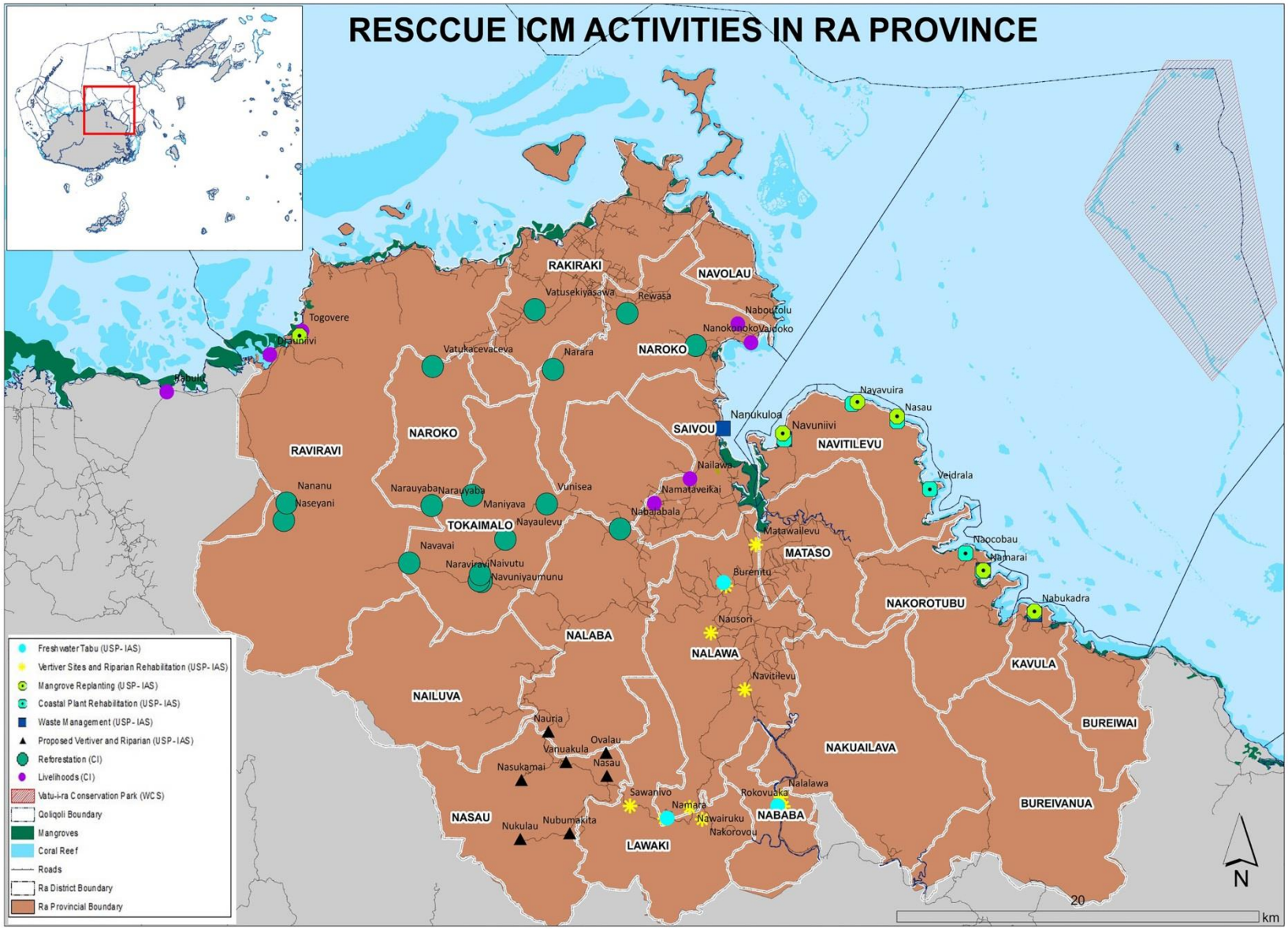

Figure 8 RESCCUE sites in Ra Province

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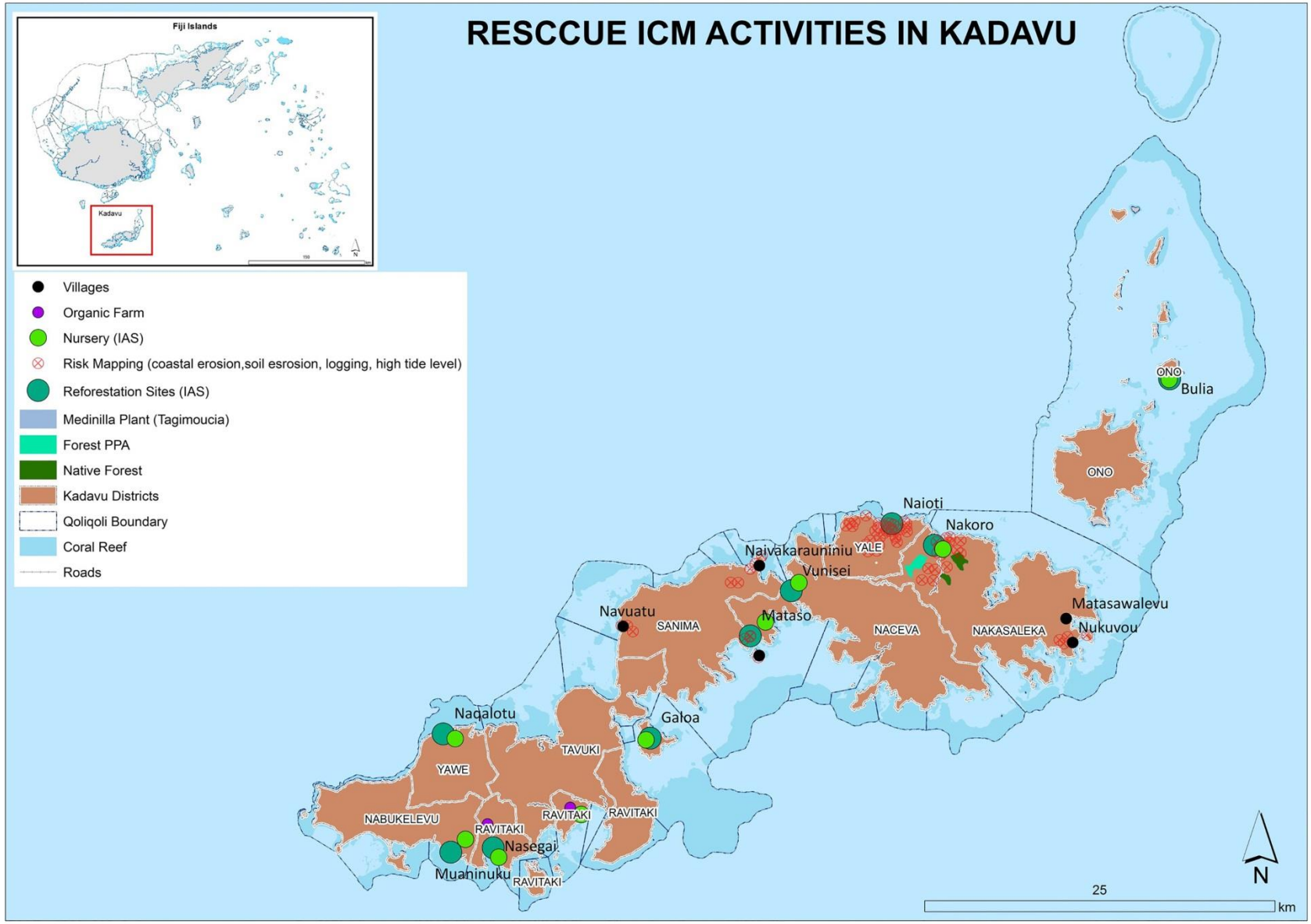

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Figure 9 RESCCUE sites in Kadavu Province

3.2. Ecological restoration and rehabilitation

3.2.1. Ra Province

Underlying Issues and Problems

Restoration of forest areas and mangroves has been a need due to the degradation of the forest areas and mangrove system. The following major issues resulted to RESCCUE ecological restoration intervention:

- Extreme weather events mainly droughts and flooding;
- Burning and Grassland fire;
- Agricultural practices and excessive use of fertilizers;
- Mangroves degradation and clearing; and
- Development activities and threats to ecological integrity.

RESCCUE have been main operators involved the restoration of the forest areas. CI has been operating for more than eight years in the Ra Province and they have been involved heavily in reforesting degraded land areas and those that were forested before. Collaboration between the RESCCUE operators made it cost-effective to secure seedlings and the construction of nurseries in the RESCCUE sites.

The key challenges that were encountered were the shortage of native seedlings due to the devastation caused by TC Winston, which destroyed most of our source trees. This meant that the team had to travel longer distance to collect seeds or delay our seed collection. This was not anticipated in the financial budget for this activity component. Due the recovery period most of the business services were only partially operating thus there were delays in the delivery of fencing materials due to factory breakdown.

There were coordination issues related to on-ground activities specifically between CI and IAS. At the outset of the on-ground activity specifically the establishment of nurseries at the implementation phase. This problem was resolved when on-ground activities budgets and logistics were better communicated.

RESCCUE Intervention

In terms of the reforestation process, the collection and potting of native and exotic tree species were carried out at their CI Rakiraki nursery. They prepared 50,000 pine seedlings to replace community woodlots destroyed by TC Winston. The seedlings were then planted in the identified sites in 2018.

The main activities were seed collection of both exotic and native species seedlings. The CI field teams were mobilized to collect teak and *tavola* tree seeds. CI nurseries in Rakiraki and Tokaimalo were repaired to accommodate IAS seedlings from the coast for hardening.

Table 1 species and quantity for the CI Nurseries in Rakiraki

Species	**Number of seedlings**
Teak (*Tectona grandis)*	338
Tavola (*Terminalia catappa)*	1467

Lauci (*Aleurites moluccana*)	67
Vesi (*Intisia bijuga)*	13
Macou (*Cinnamonum sp)*	4
Pine (*Pinus carribea*)-SPC/Reforest Fiji	50,000

The planting of mangroves was one major success along the coastal communities in Ra. CI and IAS have been facilitating the community-based mangrove planting. One of the major successes of mangrove was the involvement of communities in mangrove planting. In Navuniivi village the paramount chief was leading a mangrove replanting team which mainly comprised his grandchildren. This is a very promising succession strategy in community based ecosystem restoration initiatives. In summary the below were the main achievements in the coastal rehabilitation and mangrove replanting.

Table 2 Species planted for coastal protection and rehabilitation

Activities and species	**Number of seedlings**
Revegetated coastal land areas with planting of mangrove trees (*Rhizophor*a spp.)	1,600
Restocking mangrove seedlings into nursery (*Rhizophora* spp.)	7,500.
Revegetated coastal marine areas with coastal plants	137
Restocking of coastal saplings into the Namarai nursery (kavika (*Syzygium malaccense*), Ivi () moli (*citrus*) vutu rakaraka (*Barringtonia speciose*) Vesi wai (*Pongamia pinnata*)	909

Opportunities, limits and lessons learned

- The need to include and incentivize community members to participate in the restoration program;
- Maintenance of the seedlings in the nursery to be out-planted to ensure high survival rates in the field;
- Regular community engagement with emphasis on the destructive impact of deliberate bush fire and other environmental critical issues;
- collaboration is crucial especially working with communities, provincial councils and relevant government agencies such as Department of Forests
- Assist in the replanting of native trees on designated sites.

3.2.2. Kadavu Province

Underlying Issues and problems

For the terrestrial areas of Kadavu, the key issues are the threats and concerns of declining forested land areas mainly due to land clearing for agriculture through burning. In most cases, this has resulted in indiscriminate and uncontrolled burning. With reduction of forested areas particularly in the middle and upper catchment area, waterways in some areas have dried up. The other main concern and threat is the increase in the occurrence of extreme natural climatic events such as tropical cyclone, droughts, and torrential rainfall.

Figure 10 Kava cultivation on slope land

RESCCUE Interventions

RESCCUE Project sites in the nine districts were identified through community engagement and consultation with the relevant community members. The key activity was the terrestrial ecological restoration and rehabilitation through the establishment of nine nurseries in the nine districts

Post Tropical Cyclone Keni Restoration Activities

The nursery in Nasegai was not that badly damaged by TC Keni because it was located on a sheltered location. There were some minor damages on few posts, which made the nursery leaning to one side. There was no damage to the green house green shade netting and the nursery is safe with the plants in it. During the assessment visitation, we also planted some of the trees including mangroves.

Both villages of Vunisei and Mataso managed to take the greenhouse netting down before the cyclone so it was not damaged. Even the potted seedlings, were still intact. The RESCCUE team managed to re-install back the two nurseries from those villages before restocking it with the available species on site. However, after consultations with headman, the RESCCUE team with the community members reduced the size of the nurseries to meet their current need.

In Naqalotu, the nursery was completely destroyed with the seedlings. There were some coastal rehabilitation activity conducted with the planting of coastal tree species. Most of the planted trees and mangrove seedlings along the village coast were destroyed by tidal waves.

Below in Table 3, shows the tree species and the numbers that have been planted post TC Keni.

Table 3 key plant species that have been nurtured in the nurseries in most the nurseries in Kadavu

Plant species	**Scientific Names**	**Number planted**
Sekoula	*Caesalpiniaceae*	5
Vesi Wai	*Intsia bijuga*	43
Cumquat	*fortunella*	1
Sour soup	*Annona muricata*	3
Tavola	*Terminalia catappa*	2
Vetiver	*Chrysopogon zizanioides*	15
Mangroves	*Rhizophoraceae*	801

Figure 11 Nursery in Nasegai after some minor work that has been done to it after TC Keni

Figure 12 Post TC Keni mangrove seedlings planted in a protected area

Figure 13 Post TC Winston Vetiver grass planting to support coastal rehabilitation

Results and Achievements

As in the case of post TC Winston in Ra, the communities in Kadavu were very keen and passionate to participate in rehabilitation of their coastal areas. The eastern and southern side of the island experienced the brunt of TC Keni. Storm surges caused most the damages. Villages which were not sheltered from coastal vegetation such as mangroves were hit the hardest.

Opportunities, limits and lessons learned

It is important to do most of the planting in terms of terrestrial and coastal plants restoration early in non-cyclone season that is between April and October. Including species of high value to communities is important. This would help their commitment in monitoring seedling and the general maintenance of nurseries.

3.3. Locally managed marine and freshwater areas

3.3.1. Ra Province Locally managed freshwater areas

Underlying Issues and Problems

The communities have not perceived freshwater conservation as a major contributor to the sustainability of the broader freshwater ecosystem and its important role in supporting the health of coastal ecosystems. The key issues related to freshwater system is development initiative in the waterways mainly gravel extraction, riverbank erosion due to the depleting of riparian vegetation and flash flooding as well as the disposal of domestic solid and liquid waste into the water ways.

Figure 14 landslide and soil erosion near the village from flood waters during a prolonged period of rain

RESCCUE Intervention

In terms of riverbank erosion, the following were the key activities that were implemented:

- Planting of vetiver grass, pineapple and native tree seedlings;
- Awareness raising through informal discussions with communities on the need to improve the management of their freshwater resources;
- Mapping of the current activity areas so it can assist the communities in identifying the areas they need to protect as well as places they can cultivate or use for their subsistence and economic livelihood; and
- Implementation of activities outlined on their village management plans that would enhance the sustainable management of their freshwater resources.


Figure 15 Planting of vetiver grass and native seedlings

Table 4 Tree species planted for land restoration and soil conservation

Tree Seedling Species **Native names**	**Common names**	**Number of seedlings supplied**
Vesi	*Intsia Bijuga*	18
Marasa	*Elattostachys falcata*	58
Damanu	*Calophyllum vitiensis*	20
Laubu	*Garcinia myrtifolia*	21
Doi	*Alphitonia zizyphoides*	20
Kau ceuti		20
Vesi wai	*Pongamia pinnata*	20
Dakua	*Agathis macrophylla*	233
Kauvula	*Endospermum macrophylum*	48
Dilo	*Calophyllum inophyllum*	153
Cibicibi	*Cynometra falcata*	5
Kaukauloa	*Diospyros major*	12
Sosape	*Annona muricata*	53
Tavola	*Terminalia catappa*	200
Total seedlings supplied		881

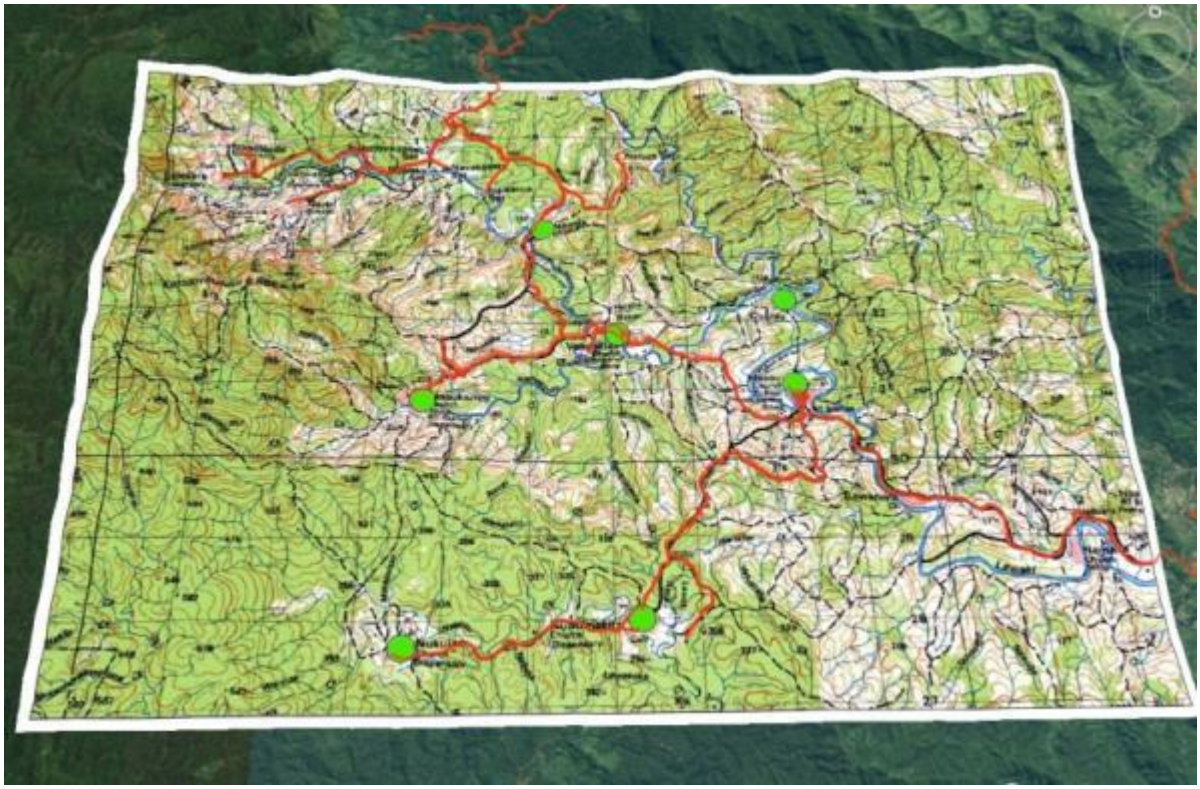

Figure 16 map of the hot spots for the freshwater resources

Results and Achievements

The vetiver grass planting activity was successful in the sense that the community members were extremely keen to be involved in the planting. Vetiver is an exotic plant and normally they do not plant it. The awareness on the conservation properties of vetiver and practical training on the planting really helped and motivated the community to appreciate conservation attributes of vetiver.

Key output(s) and contribution(s) to expected outcomes

The areas that were planted with vetiver and other native species helped the stabilization of the soil structure. Information on the role of vetiver and native species in riparian rehabilitation was shared through the social networks.

Opportunities, limits and lessons learned

Due to the limited knowledge of specific ecological traits of many of our native freshwater fish species, it is a costly exercise to culture many of these species for economic purposes. Culture of these species will be dependent on wild capture-based fisheries for grow-out.

Tilapia with its dominance and abundance in most of the creeks and rivers is the current go-to species for many of rural Ra inland communities as their source of freshwater ecosystem cash income.

Tilapia has established itself in the waterways in Ra and many parts of Fiji. To control Tilapia population it is important to have proper incentives to enhance its commercialization such as

providing market accessibility to main urban centers in the Western division and improve its value chain. Advocate the development of the aquaculture industry specifically Tilapia pond farms in these interior areas in the province. This is possible given that the Ministry of Fisheries has the knowhow and technology.

Soil erosion is a major challenge in nearly all of the communities of in the upper and middle catchment in Ra. Adaptation option such as the relocation of houses in more secure areas away from the river is one of the solutions. Communities in these flood prone areas have been contemplating this option since TC Winston and the huge flood they experienced in May 2018.

The current ecosystem based erosion protection measure such as the planting of vetiver grass and other native species need to focus on areas, which are just starting to experience erosion, rather than areas that are already degraded or have steep slopes with an unstable soil structure.

Furthermore, other factors that the communities are concerned about in terms of the relocation are the availability and accessibility of potable drinking water, access to roads and their farming areas. So the key lesson is the importance of identifying a site for relocation that has accessibility to water, transport, farming areas, market and health centers or hospital.

3.3.2. Kadavu Province - Locally managed marine areas

Underlying Issues and Problems

There was a need to train community members who have not been involved in any of the previous biological monitoring trainings so that they be empowered to assess the productivity of their MPA(s). The other major concern is that those who have been trained have not been consistently monitoring their respective MPA sites.

One of the key issues was the need for Fisheries department representatives to update community members on new information on laws and policies that govern the management of marine resources. Part of this process is the clarification of fishing administrative issues that are problematic to community members.

RESCCUE Interventions

A marine biological monitoring training was conducted to train community members who are interested in monitoring the status of the marine resources in their fishing ground. This was different from the previous training because only those community members that were keen and willing to consistently carry out the monitoring were trained. Community reps from the southern tip of Kadavu attended the training in Levuka village, Nabukelevu district and those who came from the northern part of the island attended the training in Vabea village in the district of Ono.

Results and Achievements

Participants learnt useful lessons regarding ridge to reef connection and its management. Overall, they were satisfied with the training. Participants were requested a review of the progress of their monitoring to ensure sustainability.

Key output(s) and contribution(s) to expected outcomes

There were 30 participants attending the training. About 50% were women. This is important because they are the first educators of the young and more importantly they are the ones that manage the daily household food supply and other important family chores.

Opportunities, limits and lessons learned

More involvement or participation of women in marine management monitoring would be an impetus to their respective husbands, brothers and other male relatives to sustain the monitoring practices.

More community members could play a more active role in policing the no-take zone within their iqoliqoli. Communities are able to understand and comply to provisions and regulations in the Fisheries, Land Improvement, Environmental Management and Forestry Acts if they want their catchment and coastal management strategies to be effective.

3.4. Sustainable farming practices

3.4.1. Underlying issues and problems

Land degradation caused by mono-cropping cultivation such as sugarcane plantation on steep land areas is irreversible. The lack of proper land-use planning and regulations together with the lack of arable land has led to the loss of forest cover and forest degradation as farmers cultivate steep slopes. Productivity in slope lands has decreased significantly due to soil loss. At the same time, lack and absence of sustainable farming techniques has resulted in depleted soils as the use of chemical fertilizers continues to increase. Slash and burn land preparation expose and degrade soil structures.

During 2014-2015 there was poor beef production due to poor pastures resulting to a significant decline in productivity per head and per hectare. "Mission Grass" (*Pennisetem polystachon*) and Nadi Blue Grass (*Dicanthium caricosum*) dominate dry zone pastures. This exacerbated weed infestation in paddocks resulted in the reduction of grazing areas. Stray cattle from the farm caused significant damage to the adjacent vegetables and cane farms, which resulted in the Yaqara Pastoral Company Ltd. compensating 109 farmers from $100.00 to $11,000.00 (Delaibatiki, 2016).

3.4.2. RESCCUE Interventions

Tokaimalo Methodist Site

This site is around 3 hectares and is located along the main Tokaimalo road and adjacent to the headwater of Barotu creek. On flat areas along the flood plain was the former sugarcane plantation now abandoned due to high cost of transporting cane to the now closed Penang Mill. The African Tulip (*Spathodea campanulata*) trees dominated the landscape along the slopes together with rain trees (*Samanea saman*). The site had plantain or vudi (*Musa sp.*) and banana trees (*Musa paradisiaca*) remnants from former subsistence plantation.

Navunibitu Catholic Site

The site is slightly larger than the Tokaimalo site at around 5 hectares and located inland from the St. Francis College behind the current Catholic church building. The flat arable areas are covered in paragrass (*Brachiaria mu*tica) and currently has small commercial Hawaiian pawpaw variety (*Carica papaya*) and yam farm currently managed by the resident catholic priest. The sloppy areas are infested with African tulip trees and very old coconut trees (*Cocos nucifera*) that are still recovering from TC Winston. Work on site preparation has been completed in August 2018.

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Figure 17 Site preparation and the planting of taro at the Tokaimalo Model farm

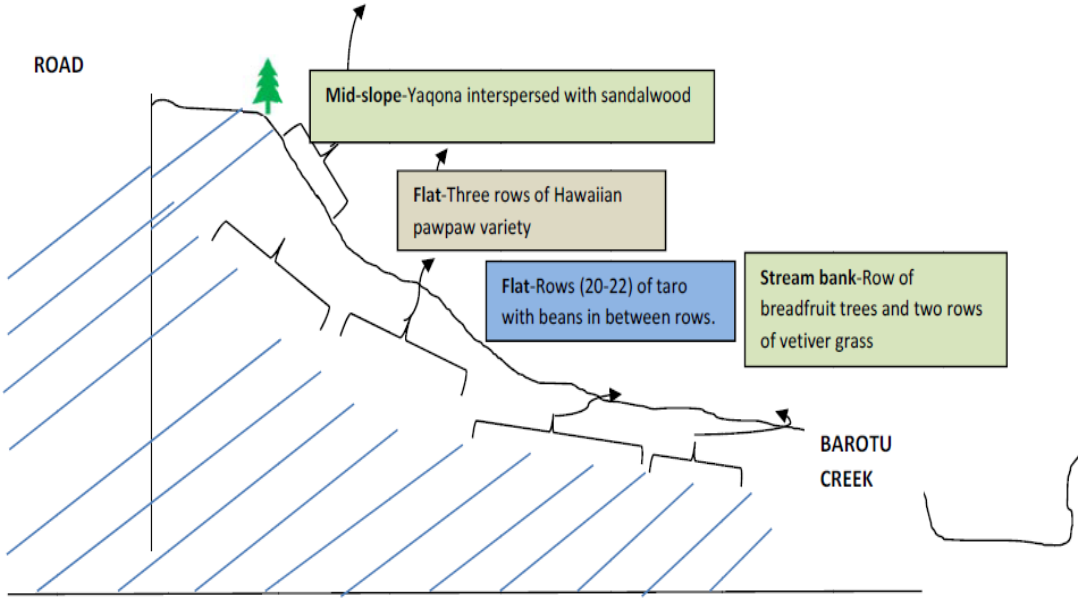
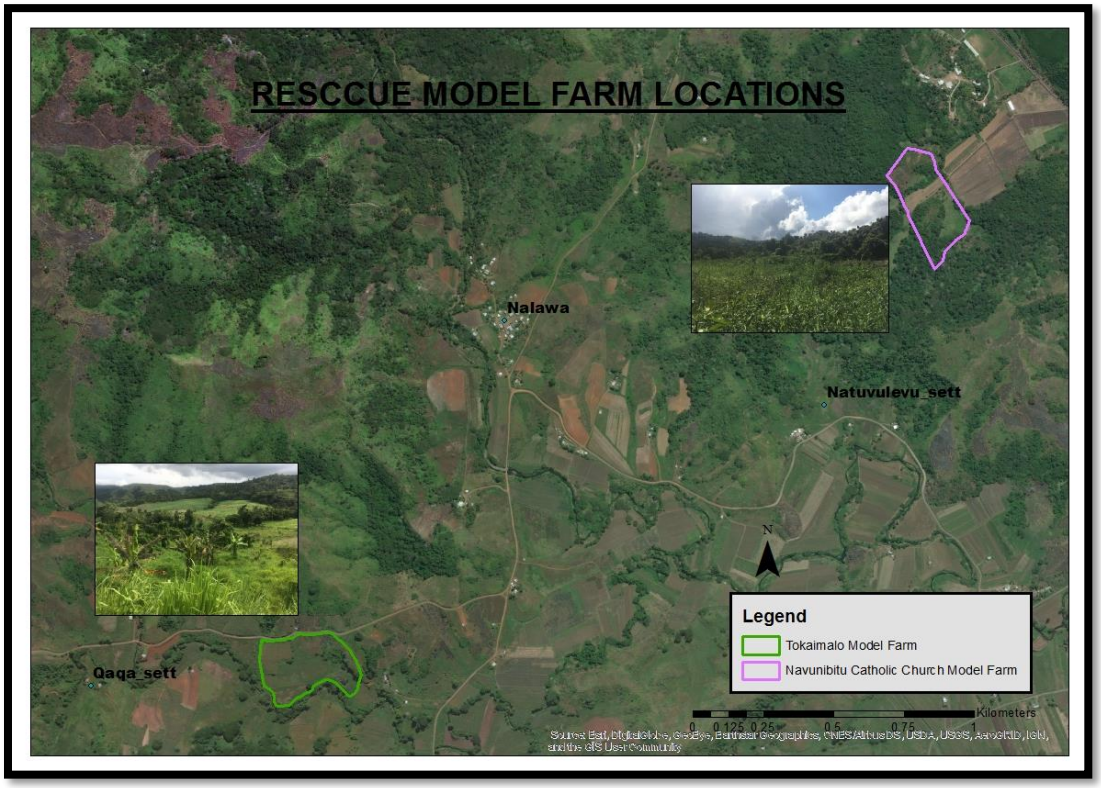


*Figure 18 C*ross-section of the Tokaimalo Model Farm

A total of 10 coils of 25kg barbed wire fence were delivered to our community in Narara Village. A further request came from our community in Drana Village and another 10 coils of barbed wired fence was delivered to them for their community cattle fencing project in their existing reforestation plots.

3.4.3. Results and Achievements



3.4.4. Key output(s) and contribution(s) to expected outcomes

The community particularly the capacity and skill set of youth were strengthened through on-field training in applying agroforestry techniques.

3.4.5. Opportunities, limits and lessons learned

The conversion of an abandoned farm area to establish a sustainable form of farming is an eye opener to community members of how their land can be utilized sustainably even those pieces of land that seem “marginal”.

Fencing materials to keep the cattle in a controlled environment helped not only the farmers from having cattle rampaging over their cultivated cropland but also a means to keep the grassland less susceptible to bush fire.

3.5. Waste and waste water management

3.5.1. Ra Waste and waste water management

Underlying issues and problems

The key issues on waste in Ra is the village boundaries do not have the jurisdiction of the local authority to regularly collect its rubbish. This is actually the case for all formal iTaukei villages. Rubbish are left for the villages to manage. In most incidence they do not have a clear knowledge of the impact of the various solid waste on their health and the environment. Most dispose their rubbish along river banks or along the shoreline. This is due to lack of knowledge in managing solid waste.

Prior to TC Winston, the main source of liquid waste in Rakiraki river was from the Penang sugar mill. The mill was damaged quite badly from TC Winston and the government had no other option but to close it down indefinitely. This was blessing in disguise given the problem of the waste water from mill of the freshwater resources and the communities living along the river bank.

RESCCUE Interventions

Constructions of solid waste management system

Generally, there were five incinerators constructed in those villages with two in Namarai and Navuniivi and one in Nanukuloa. Namarai and Navuniivi did not have any forms of proper solid waste management in place while Nanukuloa has two existing incinerators.

The team was able to assist on the construction of compost in Nanukuloa and incinerator in Namarai. Unfortunately, we did not attend the construction of incinerator in Nanukuloa due to unfavorable weather conditions. With great confidence, Nanukuloa village headman highlighted that they will build the incinerator once the weather is clear and community is available.

The incinerator design was adopted from an existing one established at the Ra Provincial Office. Its measurement was standardize to all sites with 1200 x 800 x 1500 mm (L x W x H). The site for incinerator was chosen based on the following conditions: how protected it is from the potential impact of extreme weather events, accessibility to transport services, whether it poses potential health risk issues and aesthetic of villages.

Figure 19 Incinerator building – Namarai Village

Compost set-up – Nanukuloa Village

A pilot compost design was constructed in Nanukuloa Village. The initiative was focusing on household level. The arrangement was to make it easier for them to use their green waste hence discouraging its improper disposal. Given the availability of small vegetable garden next to their household, this initiative would be very useful in terms of natural manure to the garden. Some households have shown interest in building compost where the supplied materials would be used.

The arrangement has been made in which a few other household would be consulted (during village meetings) first before further distribution be made.

Figure 20 Pilot compost in Nanukuloa Village

In Nanukuloa village, we have noted some existing compost being utilized – showing good indication of project effectiveness. Unfortunately, there were mixed rubbish (plastic bottles and food wrappers) being disposed on the existing compost (Figure 18B). This somehow depletes the whole purpose of composting initiatives. Conducing proper waste segregation at the household level is critical to ensure that rubbish are disposed of at correct places. The project participations and involvement of community with frequent follow-up was very critical on this matter. This will potentially build a strong foundation of project ownership and sustainability. Meanwhile, we have also suggested the use of signboard to raise awareness to community on the importance of waste segregation.

Several community members with the assistance of the RESCCUE team cleaned the old two incinerators. While doing the cleaning, the team noticed that the rubbish was there for the past few years. This is something that the RESCCUE team emphasized to the community members of how critical to conduct a regular clean up in order to ensuring that incinerator will continue to operate efficiently.

Figure 21 Maintenance of existing waste management system

In terms of liquid waste previous RESCCUE waste consultations identified the importance of planting this nutrient consuming plants. The idea behind this activity was to minimize the impacts of wastewater discharges to the waterways that villagers use for fishing, washing or bathing. A common

practice is to plant dalo plants in the village drainage system and by default this is one natural way that grey wastewater is "treated" before it goes into the creeks or rivers and down to coastal areas. Communities plant taro merely for their home consumption. One of the liquid waste project sites, Nabukadra village, *Scleria cubensis* as illustrated in Figure 22 was planted to mitigate the impact of nutrients and pathogens in water ways as well with village drainage system.

Figure 22 *Scleria cubensis* nutrient consumed plant

Although, some community members were still not very much active on implementing wastewater management activities in their respective homes they were committed to better manage their solid waste but making their compost rubbish pits and taking the appropriate rubbish to the village incinerator to be burnt and items such plastic bottles and bags reused.

Results and achievements

Few of the waste project sites have continued the initiative through incorporating and mainstreaming their waste management activities into village plan. For instance, both Navuniivi and Nabukadra practiced the use of allocated bins for different waste types (waste segregation) at household level. This is now a village policy. In Nanukuloa the villagers themselves set-up their own compost system.

Key output(s) and contribution(s) to expected outcomes

Sites	**Expected ground key indicators**	
	Composts	**Incinerators**
Namarai	5	2
Nanukuloa	10	1
Navuniivi	5	2
Total # of project activity output	20	5

Opportunities, limits and lessons learned

One thing that sets this project apart was the active participation of communities. They were involved in all of the on-ground waste management activities. For example, the IAS-USP team assisted the people of Namarai to construct one incinerator as a pilot. The community constructed the second incinerator by themselves during village communally working day.

There is a real need for the relevant technical personnel in this case the Health Inspector to conduct frequent follow-up to the community just in case the community have issues or problems that they are struggling to resolve. This will also enhance project sustainability at community level.

3.5.2. Kadavu Waste and waste water management

Underlying issues and problems

This issue on waste management in Kadavu was highlighted during the ICM consultation process. The magnitude of the problem of waste was not fully captured during the initial RESCCUE diagnosis.

RESCCUE Interventions

It became apparent that this issue needed to be addressed. Unlike in Ra Province the basic step of raising awareness and the development of community based action plans specifically on the management of waste, conservation of water and other issue such as managing stray livestock were the priorities in Kadavu.

Figure 24 Community engagement and development of action plans

Figure 23 Sketch map of the water source. The water issues facing this community is mainly due to the damaged pipelines and adverse weather conditions

Figure 26 Sketch map of waste and waste-water hotspots. They have also identified locations for rubbish pits and incinerators

Figure 25 Sketch map of livestock hotspots. They have also identified locations for animal fencing

Results and achievements

The main achievement was the development of action plans. This is in line with the manner the ICM Plan was developed. Such village action plan provides a clear and efficient means of how communities can manage their water, waste and other issues such as livestock.

Key output(s) and contribution(s) to expected outcomes

The development of the community waste management plan is a key output. The communities are in the process of putting the community waste management plan in their respective community hall.

Opportunities, limits and lessons learned

Waste is part of people's life. The waste management activities allowed the communities to see that there are proper ways to dispose or reuse or recycle their waste; However, some of the solid waste is problematic to dispose in isolated areas such as Kadavu or the interior of areas of Ra and these are solar batteries, plastic bags and liquid waste such engine oil.

3.6. Innovative economic and financial mechanisms

3.6.1. Underlying Issues and problems

In Ra gravel extraction, burning, marine poaching, freshwater destructive fishing methods, community waste management, unsustainable farming practices, the Vatu-i-Ra conservation park and black sand mining are the eight environmental issues identified in the Ra ICM Plan. Of these burning, unsustainable farming practices, the Vatu-i-Ra Conservation Park and black sand mining are the issues that appear most suited to use financial/economic mechanisms to support their management. Some of these are more immediate options for establishing financial or economic instruments while others are options potentially available in the longer term.

In Kadavu as similar to Ra burning, unsustainable farming practices and tourism would be suited to use of financial/economic mechanisms to support the management of natural resource and assist in any climate change adaption and resilience activities.

3.6.2. RESCCUE Interventions

For sustainable financing, a comprehensive review was undertaken by RESCCUE primarily through Landcare New Zealand to tease out the pros and cons of the various financial mechanisms that have been applied to conservation initiatives in Fiji and in the region. A number of Key Informant Interviews were conducted to ascertain the most practical and appropriate option.

Kadavu: Initiated the establishment of organic certification for the whole island

- Explored a number of different mechanisms. Most were not feasible as they relied on tourists or industry but there are not a high volume of tourists to Kadavu or significant industry to pay for ecological restoration.
- Organic production was promising and in the feasibility assessment we identified the key challenges to becoming organic, including the risks associated with organic yaqona which is by far the biggest commercial crop on Kadavu
- Numerous community meetings were held to determine the willingness of islanders to go through the process of being certified and to get buy in for the process
- Liaised with BioGro and Organic Pasika to understand the certification process (and issues they may have with organic yaqona

3.6.3. Results and achievements

In Ra, the most promising mechanism was the voluntary contribution scheme for the proposed Vatu-i-Ra Conservation Park, where communities created a permanent no-take area and dive operators contributed to the proposed Conservation Park and community development. The main driver for this sustainable financial mechanism scheme was the high level of interest shown by the community members and the seeming willingness of most dive operations to be part of it.

In Kadavu the economic study and the participatory ecosystem services assessment provided the necessary information of what would be the most applicable sustainable financial mechanism scheme. Going organic was one of the agreed resolutions at the Kadavu Provincial Council meeting in 2016. The underlying factor for Kadavu going organic amongst the council members was because of the high premium price of organically certified products in the international market. Kava has been the main agricultural product that most people in Kadavu were economically benefiting from by marketing it domestically and exporting it abroad.

The organic certification process typically takes three years and requires buy-in from all communities (farmers) for an island certification. Significant engagement is required at the district and community levels to inform farmers of the steps that are needed to achieve certification. The Kadavu organic committee was established to progress the organic certification process. They have formulated an engagement plan which is being carried out and is creating farmer groups/committees to get ready for certification.

3.6.4. Key output(s) and contribution(s) to expected outcomes

In Ra one of the key outputs is the establishment of the Voluntary Trust Fund along with the diving fee. This is the most practical legal option. This will be an important contribution to the limited number of sustainable financing mechanisms that support conservation.

Kadavu organic island initiative is the only option identified through the review. The organic certification process typically takes three years and requires buy-in from all communities (farmers) for an island certification. Significant engagement is required at the district and community levels to inform farmers of the steps that are needed to achieve certification.

The Kadavu Kava Farmers Association organic committees was formed at village level. Organic Pasifkica used these groups for self-compliance. These are all key steps in the process to be certified organic.

3.6.5. Opportunities, limits and lessons learned

The Voluntary Trust Fund works in an economic and social setting such as Vatu-i-Ra Conservation Park where there are resorts with tourists who benefit from its aesthetic and recreationally values makes it financially viable.

However, Voluntary Trust Fund scheme may not work in other areas in Fiji where the institutional structure and economic driver for it does not exist at all for example Kadavu.

Communication and engagement around organic certification is challenging in places like Kadavu where transport cost is very high and physically difficult. Having local champions for the initiative is crucial and it is important that at least some of these local champions are spending time in community as part of their normal job.

The other major factor is Island-wide certification at the provincial level takes time to achieve the buy in from all communities compared to just an island in one province such as Cicia island in the Lau Group. Being less ambitious around whole island certification and focusing on some of the districts or/communities that are more willing to pursue organic certification makes it easier to get the necessary systems in place, tested and refined.

With kava as the key commodity to be certified as organic, the potential negative health impacts of yaqona made it challenging to explore organic certification for entry into some markets (e.g. US where kava demand is quite high).

Therefore, engaging the community to diversify their commercial production beyond kava is to enable a wider range of organic products was undertaken.

Intercropping of commercial crops would be improve the resilience capacity of crop production and reliance on just one crop where disease, climate, etc. could damage all crops at the same time.

3.7. Use of economic analysis

3.7.1. Underlying Issues and problems

Ecosystems provide many benefits for communities, many of which are taken for granted and are not recognized until these ecosystems have been removed or damaged. To neutralize these threats to the ecosystems is becoming increasingly important. Therefore, one of the ways to educate and convince policy makers at local and national level is to provide the net economic benefit of the protection or the various subsistence and monetary use of the resources in an ecosystem or the ecosystem itself.

3.7.2. RESCCUE Interventions

The economic approaches and analyses were undertaken for the following reasons.

- Survey communities to determine, among other things, commercial crops grown, yields of these crops, price gotten when selling the crops and who they sold the crop to. These surveys also identified that fishing, though it was believed to be a major source of commercial sales, was indeed relatively small. Other potential constraints and production options were also asked.
- Ecosystem services assessments was conducted to identify the key risks and opportunities in terms of ecosystem services flows. This was to explore what a financial instrument could be based on.
- Cost-benefit analysis of organic kava identified the range of costs to become and maintain organic certification and the benefits (i.e. expected revenue).

3.7.3. Results and achievements

The survey was successful with detailed information on production levels and production practices on which to base the certification programme. Kadavu organic committee was established.

Growing yaqona is the main commercial activity for most households in all the villages in the eight surveyed districts. There are relatively small shares of individuals working for wages or in self-employment which are indicative of the limited opportunities for income generation outside of leveraging natural resources.

The main risks related to the economic and social livelihood based on the economic study were:

- Dependence on yaqona;
- Little income diversification;
- Fisheries are available as an alternative source of income, but the status of fisheries is not very clear given there has been poor fisheries stock time series data collected in the past.

Risks related to the biophysical environment:

- Migration to the coast has facilitated transport, but has increased vulnerability to coastal disasters and impacts of climate change such as sea-level rise;

- Erosion and subsequent environmental issues associated with developing a road network;
- Indiscriminate burning is a major threat to biodiversity.

The main benefits and issues from the ecosystem services were:

- The arable land that is available for cultivating crops;
- Availability of grassland for livestock husbandry;
- Herbal medicines from the forest areas and home gardens;
- Wild food in the marine areas and forest land as a food security source;
- There are no major development activities causing air pollution and the air quality is clean;
- Climate regulation has not significantly changed but there are occasional incidence of king tides and storm surges;
- Water availability and accessibility is a concern to some communities due to poor water system and contamination of drinking water due to animal faeces in the water sources and from agricultural run –off;
- Erosion control measures mainly ecosystem based such mangroves and riparian vegetation but agriculture activities on steep slopes is causing severe erosion in some communities;
- Biological control has been identified as ecosystem services specifically snakes which have been controlling the rat population in the island;
- Pollination from bees has been beneficial economically as well as nutritionally. Beehives have been source of economic livelihood to some families. Nutritional benefit, specifically there are a lot edible fruit trees bearing fruits;

3.7.4. Key output(s) and contribution(s) to expected outcomes

Marine Protected Areas (LMMA) specifically "no-take" zones

- There has been dedicated boat for policing of "no-take zone" in the respective LMMA and in early November 2018 the Naqoro passage in Nakasaleka has been gazetted as marine protected area or a permanent no-take zone.

Erosion control

- Vetiver grass has been planted to mitigate land-based erosion on slopes. Coastal trees such as *Barringtonia asiatica* has been planted for coastal land erosion. Indigenous tree species such as vesi and dakua as well fruit trees such as dawa has been planted in forested land that have been experiencing soil erosion.

Coastal protection

- Replanting of mangroves has been the main ecosystem based approach for coastal protection.

3.7.5. Opportunities, limits and lessons learned

With the increase in kava cultivation more land have been cleared. Thus, it is important that agroforestry practices and soil conservation measures are applied. Traditional subsistence agricultural practices have been using agroforestry methods. This traditional agricultural practice needs to be revived and to incorporate soil conservation measures such as intercropping of vetiver, pineapple with commercial crops such as kava

4. CROSS-CUTTING LEARNING THEMES

4.1. Support to public policies

RESCCUE interventions specifically the development of ICM plans and their on-ground implementation is clearly fulfilling the Fiji National ICM framework and related legislation and policies namely the Environment Management Act, Climate Change Policy, Fisheries Policy, Rural Land Use Policy, National Biodiversity Strategy and Action Plan, Forestry Decree and Fiji National Solid Waste Management Strategy

Main policies/strategies supported	**Relevant project activities**	**Comments**
Environment Management Act	Development of the ICM plans of Ra and Kadavu. EIA work specifically on training key stakeholders on EIA process in Ra and Kadavu	Communities have the means to deal effectively and appropriately with modern development in their coastal areas. RESCCUE has been very effective in addressing the importance at the community most of whom are resource owners. The EIA training contributed enormously to communities' knowledge on the institutional means to mitigate and even avoid the negative impacts of development on the environment.
Climate Change Policy	Planting mangroves and coastal tree species Conducting Vulnerability Rapid Assessment	This planting is to protect the coastal communities from strong storm surges and to prevent extensive coastal erosion. The application of ecosystem based management approaches as a climate change adaptation measure reinforces of the importance the protection other mangrove systems in the country.
Fisheries Act	Refresher training on the biological monitoring of no-take zones in LMMA sites in Kadavu. Establishment of the Trust Fund and voluntary diving fee in Vatu-i-Ra as a means to sustainably manage the MPA Establishment of freshwater protected areas (similar to MPA)	This needs to be done on a regular basis so the new / younger people are trained to sustain monitoring work Hence, reviving LMMA biological monitoring work supports the surveillance component of the Act in relation to MPAs. More importantly, the customary fishing owners are involved in this work. In addition, the marine biological monitoring training is one of the key prerequisites for selecting community reps to be trained Fisher Wardens.

Main policies/strategies supported	Relevant project activities	Comments
		Sustainable financing is critical for the management of ecological restoration, conservation and climate change adaptation Communities cultural no-take zones in freshwater areas now being officially recognized at the Provincial and National government level.
National Biological Diversity Strategy and Action Plan	Supporting the protection of the four endemic endangered birds only found in Ului-Nabukelevu (Mount Washington, Kadavu) through capacity building.	Species conservation normally has far greater positive impact ecologically. This is evident in the healthy marine life (sea grapes thriving in Figure 27) The consultation with the 10 sub-clans who are the landowners of the Important Bird Area (IBA) in Nabukelevu is fulfilling the National Biodiversity Strategy and Action Plan and that is the active involvement of the landowners in any of the Biodiversity conservation initiative on native land. Unfortunately, IBA status does not provide legal protection so there is a need to have a proper legislation process to legalize IBA. A possible pathway for the IBA sites to be legally declared as a Protected Area is through the Protected and Endangered Species Act of 2002.
Rural Land Use Policy 2006	Agroforestry model in Ra is a way to illustrate sustainable agriculture activity and the organic island initiative in Kadavu. Hence, the planting of Vetiver is putting this policy into action.	This is an effective means of educating rural communities. Learning by doing is an extremely effective learning tool.
Forest Decree	Protection of forests resources and maintaining the ecological integrity, together with values such as water supply. RESCCUE terrestrial resource management	The reforestation activities improved the community knowledge of the ecological and physical importance of forest and its connectivity to the water

Main policies/strategies supported	Relevant project activities	Comments
	focusing on reforestation of native species	sources, freshwater system and coastal ecosystem. In addition, the reforestation activity is supporting the forest rehabilitation component in the decree. Similarly the establishment of the community based protected forest area in Ra is aligned with initiative in the decree to establish forest reserve and forest protected areas.
Fiji National Solid Waste Management Strategy	Solid and liquid waste management in Ra and Kadavu.	This is a community based approach using participatory process which mobilize the communities in Ra and Kadavu to develop and implement their water management plan is directly supporting the "Awareness" and "Capacity Building" section in the Fiji National Solid Waste Management Strategy. It is very applicable given there is no municipal regular collection.
Post- TC Winston National Needs Assessment	All RESCCUE activities relate to ecosystem-based adaptation and contributed to post-TC Winston recovery	After TC Winston hit Ra in 2016, all project activities in this Province were put on hold. When the Post Disaster Needs Assessment was released, the RESCCUE Fiji National Steering Committee reviewed planned activities and decided that all of them were consistent with the needs assessment and contributed to the recovery plan implementation.

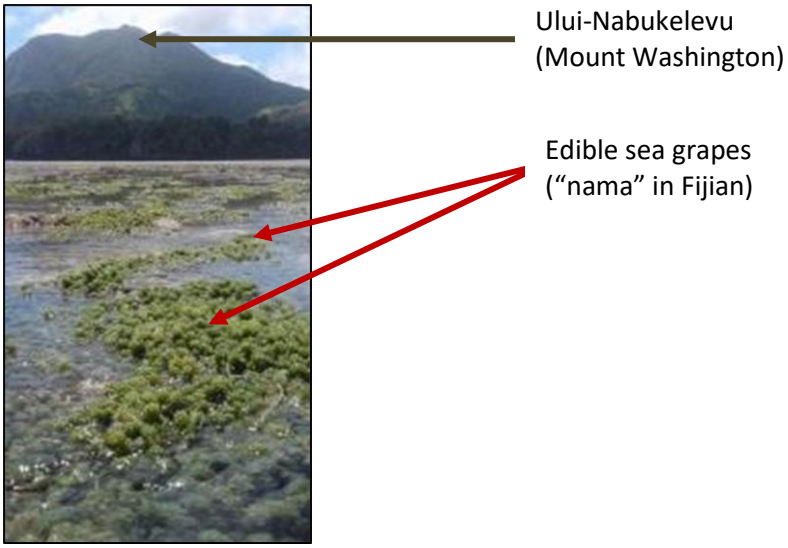


Figure 27 Edible sea grapes near Ului-Nabukelevu

4.2. Public participation

In terms of the implementation of the ICM activities, relevant stakeholders were consulted and in most cases, they end up either directly or indirectly involved. Use of participatory process in villages established a space where the common people can share their views openly with their respective chiefs and traditional leaders.

The status update of RESCCUE activities has been presented at the Fiji National ICM Committee meetings and National Environment Council meetings. These two national committees have representatives from other agencies who share their views as well as provide their input on the RESCCUE work.

4.3. Knowledge and capacity building

The implementation of the on-ground ICM activities was one of the main mode of building the capacity and knowledge of community members through learning-by-doing. In terms of developing knowledge on environmental management, the EIA trainings that were held in Ra and Kadavu proved to be very effective. People now have a clear understanding who and how to report the environmental and social impacts of development that is affecting them. In Kadavu communities have formally written to the Department of Environment on the negative impact of road construction along their coastline. In Ra communities reported the illegal gravel extraction along their river. A mix of classroom sessions and field visits were effective means to pass on knowledge and empower the communities.

4.4. Gender and youth mainstreaming

In all workshops or community consultation meetings, women have been requested and urged to attend. In ensuring the participation of women, the RESCCUE team follows the traditional protocol and that is to meet with the chief of the village and sought his approval.

The youth do participate in workshops as well and more so in field activities such as replanting activities, establishing nurseries and marine biological monitoring. Monitoring the growth of coastal plants in villages has been the role of women. This is because they spend most the time at home and attending to their household chores..

5. RESOURCES FOR MONITORING AND EVALUATION

5.1. Final reporting on the pilot sites log frame indicators

Based on updated Ra log frame (Annex 2) the following are the key highlights:

- 60% of activities in the ICM Plan that are ACC-explicit were achieved. 70% of activities in ICM plan adopted.
- 10% of activities specified in the ICM Plan have been successfully executed at the beginning, 30% by mid-term and at least 60% by the end of RESCCUE. Meetings were held at least on quarterly basis.
- 80% of the planned actions in ICM plan address the key issues.
- 90% of the issues and planned activities in the diagnosis have been implemented despite the damages caused by TC Winston.
- Enforcement procedures and process of village by-laws is provincially and nationally endorsed that ensure sustainable use of marine resources, protection of ecosystem services that is vital for community livelihood and enhances their resilience to the impacts of climate change.
- 7 out of 10 of the activities planned under the capacity building plan have been achieved.
- Over 200 individuals and 80% of key community leaders, Ra ICM/YMST members, private sector (e.g. Fiji Sugar Corporation, Resort operators) in 20 districts and key stakeholders have been trained on specific needs related to ICM
- Only about 30% of new or existing local businesses have supported in a way that contributes to more integrated coastal management
- 60% of targeted people and at least 5 organizations have improved capacity following participation.
- 30% of commercial fishers association, 30% commercial agricultural; farmer have been supported.
- Only 2 local businesses increased involvement in ICM.
- Only 40 % of Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses.
- At least two economic analyses effectively used in support of ICM.
- An extended cost-benefit with the inclusion of both negative and positive externalities suggests that ratio is positive and probably greater than 1.
- Feasibility of 4 new economic and financial mechanisms has been studied.
- existing economic and financial mechanisms have been reviewed.
- One economic and financial mechanism has been set up (Vatu-i-Ra Trust fund).
- Transaction costs monitored, but no estimate of economic benefits.
- About 40% of those community members involved natural resources based commercial enterprise in Ra have successfully been able to share their experience and expertise to the counterparts in Kadavu
- 4 dissemination activities achieved involving 4 provinces and 2 other RESCCUE countries and territories.
- At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway.
- 100% of regional activities have been built, among other, on pilot sites activities
- 85% of activities in Communication Plan are implemented according to schedule and budget.
- About 70 percent of the stakeholders in the province have fully understood the key outcome of RESCCUE activities.

- The signing and endorsement has been achieved.
- All the meeting resolutions have been endorsed by all
- 100% of national/provincial steering committee members show their appreciation on RESCCUE activities.
- Availability of data for monitoring and evaluation at provincial level has been achieved.

Based on updated Kadavu log frame (Annex 2), following are key highlights.

- Kadavu ICM plan endorsed on 25/09/2018.
- 50% of activities in the ICM Plan are ACC-explicit.
- 50% of activities in ICM plan adopted.
- 20% of activities specified in the ICM Plan have been successfully executed.
- Kadavu ICM/ YMST meetings were held at least on a quarterly basis.
- 60% of the planned actions in ICM plan address the key issues achieved.
- 60% of the issues and planned activities in the diagnosis have been implemented despite the damages caused by TC Keni.
- 2 enforcement procedures and process of village by-laws are provincially and nationally endorsed to ensure sustainable use of marine resources, protection of ecosystem services.
- 5 out of 10 of the activities planned under the capacity building plan are implemented.
- Over 200 individuals and 80% of key community leaders, Kadavu YMST members, private sector (e.g. Resort operators) in nine districts and key stakeholders have been trained on specific needs related to ICM.
- Only about 10% of new or existing local businesses have supported in a way that contributes to more integrated coastal management.
- 60 % of targeted people and at least 5 organizations have improved capacity following participation.
- 30% of commercial fishers association, 30% commercial agricultural; farmer have been supported.
- 1 local business has given its support to the coastal management work.
- Only 2 local business increased involvement in ICM
- 80% of Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses
- Only one economic analyses was effectively used to support ICM
- An extended net-benefit with the inclusion of both negative and positive externalities suggests that ratio is positive and probably greater than 1.
- Feasibility of 4 new economic and financial mechanisms have been studied have been achieved.
- 4 existing economic and financial mechanisms have been reviewed and achieved.
- 1 economic and financial mechanisms is being set up (organic certification).
- About 60% of the natural resources based commercial enterprise based experience and expertise-sharing activities have been achieved.
- 2 methods and experiences are shared over course of project.
- 2 public forums were conducted.
- At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway
- 100% of current RESCCUE regional activities have built, among other, on pilot sites activities
- 85% of activities in Communication Plan are implemented according to schedule and budget.
- About 80 percent of the stakeholders in the province have fully understood the key outcome of RESCCUE activities.

- The Financial and narrative have not always met required deadline for the completion of report and endorsement due to delays from field activities reports
- All reports are submitted in accordance with the required Fiji RESCCUE schedule: partially achieved
- 90% of members attendance has been achieved at each steering committee meetings
- 100% of national/provincial steering committee members show their appreciation on RESCCUE activities
- Availability of data for monitoring and evaluation at provincial level has been achieved

5.2. Vulnerability Reduction Assessment (VRA)

5.2.1. Ra Province

Ra Province VRA Summary

Score: **1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem**	**Score:** **1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem**	**Score** **1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem**	**Score** **1= Not confident;** **2 = Low confident; 3= Moderate; 4= Confident; 5 =Very confident**

Climate Change Impact	**Villages**	**Indicator 1** **What happens when there are extremely high wave incidences? How do these affect you and your community, including the ecosystems on which you rely?**	**Indicator 2** **What would happen if these waves were twice as high? How do these affect you and your community, including the ecosystems on which you rely?**	**Indicator 3** **What stands in the way of adapting to increasing high waves (e.g. king tides)?** **To what extent do you or your community have the means manage these extreme events?**	**Indicator 4** **How confident are you that the improvements in coastal management delivered by the project will continue after it ends?**
Sea Level Rise	**Nabukadra**	**3**	**1**	**3**	**5**
	Nativi Village	**1**	**1**	**1**	**5**
	Nawairuku Village	**NA**	**NA**	**NA**	**NA**
	Rewasa	**2**	**1**	**5**	**5**
	Drauniivi	**2**	**1**	**5**	**5**

Climate Change Impact	Villages	Indicator 1 What Happens when there are extremely drought events?	Indicator 2 What would happen if drought goes for a longer period (e.g. 6>months)?	Indicator 3 What stands in the way of adapting to long period of drought?	Indicator 4 How confident are you that the improvements in water management delivered by the project will continue after it ends?
Drought	Nabukadra	4	2	3	5
	Nativi Village	1	1	1	5
	Nawairuku Village	1	1	1	5
	Rewasa	4	3	4	5
	Drauniivi	NA	NA	NA	NA

Climate Change Impact	Villages	Indicator 1 What Happens when there are continuous coral bleaching?	Indicator 2 What would happen if these coral bleaching affects 50%> of your iqoliqoli reef?	Indicator 3 What stands in the way of adapting to coral bleaching?	Indicator 4 How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?
Ocean Acidification	Nabukadra	3	1	3	5
	Nativi Village	NA	NA	NA	NA
	Nawairuku Village	NA	NA	NA	NA
	Rewasa	NA	NA	NA	NA
	Drauniivi	NA	NA	NA	NA

Climate Change Impact	Villages	Indicator 1 What Happens when there are extreme tropical cyclone incidences?	Indicator 2 What would happen if these tropical cyclones were as twice as strong?	Indicator 3 What stands in the way of adapting to increasing intensity of tropical cyclones?	Indicator 4 How confident are you that the improvements in tropical cyclone disaster management delivered by the project will continue after it ends?
Tropical Cyclone	Nabukadra	1	1	1	5
	Nativi Village	2	1	3	5
	Nawairuku Village	2	1	3	5
	Rewasa	2	1	4	5
	Drauniivi	2	1	4	5

Climate Change Impact	Villages	Indicator 1 What Happens when there are frequent flooding events?	Indicator 2 What would happen if these flooding events occur much more frequent (e.g. 4> times a month)?	Indicator 3 What stands in the way of adapting to flood management?	Indicator 4 How confident are you that the improvements in water management delivered by the project will continue after it ends?
Flooding	Nabukadra	1	1	1	5
	Nativi Village	2	1	3	5
	Nawairuku Village	1	1	1	5
	Rewasa	NA	NA	NA	NA
	Drauniivi	NA	NA	NA	NA

5.2.2. Kadavu Province

Kadavu Province VRA Summary

Score: 1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem	Score: 1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem	Score 1 = Very serious; 2 Serious; 3 = Moderate; 4 = Not so bad; 5 No problem	Score 1= Not confident; 2 = Low confident; 3= Moderate; 4= Confident; 5 =Very confident

Climate Change Impact	Villages	Indicator 1 What happens when there are extremely high wave incidences? How do these affect you and your community, including the ecosystems on which you rely?	Indicator 2 What would happen if these waves were twice as high? How do these affect you and your community, including the ecosystems on which you rely?	Indicator 3 What stands in the way of adapting to increasing high waves (e.g. king tides)? To what extent do you or your community have the means manage these extreme events?	Indicator 4 How confident are you that the improvements in coastal management delivered by the project will continue after it ends?
Sea Level Rise	Matasawalevu	2	1	2	4
	Nabukelevu-i-Ra	2	1	3	5
	Galoa	1	1	3	4

Climate Change Impact	Villages	Indicator 1 What Happens when there are extremely drought events?	Indicator 2 What would happen if drought goes for a longer period (e.g. 6>months)?	Indicator 3 What stands in the way of adapting to long period of drought?	Indicator 4 How confident are you that the improvements in water management delivered by the project will continue after it ends?
Drought	Matasawalevu	2	1	3	4
	Nabukelevu-i-Ra	2	1	4	5
	Galoa	2	1	3	5

Climate Change Impact	Villages	Indicator 1 What Happens when there are continuous coral bleaching?	Indicator 2 What would happen if these coral bleaching affects 50%> of your iqoliqoli reef?	Indicator 3 What stands in the way of adapting to coral bleaching?	Indicator 4 How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?
Ocean Acidification	Matasawalevu	NA	NA	NA	NA
	Nabukelevu-i-Ra	NA	NA	NA	NA
	Galoa	NA	NA	NA	NA

Climate Change Impact	Villages	Indicator 1 What Happens when there are extreme tropical cyclone incidences?	Indicator 2 What would happen if these tropical cyclones were as twice as strong?	Indicator 3 What stands in the way of adapting to increasing intensity of tropical cyclones?	Indicator 4 How confident are you that the improvements in tropical cyclone disaster management delivered by the project will continue after it ends?
Tropical Cyclone	Matasawalevu	1	1	1	5
	Nabukelevu-i-Ra	2	1	4	5
	Galoa	2	1	3	5

Climate Change Impact	Villages	Indicator 1 What Happens when there are frequent flooding events?	Indicator 2 What would happen if these flooding events occur much more frequent (e.g. 4> times a month)?	Indicator 3 What stands in the way of adapting to flood management?	Indicator 4 How confident are you that the improvements in water management delivered by the project will continue after it ends?
Flooding	Matasawalevu	NA	NA	NA	NA

Climate Change Impact	Villages	Indicator 1 What Happens when there are frequent flooding events?	Indicator 2 What would happen if these flooding events occur much more frequent (e.g. 4> times a month)?	Indicator 3 What stands in the way of adapting to flood management?	Indicator 4 How confident are you that the improvements in water management delivered by the project will continue after it ends?
	Nabukelevu-i-Ra	NA	NA	NA	NA
	Galoa	NA	NA	NA	NA

5.3. Partnerships and co-funding

SPREP- PEBACC project has been the key partner in exchange of lessons learnt. The other major initiative in terms in fostering partnership is the Ridge to Reef (R2R) GEF 5 project. There are components within the Ridge to Reef project that are very similar to the RESCCUE approach. The lesson from the development of ICM plans would be used in the development of the catchment management plans which is the main expected output of the R2R

RESCCUE Fiji Co-funding - Summary (Fiji $)

The main sources of these co-funding are

- Department of Environment;
- Ministry of Agriculture;
- Forestry Department;
- Fisheries Department;
- Ra Provincial Office;
- Provincial Administrator – Ra;
- Kadavu Provincial Office;
- Provincial Administrator – Kadavu;
- Kadavu Fisheries Department;
- Kadavu Agriculture Department;
- Kadavu Yaubula Management Support Team;
- SPREP-PEBACC

	Key co-funders	Co-funding amount (Euros)	Comments
Fiji	Department of Environment	6,253.05	Time commitments
	Ministry of Agriculture	2,501.22	Time commitments + coastal & fruit tree seedlings
	Forestry Department	2,292.79	Time commitments + coastal & fruit tree seedlings
	Fisheries Department	2,709.66	Time spent + field project implementation and boat assistance in both provinces
	Ra Provincial Office	2,918.09	Meetings, workshops
	Provincial Administrator – Ra	1,250.61	Time commitments
	Kadavu Provincial Office	2,501.22	Time commitments
	Provincial Administrator - Kadavu	1,459.05	Time commitments
	Vunisea Fisheries Department	1,250.61	Time commitments
	Vunisea Agriculture Department	2,918.09	Time commitments
	Kadavu Yaubula Management Support Team	2,501.22	Time commitments

	Key co-funders	Co-funding amount (Euros)	Comments
	SPREP - PEBACC	25,700.00	Lessons Learn Exchange Initiative Ra- Macuata and .Taveuni - Kadavu
	ADB / CTI	365,000.00	Ra Province ICM plan implementation and monitoring/evaluation. Project implemented by CI. SPC FAME is also involved.
	REDD Strategic Environmental and Social Assessment	10,000.00	CI's Nakauvadra Community-based Reforestation Project as case study for Fiji's REDD+
	Actions Against Desertification (AAD-Project)	212,000.00	CI is currently negotiating award for activities in Ra province to enhance livelihoods interventions established under the Fiji Water project.
	John D. and Catherine T. MacArthur Foundation	19,067.00	Support to WCS Vatu-i-Ra seascape project
	Total	**660,322.61**	

5.4. Issues encountered and steps taken to solve them

Engaging the key government focal point of ICM, Department of Environment has been difficult. This is due to the shortage of staff in their department. The process that has been adopted to address this issue is to provide them with regular RESCCUE updates normally through face-to-face meetings with the Director whenever she had time.

5.5. Viability analysis

The viability analysis is a synthesis of Ra and Kadavu RESCCUE activities.

Activities / outcomes	Viability			
	A Most likely excellent	B Probably good	C Worrying	D Highly unlikely
1. Alternative waste management options		There needs to be a financial innovation to enable the picking and proper disposing of Rubbish		
2. Community and private sector wastewater management			Scientific monitoring to assess the effectiveness of treatment system would be challenging to the community.	
3. Freshwater fishing practices and community-based protected areas in rivers and streams	There is a great potential of roping in other communities residing along the waterways who were not heavily involved in the RESCCUE field activities in the freshwater resources conservation work.			
4. Riparian buffer restoration	The positive impact of RESCCUE Vetiver grass and native tree species planted in areas vulnerable to erosion along riparian areas has the potential to convince other communities			

Activities / outcomes	Viability			
	A Most likely excellent	B Probably good	C Worrying	D Highly unlikely
	in same situation to follow suit.			
5. Community-based MPAs and LMMAs and coastal fisheries enforcement		Communities' respect on Community-based MPAs and LMMAs is enormously improving the fisheries in the inshore areas.		
6. Mangroves rehabilitation and protection	The mangrove planting in Ra and to some extent in Kadavu will be the flagship of other restoration and climate change adaptation initiatives in Fiji.			
7. Erosion-control		Other innovative erosion control approaches need to be applied for land, riverbank and coastal erosion. One that has been applied in Fiji is combining "soft" (ecosystem based) and "hard" coastal / riverbank protection measures such as the use of metro-mattress with the planting of coastal trees within the mattress. This is a hybrid coastal and riverbank protection. In coastal places experiencing regular strong waves the use of boulders would be more		

Activities / outcomes	Viability			
	A Most likely excellent	B Probably good	C Worrying	D Highly unlikely
		appropriate with the planting of appropriate coastal or riparian plants.		
8. Farming practices and cattle ranching			Cattle ranching RESCCUE intervention may not be sustainable in the long-term given that communal cattle pastoral lands has not been economically managed properly.	
9. Reforestation and sustainable agroforestry models		There is great potential on reforestation and agroforestry given the role of forest that communities have witnessed during extreme weather conditions. Communities that reside close to land areas that were degraded suffered more from the impact of these events compared to those that have their forest (in land and coastal forests) still intact. Likewise, agroforestry will not only mitigate erosion but also provide food security to communities during extreme weather events.		

6. RECOMMENDATIONS

Within the two RESCCUE pitot sites (Ra and Kadavu)

i. At the institutional level, the iYaubula Management Support teams which are also the Provincial ICM Committee (in Ra and Kadavu) with the inclusion of a broader stakeholder representation such as the non-itaukei and private sector would need further technical support of the current RESCCUE operator at the minimum over the next two years.
ii. In terms of capacity building, there is a need to have a long-term program in capacity building of communities and technical personnel in line ministries and other provincial statutory bodies based in Ra and Kadavu on the management of the current RESCCUE interventions and its relationship to the impacts of climate change.
iii. The Vatu-i-Ra marine conservation park voluntary payment system is one of proven sustainable financial mechanisms for conservation initiatives. This sustainable financial mechanism could potentially be applied in conservation initiatives that have similar institutional setting with the support of the targeted stakeholders
iv. A more scientifically robust approach is needed for monitoring reforestation, coastal rehabilitation and riparian revegetation initiatives.
v. Having visible and tangible places in the two provinces that have all the information of the Fiji RESCCUE initiative is critical. A one stop-shop such as the "Resource Center" built by RESCCUE in North Efate (Vanuatu) would provide a room where there is on-going public education and awareness. For local and foreign researchers it will be a place where they can access key primary data for their own research or work.

Upscaling

i. The development of the Bua Province ICM Plan is a "spillover effect" of the RESCCUE initiative. In addition, the Macuata province is now in the process of developing an ICM plan.
ii. Lessons learnt can be packaged into a formal training module to assist other provinces in resource management work and adaptation to the impacts of climate change.
iii. Experiences and lessons from on-ground field activities in Ra and Kadavu should be shared to the other provinces.
iv. In provinces where villages and settlements are scattered it would be wise to work first with communities who are most vulnerable to the impacts of climate change.

ANNEX 1 ACTION PLAN ON WATER CONSERVATION, WASTE MANAGEMENT AND LIVESTOCK MANAGEMENT, NASEGAI VILLAGE

Example of an action plan that was developed by Nasegai Community on water conservation, waste management and livestock Management

Table 5 Nasegai Community Water Conservation Management Plan

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
Limited amount of water is flowing through to the village, from their own water source (Water Source (Vakaso ni Wai - Figure 1).	Safe keeping of the water source and sustainable use of drinking water	The sustainable use of drinking water is to be discussed in the village meeting	Community members/villagers	During the village meeting in June, 2018	No
		A general announcement in the village is to be made	Village headman	June, 2018 and ongoing	No
	Replanting of trees beside the water source	To be discussed in the village meeting	Villagers/ community members	June, 2018	No
		Formulate a letter of assistance to the Ministry of Forests for seedlings	Village headman	June, 2018	Seedling costs to be borne by the Ministry of Forests
	Avoid cutting down of trees	To be announced in the village	Village headman	June, 2018 and ongoing	No
	Avoid forest fires	To be announced in the village	Village headman	June, 2018 and ongoing	No
Damaged pipelines within the village needs to be repaired and better water conservation measures adopted	Repair the damaged pipelines in the village and turn off taps that have water running unnecessarily	Water committee to have a discussion on all the water related issues within the village	Chairman of the water committee	June, 2018	No
		The resolution of the water committee is to be brought up to the village meeting and the villagers will decide on fundraising for those items that	Water Committee	June, 2018	Yet to be confirmed

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
		needs repairing			
	The village schedule for opening of water needs to be strictly adhered to and monitored	To be discussed in the village meeting and announced in the village	Village headman and the villagers themselves	June, 2018 and ongoing	No
Water level at the water source seems to be decreasing	To increase the size of the water source	To be discussed in the village meeting and a letter for assistance to be sent to the Water Authority of Fiji	Village headman and the villagers themselves	June, 2018	No
		The village resolutions are to be taken up to the District Meeting	Village Headman	Next District Meeting	No
		The resolutions from the village and district meeting are to be taken up to the provincial council	The District Representative	Next Provincial Council Meeting	Will be needing the financial assistance of relevant government authorities

Table 6 Nasegai Community Waste and Wastewater Management Plan

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
Viral diseases are spread from waste or littering	Place all rubbish in the proper bins	To be discussed in the village meeting	Villagers/ community members	During the village meeting in June 2018 and ongoing	No
		Proper separation of wastes to identify those that are to be burnt, buried or put in compost pits	Individual households	During the village meeting in June 2018 and ongoing	No

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
Littering of the beachfront and marine area	Avoid littering on the beachfront or the shores	The digging up of rubbish pits is to be discussed in the village meeting	Village headman and the villagers/ community members	During the village meeting on June 2018	No
Littering in the village surroundings and shore	Pick up rubbish on the beach periodically	To be discussed in the village meeting and it is to be monitored	Villages/ community members	During the village meeting on June 2018	No
	Place rubbish in the proper bin	Rubbish bins are to be placed in each house and by the roadside	Villages/ community members	During the village meeting on June 2018 and ongoing	No
Cutting down of mangroves	Replanting of mangroves	To be discussed in the village meeting and together they should formulate a letter of assistance to the relevant authorities	Village headman	June, 2018	Replanting of mangroves (seedling) to be sourced from the relevant authorities

Table 7 Nasegai Community Livestock Management Plan

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
Unfenced Livestock's Increase in number of stray dogs.	People should be aware whether they are breeding livestock for commercial or subsistence purposes.	To be discussed in the village meeting and look for ways in which we can minimize the number of household pets like cats and dogs.	Responsibility of those who own household pets.	June 2018	No
		Seek assistance from the relevant authorities in liaising with them in getting these pets licensed.	Village headman	June-August 2018	Price of License.
		The number of households pets in each house	Community Members/Villagers	June, 2018	No

Issues	What Will We Do?	How Will We Do It?	Who Will Do It?	When Will We Do It?	Are There Any Costs?
		needs to be discussed in the village meeting			
Livestock fences are not properly constructed	Livestock for commercial purposes need to be properly fenced	The fencing of these commercial livestock needs to be discussed in the village meeting	Community members and the livestock owners	June, 2018 and ongoing	Cost of fencing and license to be borne by the livestock owners
The village does not have sufficient space for the breeding of commercial livestock	Look for space to breed livestock	Livestock owners need to have a discussion on where they can find sufficient spaces for the livestock	Discussion between the animal/livestock owners, land owners and the head of clans	June, 2018 and ongoing	The leasing of the land and "tabua" or whalestooth to traditionally ask for the land is to be borne by the livestock owner

ANNEX 2 RESCCUE LOGFRAME FOR RA & KADAVU PROVINCES, FIJI

RESCCUE Logframe for Ra Province

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
Outcome 1.1: The pilot sites have ACC-explicit ICM plans and active participatory platforms	1.1.1 Ratio of sites where an ICM plan has been developed	1.1.1 Ra ICM plan developed	1.1.1 Ra ICM finalized by 01/10/2015	1.1.1 Ra ICM plan endorsed by the Ra Provincial Council on October 2017	There are no delays in the Fiji Environmental Council and Cabinet to endorse it Adoption and implementation depends on a timely decision by the communities' representatives and national administrations.	Facilitate alternative waste management options Community and private sector wastewater management Facilitate freshwater fishing best practices and community-based protected areas in rivers and streams Implement riparian buffer restoration Community-based MPAs and LMMAs and coastal fisheries enforcement • Mangroves rehabilitation and protection • Erosion-control • Farming practices and cattle ranching • Reforestation and sustainable agroforestry models • Other relevant activities	**Deliverables L1.2 and L6.1** Before and after the surveys 6 month project progress reports Minutes of meetings Published materials Media interviews Short videos
	1.1.2 Ratio of ACC-explicit ICM plans	1.1.2 Number of activities in Ra ICM plan that are ACC explicit	1.1.2 40% of activities in the ICM Plan that are ACC-explicit	1..1.2 60% of activities in the ICM Plan that are ACC-explicit were achieved			
	1.1.3 Ratio of sites where an ICM plan has been adopted	1.1.3 Ra iCM plan adopted	1.1.3 80% of activities in ICM plan adopted	70% of activities in ICM plan adopted			
	1.1.4 Ratio of sites where the adopted ICM plan is being implemented	1.1.4 Ra ICM plan is being implemented	1.1.4 10% of activities specified in the ICM Plan is successfully executed at the beginning, 30% by mid-term and at least 60% by the end of RESCCUE	1.1.4 10% of activities specified in the ICM Plan has been successfully executed at the beginning, 30% by mid-term and at least 60% by the end of RESCCUE have all been achieved			
	1.1.5 Ratio of sites where an ICM platform is active (meeting regularly)	1.1.5 Provincial ICM committee meeting is active (meeting regularly)	1.1.5 Meeting are held at least on quarterly basis	1.1.5 Meeting were held at least on quarterly basis was achieved			

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
						identified in the ICM plan for the Ra Province	
Outcome 1.2: Pilot sites' environmental issues, including climate change and the loss of ecosystem services, are successfully addressed through ICM activities	1.2.1 Activities undertaken on sites address key issues as identified in ICM plans and participatory processes	1.2.1 Activities undertaken on site address key issues as identified in ICM plan and participatory process	1.2.1 At least 90% of the planned actions in ICM plan address the key issues	1.2.1 80% of the planned actions in ICM plan address the key issues achieved	Communities may associate all environmental related issues to the impact of climate change rather than on their own poor land use and exploitative marine management practices	Enhance food security through identifying and cultivating more climate change resilient food crops and engage in or establish alternative income opportunities reduces their vulnerability to the impacts of climate change and simultaneously improve their livelihood and well- being. Examine and promote sustainable freshwater fishing practices and facilitate the establishment of community-based protected areas in rivers and streams. In addition riparian buffer restoration with mangroves rehabilitation and protection are vital as well. Enhance resilience of coral reefs and coastal fisheries to climate change and ocean acidification by providing technical assistance to communities and key stakeholders on how to protect healthy reef ecosystem and identifying climate change resilient coastal marine areas such as establishing mall scale coral garden and installing fish aggregating devices in	**Deliverable L1.5, L2.4, L2.5, L1.6 L2.1 & L2.1** 6 month project progress reports Published materials Short videos Media interviews
	1.2.2 Mid-term and final sites diagnoses show significant progress on key issues identified in ICM plans and participatory processes (as compared to initial sites diagnoses)	1.2.2 Mid-term and final site diagnoses show significant progress on key issues identified in ICM plan and participatory process (as compared to initial site diagnoies)	1.2.2 At least 80% of the issues and planned activities in the diagnosis have been implemented (due to the severity of the damages caused by Cyclone Winston some of the planned activities may need to be revised)	1.2.2 90% of the issues and planned activities in the diagnosis have been implemented were achieved despite the damages caused by TC Winston			
	1.2.3 Mid-term and final sites diagnoses show significant progress on vulnerability index	1.2.3 Mid-term and final site diagnosis show significant progress on vulnerability index	1.2.3 VRA index has increased by 1 in mid-term and 3 by the final diagnosis	1.2.3 Yet to be finalized			

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
						appropriate areas Facilitate in Identifying options and decision making process on relocation of communities or critical infrastructure and provide lessons learned to national relocation guidelines. Mainstream climate change and adaptation measures at various administrative levels. Develop education materials on climate change and climate smart adaptation initiatives Carry out sustainable farming practices and identify mitigation measures to minimize the negative environmental impact of cattle ranching Facilitating the reforestation and sustainable agroforestry models Identifying adapted farming system design for climate change resilience	
Outcome 1.3 ICM-related national / provincial policies, strategies and legal frameworks are improved	1.3.1 Number of new / improved policies, strategies and legal frameworks	1.3.1 Number of new / improved policies, strategies and village by-laws that address sustainable management of	1.3.1 At least 4 enforcement procedures and process of village by-laws is provincially and	1.3.1 4 enforcement procedures and process of village by-laws is provincially and	Process in endorsing the improvement of legal framework at the national level for ICM policies and strategies related to	Community training and with practical application of existing legislation in the following areas would be required: • coastal and hillside erosion	**Deliverables L5.1, L1.3 & L3.2** 6 month project progress reports

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
		marine and land based resources	nationally endorsed that ensure sustainable use of marine resources, protection of ecosystem services that is vital for community livelihood and enhances their resilience to the impacts of climate change.	nationally endorsed that ensure sustainable use of marine resources, protection of ecosystem services that is vital for community livelihood and enhances their resilience to the impacts of climate change have been achieved	proper or better waste management practices and sustainable land use practices at the village level could take a long time due to all the bureaucratic complexity it may have to go through.	control measures through forestry; • Solid and liquid waste management.	Published materials
	1.3.2 Ratio of pilot sites where coordination between sectoral administration has been enhanced through the project	1.3.2 Number meetings a month with all respective ICM statutory bodies and government agencies on project progress status	1.3.2 At least 2 meetings a month	1.3.2 4 meetings were was achieved in the year			
Outcome 1.4: Individual and institutional capacities to implement ICM for increased resilience are strengthened	1.4.1 Number of capacity building activities undertaken	1.4.1 Number of capacity building activities undertaken in capacity building activities	1.4.1 8:10 of the activities planned under the capacity building plan are implemented.	1.4.1 7:10 of the activities planned under the capacity building plan are implemented have been achieved.	Lack or limited of financial resources and the absence of local authority(e.g. Provincial iTaukei Office, Fisheries Department, ICM / YMST and Provincial Administrator's support due to unclear or unconfirmed financial or institutional	Community and key stakeholders training and with practical application in the following areas would be required: Means and strategies to sustain and maintain the management of marine and terrestrial protected area(s); Facilitate community consultation and training on how to strengthen the management of existing community-based protected area(s)	**Deliverable L1.4** 6 month project progress reports Capacity building activities reports Before/ after surveys Published materials

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
					benefits they will get from such initiative	Provide needed technical support in the area of finance and economics in relation to Conservation, restoration and rehabilitation activities Training with application at village level on in waste and waste water management	
	1.4.2 Number of individuals targeted by capacity building activities	1.4.2 Number of individuals targeted by capacity building activities	1.4.2 200 individuals targeted in total. And 50% of key community leaders, Ra ICM/YMST members, private sector (e.g. Fiji Sugar Corporation, Resort operators) in 20 districts and key stakeholders are trained on specific needs related to ICM	1.4.2 Over 200 individuals and 80% of key community leaders, Ra ICM/YMST members, private sector (e.g. Fiji Sugar Corporation, Resort operators) in 20 districts and key stakeholders are have been trained on specific needs related to ICM have been achieved		Identify individuals, stakeholders and communities who have institutional capacity to implement ICM and thus strengthen their resilience to impacts of climate change and other environmental or socioeconomic pressures.	
	1.4.3 Number of organisations targeted by capacity building activities	1.4.3 Number of organisations targeted by capacity building activities	1.4.3 Ra ICM committee/YMST is supported, and at least 50% of new or existing local businesses are supported in a way that contributes to more integrated coastal	1.4.3 Only about 30% of new or existing local businesses have supported in a way that contributes to more integrated coastal management	Without a meaningful or appropriate incentive, businesses such as grocery shops, petrol/ fuel depot and large-scale commercial sugar-cane farmers may not be interested in ICM.	Facilitate new or existing local businesses on how to incorporate financial and economic mechanism/ tools to support and contribute to the strengthening of integrated coastal management activities	**Deliverables L1.4, L2.1, L2.4, L2.5, L3.1 & L3.2** 6 month project progress reports Capacity building activities reports Before/ after surveys

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
			management				Published materials
	1.4.4 Number and % of people and organisations who demonstrated improved capacity following participation in capacity building activities	1.4.4 Number and % of people and organisations who demonstrated improved capacity following participation	1.4.4 60 % of targeted people and at least 5 organizations have improved capacity following participation	1.4.4 60 % of targeted people and at least 5 organizations have improved capacity following participation have been achieved.		Report compilation, publication and dissemination Conduct negotiations with payers and payees Finalize agreements and instruments.	
Outcome 1.5: New or existing local businesses are supported in a way that contributes to more integrated coastal management	1.5.1 Number of existing local businesses supported	1.5.1 Number of existing local businesses supported	1.5.1 At least 30% of commercial fishers association, 30% commercial agricultural; farmer to be supported.	1.5.1 30% of commercial fishers association, 30% commercial agricultural; farmer to be supported have been achieved.		Support set up of economic and financial mechanisms as recommended in the feasibility study	**Deliverable L6.1** 6 month project progress reports Publication materials Interviews
	1.5.2 Number of new local businesses supported	1.5.2 Number of new local businesses supported	1.5.2 At least 5 local business supported			Identify businesses that are keen in incorporating economic and financial mechanisms as recommended in the feasibility study by evaluating their institutional, human and financial capacity.	6 month project progress reports
	1.5.3 Number of businesses with increased involvement in ICM	1.5.3 Number of businesses with increased involvement in ICM	1.5.3 At least 5 local business increased involvement in ICM	1.5.3 Only 2 local business increased involvement in ICM		Support set up of economic and financial mechanisms as recommended in the feasibility study	6 month project progress reports
Outcome 2.1: Governmental and	2.1.1 Economic and management	2.1.1 % of Governmental and	2.1.1 60 % Governmental and	2.1.1 Only 40 % of Governmental and		Training for governmental and non-governmental stakeholders at	**Deliverable L3.1**

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	literacy of key ICM stakeholders.	non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses		district levels on the various uses they can make of a wide range of economic analyses.	6 month project progress reports Publication Interviews
Outcome 2.2: A range of economic analyses are used in support of ICM (decision-making, technical design of economic and financial mechanisms, advocacy)	2.2.1 Number of economic analyses effectively used in support of ICM	2.2.1 Number of economic analyses effectively used in support of ICM	2.2.1 At least two economic analyses effectively used in support of ICM.	2.2.1 At least two economic analyses effectively used in support of ICM have been achieved		Training key stakeholders in the province and selected individuals/ entities at the national level on a range of economic analyses are used in support of ICM. Conduct relevant economic analyses. A more user-friendly economic analysis approach that can be easily understood by all key stakeholders that would facilitate decision-making process on different development and conservation options at the community, provincial and national level.	
Outcome 2.3: Economic profitability of key ICM activities is demonstrated wherever possible	2.3.1 Costs / benefits ratios (costs of activities and associated benefits in terms of ecosystem services)	2.3.1 Costs / benefits ratios (costs of activities and associated benefits in terms of ecosystem services)	2.3.1 A positive net economic benefit or benefits / costs ratio (costs of activities and associated benefits in terms of ecosystem services) greater than 1	2.3.1 An extended net-benefit with the inclusion of both negative and positive externalities suggests that ratio is positive and probably greater than 1.		Estimate costs / benefits ratio of at least one key ICM activity. Facilitate the Identification and the incorporation of all potential costs, benefits and externalities in calculating the economic profitability. Facilitate and provide key	

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
						stakeholders with technical assistance in how they can attain profit in community based resource management enterprise, or farmers who engaged in intensive commercial farming such as sugar cane or commercial fishers.	
Outcome 3.1: Potential economic and financial mechanisms are identified and their feasibility studied; existing ones are assessed	3.1.1 Number of new economic and financial mechanisms of which the feasibility is studied	3.1.1 Number of new economic and financial mechanisms of which the feasibility is studied	3.1.1 Feasibility of least 2 new economic and financial mechanisms are studied	3.1.1 Feasibility of 4 new economic and financial mechanisms have been studied have been achieved	Disagreement among stakeholders on the best options based on the economic analysis results.		**Deliverables L3.1 & L6.3** 6 month project progress reports Published materials
	3.1.2 Number of existing economic and financial mechanisms reviewed	3.1.2 Number of existing economic and financial mechanisms reviewed	3.1.2 At least 2 existing economic and financial mechanisms reviewed	3.1.2 4 existing economic and financial mechanisms have been reviewed	Some major externalities are not accounted for such as potential impact of climate change. One of these impacts would be sea-level rise and the other is ocean acidification and its effect on existing MPAs and LMMAs.		**Deliverable L6.1** 6 month project progress reports Published materials
Outcome 3.2: Selected new economic and financial mechanisms are set up and implemented; existing ones are	3.2.1 Number of economic and financial mechanisms set up	3.2.1 Number of economic and financial mechanisms set up	3.2.1 At least 2 economic and financial mechanisms set up	3.2.1 1 economic and financial mechanisms have been set up (Vatu-i-Ra Trust fund)	Non-co-operation of resort owners can be problematic given if they do not wish reveal commercial transactions involving recreational dives.	Facilitate and implement economic and financial mechanisms targeted to finance conservation and sustainable resource management	**Deliverable L3.1** 6 month project progress reports Published materials

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
strengthened, in a cost-effective and sustainable way					Poor records of financial cash flow and bookkeeping would make it difficult to truly work out the financial profit of the *Yaubula* rugby sevens fundraising initiative and the Fisherman's Association deep sea commercial fishing venture.		
	3.2.2 Cost / benefits ratio (financial flows generated by the mechanisms and associated transaction costs)	3.2.2 Number of Costs/Benefits ratio > 1 (financial flows generated by the mechanisms and associated transaction costs)	3.2.1 At least 50 % of costs/benefits ratio are >1 (financial flows generated by the mechanisms and associated transaction costs)	3.2.1 Transaction costs monitored, but no estimate of economic benefits (see Monitoring report on the Vatu-i-Ra marine park and financial mechanism)		Monitor cost / benefits associated with the mechanisms being implemented	
Outcome 4.1: Experiences are exchanged and expertise is shared between pilot sites	4.1.1 Number of experience- and expertise-sharing activities undertaken	4.1.1 Number of stakeholders involved in experience- and expertise-sharing activities undertaken 4.1.1.2 Number of methods or stories shared.	4.1.1.1 At 50% of the natural resources based commercial enterprise based experience and expertise-sharing activities.	4.1.1.1 About 40% of the natural resources based commercial enterprise based experience and expertise-sharing activities have been achieved		Facilitate the experience- and expertise-sharing activities through public forum involving key stakeholders. Support sharing of information through communications	**Deliverable L6.1 & L1.3** 6 month project progress reports Published materials

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
			4.1.1.2 10 methods or experiences are shared over course of project.	4.1.1.2 5 methods and experiences are shared over course of project were achieved.			
Outcome 4.2: Lessons learnt from pilot sites are disseminated nationally and to other Pacific Island Countries and Territories	4.2.1 Number of dissemination activities conducted	4.2.1 Number of dissemination activities conducted	4.2.1 Activities conducted or planned are disseminated in 14 provinces in Fiji and in the four RESCCUE countries with at least 4 dissemination activities	4.2.1 4 dissemination activities achieved involving 4 provinces and 2 other RESCCUE countries and territories		Facilitate the dissemination activities.	**Deliverable L2.2** 6 month project progress reports Published materials
	4.2.2 Number of sites where replication of RESCCUE's approach is underway or planned	4.2.2 Number of provinces where replication of RESCCUE's approach is underway or planned	4.2.2 At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway	4.2.2 At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway		Articulating clearly in the local language and actual dissemination of information in particular the process involved in the various RESCCUE components.	**Deliverable L6.1** 6 month project progress reports Published materials
	4.2.3 Ratio of regional activities that build, among other, on pilot sites activities	4.2.3 Ratio of current RESCCUE regional activities that build, among other, on pilot sites activities	4.2.3 At least 50% of regional activities that build, among other, on pilot sites activities	4.2.3 100% of regional activities have been built, among other, on pilot sites activities	Ineffective and inappropriate communication strategies could limit the scope of the dissemination of the lessons learned.	Compilation of lessons learned and using communication tools such as video and pamphlets, social network to disseminate RESCCUE experiences and lessons learned.	6 month project progress reports Published materials
Outcome 4.3: Regional and local	4.3.1 Ratio of regional activities	Not the operators responsibility					**Deliverables L1.3 & L6.1** 6 month project progress

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
stakeholders are better equipped to address key issues of shared interest	that are of relevance to more than half of pilot sites.						reports Published materials
	4.3.3 Improved literacy of stakeholders on key issues addressed regionally.	Not the operators responsibility					
Outcome 4.4: The full range of interested stakeholders, from local to international, is informed about the project and its activities	4.4.1 Communication plan effectively implemented	4.4.1 Communication plan effectively implemented	4.4.1 85% of activities in Communication Plan are implemented according to schedule and budget.	4.4.1 85% of activities in Communication Plan are implemented according to schedule and budget.		Community meetings specially to share experiences and lessons learned from the RESCCUE activities and outcome Seminars on RESCCUE Outcome and experience will be conducted for provincial and national stakeholders (e.g. ICM/ KYMST Ra Province, National ICM committee. Key stakeholders from civil society and private sector).	**Deliverable L6.1** 6 month project progress reports Published materials
	4.4.2 Stakeholders' level of awareness about the project and its activities	4.4.2 % of stakeholders' who have grasped a high level of awareness about the project and its activities	4.4.2 At least 90 percent of the stakeholders in the province fully understand the key outcome of RESCCUE activities.	4.4.2 About 70 percent achieved of the stakeholders in the province have fully understood the key outcome of RESCCUE activities.		Carry out an evaluation process of the level of understanding using low, medium and high to gauge the level of understanding on the project activities	**Deliverables L1.3 & L6.1** 6 month project progress reports Published materials
Outcome 4.5: Lessons from the design and implementation of RESCCUE are learnt	4.5.1 Level of awareness of SPC Senior Leadership Team about lessons	Not the operator's responsibility					**Deliverable L6.1** 6 month project progress reports

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
by SPC and AFD/FFEM	learned						Published materials
	4.5.2 Level of awareness of AFD/FFEM senior management about lessons learned	Not the operator's responsibility					
Outcome 5.1: Technical and financial reporting matches requirements	5.1.1 Dates of reports match set deadlines	5.1.1 Dates of reports match set deadlines	5.1.1 At least meet required deadline to be completed and endorsed	5.1.1 Meeting required deadline for the completion of report and endorsement is yet to be achieved	Financial support to implement lessons learnt with the consensus adopting these changes by the key stakeholders	Communicating the project's actions and results towards the various identified targets, in a coherent manner with the RESCCUE regional communication plan.	**Deliverable L1.3 & L1.4** 6 month project progress reports Published materials
	5.1.2 Quality of reports	5.1.2 Quality of reports	5.1.2 Approved by external reviewers	5.1.2 Approval of external reviewers has been achieved			
Outcome 5.2: Regional and national/provincial steering committee members are involved and feel ownership	5.2.1 Ratio of agreements of implementation signed	5.2.1 Agreements of implementation are signed	5.2.1 Signed and endorsed	5.2.1 The signing and endorsement has been achieved.	Lack of personnel within the province to review the technical and financial reporting matches requirements	Ensure the establishment of a Quality Control mechanism that is endorsed by all stakeholders	**Deliverable L1.3, L4.2, L5.3** 6 month project progress reports Published materials Minutes of steering committee meetings Interview
	5.2.2 Rate of members participation in regional and national/provincial steering committee meetings	5.2.2 Consistent and regular participation of National ICM members in national/provincial steering committee meetings	5.2.2 Meeting resolutions endorsed related to activities	5.2.2 All the meeting resolutions have achieved the endorsement of all related to activities	Lack of personnel within the province to review the technical and financial reporting matches requirements Achieving consensus by all affected parties and stakeholders can be difficult	Ensure the establishment of a Quality Control mechanism that is endorsed by all stakeholders Revise and update the ICM plan	
	5.2.3 Level of satisfaction from regional and	5.2.3 Level of satisfaction from national/provincial	5.2.3 At least 70% of national/provincial	5.2.3 100% of national/provincial steering committee	Lack of personnel within the province to review the technical	Ensure the establishment of a Quality Control mechanism that is endorsed by all stakeholders	

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
	national/provincial steering committee members	steering committee members	steering committee members show their appreciation on RESCCUE activities	members show their appreciation on RESCCUE activities	and financial reporting matches requirements Achieving consensus by all affected parties and stakeholders can be difficult	Revise and update the ICM plan Revise and update the ICM plan Report on the status of deliverable	
Outcome 5.3: The monitoring and evaluation system provides a clear idea of project progress at any time	5.3.1 Existence of a revised logical framework	5.3.1 Existence of a revised logical framework	5.3.1 Ra logframe approved by SPC	5.3.1 Ra logframe approved by SPC		Development of Kadavu logframe in coherence with regional one	**Logframe**
	5.3.2 Data availability for monitoring and evaluation	5.3.2 Data availability for monitoring and evaluation at provincial level	5.3.2 Good availability	5.3.2 Availability of data for monitoring and evaluation at provincial level has been achieved	Flexibility and robustness of the Logical frame	Monitoring and Evaluation on project implementation	Initial/ mid-term/ final sites diagnoses. 6-month project progress reports.
Outcome 5.4: Operators are successfully contracted on each site and operate according to expectations .	5.4.1 Operators' contracts signed	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	RESCCUE Logframe for Ra Province, Fiji						
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Target reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)**	**Operator's activities**	**Site-specific means of verification**
	5.4.2 Quality and timeliness of operators' reports	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	5.4.3 Level of satisfaction of partner governments and administrations with regard to operators	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
	5.4.4 Level of satisfaction of operators with regard to SPC's supervision	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Outcome 5.5 Co-funding is mobilized according to stated objectives (1:1)	5.5.1 Level of co-funding	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

RESCCUE Logframe for Kadavu Province

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
Outcome 1.1: The pilot sites have ACC-explicit ICM plans and active participatory platforms	1.1.1 Ratio of sites where an ICM plan has been developed	1.1.1 Kadavu ICM plan developed	1.1.1 Kadavu ICM plan finalized by 01/03/17	1.1.1 Kadavu ICM plan endorsed on 25/09/2018	There are no delays in the Fiji Environmental Council and Cabinet to endorse Kadavu ICM plan Adoption and implementation depends on a timely decision by the village chief and administrations.	Facilitate the establishment and operation of an ICM committee for Kadavu Province; To engage customary and non-customary resource owners, including the private sector, and support the development of a joint ICM vision. Update existing district-level natural resource management plans and identify key ICM-related issues as well as the interventions needed to cope with such issues.	**Deliverable L1.1, L2.3 & L3.3** Before/ after surveys 6-month project progress reports Interviews Minutes of meeting Published materials Media interviews Short videos
	1.1.2 Ratio of ACC-explicit ICM plans	1.1.2 Number of activities in Kadavu ICM plan that are ACC explicit	1.1.2 40% of activities in the ICM Plan that are ACC-explicit	1.1.2 50% of activities in the ICM Plan that are ACC-explicit			
	1.1.3 Ratio of sites where an ICM plan has been adopted	1.1.3Kadavu ICM plan adopted	1.1.3 At least 80% of the Kadavu ICM Plan are adopted by the Kadavu Provincial Council at the end of September 2016 and the remaining 20% adopted by March 2017	50% of activities in ICM plan adopted			
	1.1.4 Ratio of sites where the adopted ICM plan is being implemented	1.1.4 Kadavu ICM plan is being implemented	1.1.4 Kadavu ICM plan 30% implemented.	1.1.4 20% of activities specified in the ICM Plan has been successfully executed.			
	1.1.5 Ratio of sites where an ICM platform	1.1.5 Provincial ICM committee meeting is	1.1.5 Meeting are held at least on	1.1.5 Meeting were held at least on		Provide resources (transport costs and	Attendance lists and minutes for project meetings.

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
	is active (meeting regularly)	active (meeting regularly)	quarterly basis	quarterly basis was achieved		secretariat support) for project meetings for Kadavu ICM participants.	
Outcome 1.2: Pilot sites' environmental issues, including climate change and the loss of ecosystem services, are successfully addressed through ICM activities	1.2.1 Activities undertaken on sites address key issues as identified in ICM plans and participatory processes	1.2.1 Activities undertaken on site address key issues as identified in ICM plan and participatory process	1.2.1 At least 90% of the planned actions in ICM plan address the key issues	1.2.1 60% of the planned actions in ICM plan address the key issues achieved	Communities may associate all environmental related issues to the impact of climate change rather than on their own poor land use and exploitative marine management practices	Coastal and hillside erosion control measures through forestry; Soil enhancement through planting of nitrogen fixing plants and composting; To identify adapted farming system design for climate change resilience To enhance food security through identifying and cultivating more climate change resilient food crops and engage in or establish alternative income opportunities reduces their	**Deliverable L1.5 & L3.5** 6-month project progress reports Minutes of meeting Published materials Media interviews
	1.2.2 Mid-term and final sites diagnoses show significant progress on key issues identified in ICM plans and participatory processes (as compared to initial sites diagnoses)	1.2.2 Mid-term and final site diagnoses show significant progress on key issues identified in ICM plan and participatory process (as compared to initial site diagnosis)	1.2.2 At least 80% of the issues and planned activities in the diagnosis have been dealt with	1.2.2 60% of the issues and planned activities in the diagnosis have been implemented were achieved despite the damages caused by TC Winston			
	1.2.3 Mid-term and final sites diagnoses show significant	1.2.3 Mid-term and final site diagnosis show significant	1.2.3 VRA index has increased by 1 in mid-term and 3 by	1.2.3 Yet to be finalized			

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
	progress on vulnerability index	progress on vulnerability index	the final diagnosis			vulnerability to the impacts of climate change and simultaneously improve their livelihood and well-being. To enhance resilience of coral reefs and coastal fisheries to climate change and ocean acidification by protecting healthy reef ecosystem and identifying climate change resilient coastal marine areas to develop small scale coral garden and installing fish aggregating devices in appropriate areas To relocate of communities or critical infrastructure and provide lessons learned to national	

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
						relocation guidelines. Mainstream climate change and adaptation measures at various administrative levels; Develop education materials on climate change and adaptation	
Outcome 1.3 ICM-related national / provincial policies, strategies and legal frameworks are improved	1.3.1 Number of new / improved policies, strategies and legal frameworks	1.3.1 Number of new / improved policies, strategies and village by-laws that address sustainable management of marine and land based resources	1.3.1 At least 2 enforcement procedures and process of village by-laws is provincially and nationally endorsed that ensure sustainable use of marine resources, protection of ecosystem services that is vital for community livelihood and enhances their resilience to the	1.3.1 2 enforcement procedures and process of village by-laws is provincially and nationally endorsed to ensure sustainable use of marine resources, protection of ecosystem services have been achieved.	Process in endorsing the improvement of legal framework at the national level for ICM policies and strategies related to proper or better waste management practices and sustainable land use practices at the village level could take a long time due to all the bureaucratic complexity it may have to go through.	Community training and with practical application of existing legislation in the following areas would be required: • coastal and hillside erosion control measures through forestry; • Soil enhancement and	**Deliverables L5.1, L4.1** 6-month project progress reports Minutes of meeting Published materials Media interviews

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
			impacts of climate change.			composting; and • Solid and liquid waste management.	
	1.3.2 Ratio of pilot sites where coordination between sectoral administration has been enhanced through the project	1.3.2 Number meetings a month with all respective ICM statutory bodies and government agencies on project progress status	1.3.2 At least 2 meetings a month	1.3.2 4 meetings were achieved in a year			
Outcome 1.4: Individual and institutional capacities to implement ICM for increased resilience are strengthened	1.4.1 Number of capacity building activities undertaken	1.4.1 Number of capacity building activities undertaken	1.4.1 8:10 of the activities planned under the capacity building plan are implemented.	1.4.1 5:10 of the activities planned under the capacity building plan are implemented have been achieved.	Lack or limited of financial resources and the absence of local authority(e.g. Provincial iTaukei Office, Fisheries Department, KYMST and Provincial Administrator's support due to unclear or unconfirmed financial or institutional benefits they will get from such initiative	Activities outlined within Fiji RESCCUE Capacity Building and Awareness Plan Community and key stakeholders training and with practical application in the following areas : Means and strategies to sustain and maintain the management of marine and terrestrial protected area(s);How to strengthen the management of existing	**Deliverables L1.4, L4.2 ,L3.3 & L4.1** 6-month project progress reports Capacity building activities reports Before/ after surveys
	1.4.2 Number of individuals targeted by capacity building activities	1.4.2 Number of individuals by capacity building activities	1.4.2 200 individuals targeted in total. And at least 50% of district representatives are well versed with ICM and how it is applied	1.4.2 Over 200 individuals and 80% of key community leaders, Kadavu YMST members, private sector (e.g. Resort			Interviews 6-month project progress report

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
			at community level	operators) in nine districts and key stakeholders are have been trained on specific needs related to ICM have been achieved		community-based protected area(s); Waste and waste water management at village level Provide needed technical support in the area of finance and economics in relation to Conservation, restoration and rehabilitation activities	
	1.4.3 Number of organisations targeted by capacity building activities	1.4.3 Number of organisations targeted by capacity building activities	1.4.3 Kadavu YMST and at least 30% of new or existing local businesses are supported in a way that contributes to more integrated coastal management	1.4.3 Only about 10% of new or existing local businesses have supported in a way that contributes to more integrated coastal management	Without a meaningful or appropriate incentive, businesses such as grocery shops, petrol/ fuel depot and large-scale commercial kava farmers may not be interested in ICM.	Facilitate the practical applications of ICM by providing technical input when required.	**Deliverable L1.3 & L6.3** 6-month project progress reports Published materials Interviews Before/ after surveys
	1.4.4 Number and % of people and organisations who demonstrated	1.4.4 Number and % of people and organisations who demonstrated	1.4.4 60 % of targeted people and at least 2 organizations have	1.4.4 60 % of targeted people and at least 5 organizations have			

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
	improved capacity following participation in capacity building activities	improved capacity following participation	improved capacity following participation	improved capacity following participation have been achieved.			
Outcome 1.5: New or existing local businesses are supported in a way that contributes to more integrated coastal management	1.5.1 Number of existing local businesses supported	1.5.1 Number of existing local businesses supported in ICM	1.5.1 At least 30% of commercial fishermen association, 3 full time commercial agriculturalist in each of the 9 districts to be supported.	1.5.1 30% of commercial fishers association, 30% commercial agricultural; farmer to be supported have been achieved.		Practical applications of financial and economic mechanisms that support businesses to reduce or even completely stop aspects of their operation which has negative impact on the local environmental and people's livelihood in the long-term.	**Deliverable L1.3 & L6.3** 6-month project progress reports Minutes of meeting Before/ after surveys 6-month project progress reports Published materials Interviews
	1.5.2 Number of new local businesses supported	1.5.2 Number of new local businesses supported	1.5.2 At least 2 local business supported	1.5.2 1 local business has given its support to the coastal management work.			
	1.5.3 Number of businesses with increased involvement in ICM	1.5.3 Number of businesses with increased involvement in ICM	1.5.3 At least 2 local business increased involvement in ICM	1.5.3 Only 2 local business increased involvement in ICM			

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
Outcome 2.1: Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	2.1.1 Economic and management literacy of key ICM stakeholders.	2.1.1 % of Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	2.1.1 60 % Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses	2.1.1 80% of Governmental and non-governmental stakeholders are aware of the various uses they can make of a wide range of economic analyses		Training for governmental and non-governmental stakeholders at district levels on various uses they can make of a wide range of economic analyses.	**Deliverable L1.4** 6-month project progress reports Published materials Media interviews
Outcome 2.2: A range of economic analyses are used in support of ICM (decision-making, technical design of economic and financial mechanisms, advocacy)	2.2.1 Number of economic analyses effectively used in support of ICM	2.2.1 Number of economic analyses effectively used in support of ICM	2.2.1 At least two economic analyses effectively used in support of ICM.	2.2.1 Only one economic analyses was effectively used to support of ICM	An economic analysis approach that can be easily understood by all key stakeholders is developed to facilitate decision-making process on different development and conservation options at the community, provincial and national	Practical application of economic analyses on key human based ecological activities that results to the sustainability of resources such as organic farming, watershed enhancement tree	**Deliverable L4.4** 6-month project progress reports Published materials Media interviews

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
					level.	planting, sustainable fishing practices and commercial tourist focused recreational scuba diving and snorkeling.	
Outcome 2.3: Economic profitability of key ICM activities is demonstrated wherever possible	2.3.1 Costs / benefits ratios (costs of activities and associated benefits in terms of ecosystem services)	2.3.1 Costs / benefits ratios (costs of activities and associated benefits in terms of ecosystem services)	2.3.1 A positive net economic benefit or benefits / costs ratio (costs of activities and associated benefits in terms of ecosystem services) greater than 1	2.3.1 An extended net-benefit with the inclusion of both negative and positive externalities suggests that ratio is positive and probably greater than 1.		Facilitating key stakeholders in this case community resource based enterprise, commercial farmers and fishers on attaining profits with minimum negative impact of the natural environment or profit making conservation based enterprise.	**Deliverable L4.4** 6-month project progress reports Published materials Media interviews
Outcome 3.1: Potential economic and financial mechanisms are identified and their feasibility studied; existing ones are assessed	3.1.1 Number of new economic and financial mechanisms of which the feasibility is studied	3.1.1 Number of new economic and financial mechanisms of which the feasibility is studied	3.1.1 Feasibility of least 1 new economic and financial mechanism is studied	3.1.1 Feasibility of 4 new economic and financial mechanisms have been studied have been achieved	Disagreement among stakeholders on the best options based on the economic analysis results.	Applying economic and financial mechanisms and training key stakeholders in the various districts on appropriate ones	**Deliverable L4.3** 6-month project progress reports Published materials

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
							Media interviews
	3.1.2 Number of existing economic and financial mechanisms reviewed	3.1.2 Number of existing economic and financial mechanisms reviewed	3.1.2 At least 2 economic and financial mechanisms reviewed	3.1.2 4 existing economic and financial mechanisms have been reviewed and achieved		Facilitate the Identification appropriate financial and economic mechanism applied to different resource activities to ensure minimum negative to the natural environment	**Deliverable L4.3** Published materials Media interviews
Outcome 3.2: Selected new economic and financial mechanisms are set up and implemented; existing ones are strengthened, in a cost-effective and sustainable way	3.2.1 Number of economic and financial mechanisms set up	3.2.1 Number of economic and financial mechanisms set up	3.2.1 At least 2 economic and financial mechanisms set up	3.2.1 1 economic and financial mechanisms is being set up (organic certification)	Non-co-operation of resort owners can be problematic if they do not wish reveal commercial transactions involving recreational dives. Poor records of financial cash flow and bookkeeping would make it difficult to truly work out the financial profit of the *Yaubula* rugby sevens fundraising initiative and the Fisherman's	Facilitate and implement economic and financial mechanisms targeted to finance conservation and sustainable resource management	**Deliverable L5.2** 6-month project progress reports Published materials Media interviews

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
					Association deep sea commercial fishing venture.		
	3.2.2 Cost / benefits ratio (financial flows generated by the mechanisms and associated transaction costs)	3.2.2 Number costs. Benefit ratio > 1 in financial flows generated by the mechanisms and associated transaction costs	3.2.1 At least 50 % are >1 in the financial flows generated by the mechanisms and associated transaction costs	3.2.1 This has yet to be achieved.		Monitor cost / benefits ratio	**Deliverable L5.2**
Outcome 4.1: Experiences are exchanged and expertise is shared between pilot sites	4.1.1 Number of experience- and expertise-sharing activities undertaken	4.1.1 Number of experience- and expertise-sharing activities undertaken	4.1.1 At least 50% of the natural resources based commercial enterprise stakeholders are involved in expertise- and experience sharing activities.	4.1.1.1 About 60% of the natural resources based commercial enterprise based experience and expertise-sharing activities have been achieved 4.1.1.2 2 methods and experiences are shared over course of project were achieved.		Facilitate the expertise-sharing activities. Support sharing of information through communications plan activities.	**Deliverable L6.3** 6-month project progress reports
Outcome 4.2: Lessons learnt from pilot sites	4.2.1 Number of dissemination activities	4.2.1 Number of dissemination activities	4.2.1 at least 2 public forum in the	4.2.1 2 public forum conducted		Facilitate the dissemination	**Deliverable L6.3**

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
are disseminated nationally and to other Pacific Island Countries and Territories	conducted	conducted	two provinces to share lessons learnt			activities.	6-month project progress reports Published materials
	4.2.2 Number of sites where replication of RESCCUE's approach is underway or planned	4.2.2 Number of provinces where replication of RESCCUE's approach is underway or planned	4.2.2 At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway	4.2.2 At least 2 non RESCCUE Provinces in Fiji where replication of RESCCUE's approach is underway		Articulating clearly in the local language and actual dissemination of information in particular the process involved in the various RESCCUE components.	Report on the forum and feedback Interview
	4.2.3 Ratio of regional activities that build, among other, on pilot sites activities	4.2.3 Ratio of current RESCCUE regional activities that build, among other, on pilot sites activities	4.2.3 At least 50% of current RESCCUE regional activities that build, among other, on pilot sites activities	4.2.3 100% of current RESCCUE regional activities have built, among other, on pilot sites activities	Ineffective and inappropriate communication strategies could limit the scope of the dissemination of the lessons learned.	Compilation of lessons learned and using communication tools such as video and pamphlets, social network to disseminate RESCCUE experiences and lessons learned.	
Outcome 4.3: Regional and local stakeholders are better equipped to address key issues of shared interest	4.3.1 Ratio of regional activities that are of relevance to more than half of pilot sites.	Not the operator's responsibility					
	4.3.3 Improved literacy	Not the operator's					

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
	of stakeholders on key issues addressed regionally.	responsibility					
Outcome 4.4: The full range of interested stakeholders, from local to international, is informed about the project and its activities	4.4.1 Communication plan effectively implemented	4.4.1 Communication plan effectively implemented	4.4.1 85% of activities in Communication Plan are implemented according to schedule and budget.	4.4.1 85% of activities in Communication Plan are implemented according to schedule and budget.			**Deliverable L1.3 & L1.4** 6-month project progress reports Published materials Interview
	4.4.2 Stakeholders' level of awareness about the project and its activities	4.4.2 Stakeholders' level of awareness about the project and its activities	4.4.2 At least 70% of stakeholders in Kadavu have a good knowledge of the project and its activities.	4.4.2 About 80 percent achieved of the stakeholders in the province have fully understood the key outcome of RESCCUE activities.		Community meetings specific to share for RESCCUE activities outcome and lessons learned. Seminars on RESCCUE outcome and experience will be conducted for provincial and national stakeholders (e.g. National ICM committee and key stakeholders – private sector and NGOs)	6-month project progress reports Published materials Interview
Outcome 4.5: Lessons	4.5.1 Level of	Not the operator's					6-month project progress

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
from the design and implementation of RESCCUE are learnt by SPC and AFD/FFEM	awareness of SPC Senior Leadership Team about lessons learned	responsibility					reports Published materials Interview
	4.5.2 Level of awareness of AFD/FFEM senior management about lessons learned	Not the operator's responsibility					6-month project progress reports Interview
Outcome 5.1: Technical and financial reporting matches requirements	5.1.1 Dates of reports match set deadlines	5.1.1 Dates of reports match set deadlines	5.1.1 Financial and narrative reports meet the requirement and deliverable dates as specified in the Fiji RESCCUE TOR work-plan and schedule	5.1.1 The Financial and narrative have not always met required deadline for the completion of report and endorsement due to delays from field activities reports	Financial support to implement lessons learnt with the consensus adopting these changes by the key stakeholders	Submit the report to SPC RESCCUE secretariat and the Fiji Government	6-month project progress report and deliverables
	5.1.2 Quality of reports	5.1.2 Report provide all necessary information required based on SPC RESCCUE documentation of evidence	5.1.2 All report s are submitted in accordance with the required Fiji RESCCUE schedule	5.1.2 All report s are submitted in accordance with the required Fiji RESCCUE schedule have been partially achieved			
Outcome 5.2: Regional and national/provincial steering committee members are involved and feel ownership	5.2.1 Ratio of agreements of implementation signed	Not the operator's responsibility					6-month project progress report Minutes of steering committee meetings

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
							Interview
	5.2.2 Rate of members participation in regional and national/provincial steering committee meetings	5.2.2 Rate of members participation in regional and national/provincial steering committee meetings	5.2.2 At least 80% of members attendance at each steering committee meetings	5.2.2 90% of members attendance have been achieved at each steering committee meetings	Lack of personnel within the province to review the technical and financial reporting which matches requirements	Support the government in planning and organizing the steering committee meetings well in advance	
	5.2.3 Level of satisfaction from regional and national/provincial steering committee members	5.2.3 Level of satisfaction from national/provincial steering committee members	5.2.3 At least 70% of national/provincial steering committee members show their appreciation on RESCCUE activities	5.2.3 100% of national/provincial steering committee members show their appreciation on RESCCUE activities	Achieving consensus by all affected parties and stakeholders can be difficult	Ensure the establishment of a Quality Control mechanism that is endorsed by all stakeholders Revise and update the ICM plan Report on the status of deliverable	
Outcome 5.3: The monitoring and evaluation system provides a clear idea of project progress at any time							
	5.3.1 Existence of a revised logical framework	5.3.1 Existence of a revised logical framework for Kadavu Province	5.3.1 Kadavu logframe approved by SPC	5.3.1 Kadavu logframe approved by SPC		Development of Kadavu logframe in coherence with regional one	Logframe.
	5.3.2 Data availability for monitoring and evaluation	5.3.2 Data availability for monitoring and evaluation at provincial level	5.3.2 Good availability	5.3.2 Availability of data for monitoring and evaluation at provincial level has been achieved	Flexibility and robustness of the Logical frame	Monitoring and Evaluation on project implementation	Initial/ mid-term/ final sites diagnoses. 6-month project progress reports.

RESCCUE Logframe for Kadavu Province, Fiji							
Expected outcomes	**Regional indicators**	**Site indicators**	**Site specific targets**	**Targets reached on 01/10/2018 (end of project)**	**Site-specific risks and assumptions (connected to outcomes)** ***All outcomes are subject to the 2nd grant of 2.5 M€ being attributed by AFD to SPC in 2016***	**Operator's activities**	**Site-specific means of verification**
Outcome 5.4: Operators are successfully contracted on each site and operate according to expectations .	5.4.1 Operators' contracts signed 5.4.2 Quality and timeliness of operators' reports 5.4.3 Level of satisfaction of partner governments and administrations with regard to operators 5.4.4 Level of satisfaction of operators with regard to SPC's supervision	Not the operator's responsibility	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Outcome 5.5 Co-funding is mobilized according to stated objectives (1:1)	5.5.1 Level of co-funding	Not the operator's responsibility	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

ANNEX 3 VULNERABILITY REDUCTION ASSESSMENT (VRA) RA & KADAVU

Ra Province

Nabukadra Village

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Sea Level Rise / Cere ni Waitui	**What Happens when there are extremely high wave Incidences?** Before the major hurricane Winston, sea level rise was experienced frequently in the village but after Cyclone Winston the community seldom experienced the sea level rise because according the community the ocean floor is deeper now hence they don't experience the effects of sea level rise.	**What would happen if these waves were twice as high?** If the waves were twice as high, the village as a whole will be under water.	**What stands in the way of adapting to increasing high waves (e.g. king tides)?** The mindset of some community members have been accustomed to living in the same situation over and over again despite the increase effects of climate changes being experienced in the community.	**How confident are you that the improvements in coastal management delivered by the project will continue after it ends?** They have witnessed the hands on activity that has so far been done by the RESCCUE field team in their village for the duration of the project, and they have high hopes that the work will continue because they have so far seen the positive outcome of all these activities.
	How do these affect you and your community, including the ecosystems on which you rely? • Increase in soil erosion • Loss of coastal trees • Vegetable garden damaged.	**How do these affect you and your community, including the ecosystems on which you rely?** • Houses will be damaged • Plantation affected. • Tin houses will be easily rusted. • Resources will be heavily affected.	**To what extent do you or your community have the means to manage these extreme events?** As their only option is relocation, the landowners of the area where they are to be relocated have allowed and given permission to the community to relocate to that particular area. As for the construction of the seawall, they have some available ingredients such as gravels, sand, and stones.	
	Score: 3 (Moderate)	**Score**: 1 (Very Serious)	**Score**: 3 (Moderate)	**Score**: 5 (Very Confident)
	How could this score be improved? Construction of cement Seawall.	**How could this score be improved?** Relocation to higher grounds.	**How could this score be improved?** During the community meeting, the villages can	

			be briefed on the changes that are to happen for the betterment of the community.	

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Drought/ Lauqa	**What Happens when there are extremely drought events?** Only the vegetable garden were affected.	**What would happen if drought goes for a longer period (e.g. 6>months)?** The individual families will be greatly affected	**What stands in the way of adapting to long period of drought?** • Less seedlings available for planting • Community members are not really keen on searching and trying to get hold of some seedlings.	**How confident are you that the improvements in water management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Affect the soil fertility	**How do these affect you and your community, including the ecosystems on which you rely?** • Soil fertility will be affected hence root crops and other food necessities' won't be able to grow better.	**To what extent do you or your community have the means to manage these extreme events?** • The community members have the knowledge of construction and planting.	
	Score: 4 (Not so Bad)	**Score**: 2 (Serious)	**Score**: 3 (Manageable)	**Score**: 5 (Very Confident)
	How could this score be improved? Watering of the vegetable garden early in the morning	**How could this score be improved?** If the Ministry of Agriculture could inform the communities when to plant which type of food according to the weather.	**How could this score be improved?** • Availability of seedlings. • If public transportation cane be made easier to and	

			from the village	

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Ocean Acidification	**What Happens when there are continuous coral bleaching?** Depleting of marine resources.	**What would happen if these coral bleaching affects 50%> of your iqoliqoli reef?** The marine resources will be greatly affected	**What stands in the way of adapting to coral bleaching?** • Decrease in communal work.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Less abundance of fish in the fishing grounds. • Major effects in the source of income for the family members.	**How do these affect you and your community, including the ecosystems on which you rely?** • There will be no major source of income available.	**To what extent do you or your community have the means to manage these extreme events?** • Some seedling are available.	
	Score: 3 (Moderate)	**Score**: 1 (Very Serious)	**Score**: 3 (Manageable)	**Score**: 5 (Very Confident)
	How could this score be improved? Planting of corals.	**How could this score be improved?** Planting of corals.	**How could this score be improved?** • Increase in communal work • Issues to be solved during community meeting	

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
	What Happens when there are extreme tropical cyclone incidences? • Damages in the houses • Plantation are affected.	**What would happen if these tropical cyclones were as twice as strong?** • Decrease in population of the	**What stands in the way of adapting to increasing intensity of tropical cyclones?** • According to the community members there	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are

Cagilaba/ Hurricane	• No transportation • Decrease in development • Decrease in source of income.	villagers. • No there will be no houses available	will be no other available options to withstand the extreme weather conditions.	quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Some members of the community live in tents • Food availability decreases. • Community members find it difficult to get to shopping centers to get food.	**How do these affect you and your community, including the ecosystems on which you rely?** • Most members of the community will lose their lives • Most will be living on tents. • There will be a major decrease in food availability.	**To what extent do you or your community have the means to manage these extreme events?** • Not available.	
	Score: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (Very Confident)
	How could this score be improved? • Building of cyclone proofs houses.	**How could this score be improved?** Planting of corals.	**How could this score be improved?** • More awareness to the community to help them understand of their options on such conditions.	

Nativi Village

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
	What Happens when there are extremely drought events? • Water shortages	**What would happen if drought goes for a longer period (e.g 6>months?**	**What stands in the way of adapting to long period of drought?** • Less plant	**How confident are you that the improvements in coral reef management delivered by the project will**

Drought/ Lauqa	• Effects on the plantation	• Water source will be mostly affected. • No food availability	seedlings to cater for food as the village is quite far away from the centre of business and government stations.	**continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Water availability is limited. • Roots crops and vegetables are mostly affected and root crops are mostly hard when they are uprooted.	**How do these affect you and your community, including the ecosystems on which you rely?** • There will not water at all • Plantations will not produce quality food. • Soil fertility will be affected.	**To what extent do you or your community have the means to manage these extreme events?** • Not available.	
	Score: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (Very Confident)
	How could this score be improved? • Options are to look for a new dam/ water source. • Planting of yams to help feed the family during such events.	**How could this score be improved?** • Plant food beforehand so that when these event are experienced they have available food which can cater for the family.	**How could this score be improved?** • Seek assistance from the Ministry of Agriculture.	
		The village of Nativi just experienced an 8month drought lately, and according to them they had to travel far for to get food especially in the forest areas.		**The village does not experience flloding because of its location on higher grounds.**

Activities	**Indicator 1**	**Indicator 2**	**Indicator 3**	**Indicator 4**
	What Happens when there are extreme tropical cyclone	**What would happen if these tropical**	**What stands in the way of adapting to increasing**	**How confident are you that the improvements**

Cagilaba/ Hurricane	**incidences?** • Damages in the houses • Plantation are affected.	**cyclones were as twice as strong?** • Everything will be affected from houses, food and population	**intensity of tropical cyclones?** • Less awareness on what they are to expect and how they can tackle certain issues during extreme weather events.	**in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • 2 or more families living in one household. • Food availability decreases.	**How do these affect you and your community, including the ecosystems on which you rely?** • Most members of the community will lose their lives • Most will be living on tents. • Decrease in food availability.	**To what extent do you or your community have the means to manage these extreme events?** • Their strengths lie in the ability to work together with no issues.	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 3 (Moderate)	**Score**: 5 (Very Confident)
	How could this score be improved? • Planting of sweet potatoes, yams and other root crops that can be kept for longer period of time. • Building Fijian houses such as bures.	**How could this score be improved?** More awareness on how the community can withstand extreme weather conditions.	**How could this score be improved?** • Improve their networking skills in trying to get government departments to conduct awareness programs in their community.	

Nawairuku Village

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Drought/ Lauqa	**What Happens when there are extremely drought events?** • Water shortages • Effects on the plantation • Freshwater resources being affected. • Forest areas are also affected.	**What would happen if drought goes for a longer period (e.g 6>months?** • Create deaths in the village • Increase in Non-Communicable diseases.	**What stands in the way of adapting to long period of drought?** • Less awareness in the community. • Community members are just not too keen on changes.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Water availability is limited. • Most of their root crops did not grow. • Depleting freshwater resources especially freshwater fish. • Less source of income • Forest resources decreases.	**How do these affect you and your community, including the ecosystems on which you rely?** • Decrease in the population • Decrease in live-stocks • Decrease in the source of income • Freshwater environment dries up. • Increase in stealing of food in the village which can lead to increase in conflicts within the village.	**To what extent do you or your community have the means to manage these extreme events?** • They have partner up with certain NGOs in helping them with certain issues	
	Score: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (Very Confident)
	How could this score be improved? • Planting of yams to help feed the family during such events. • Seek assistance from the Ministry of Agricuture.	**How could this score be improved?** • Planting more trees. • Building of house more inwards rather than near the	**How could this score be improved?** • Seek assistance from the Ministry of Agriculture.	

		river.		

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Flooding/Waluvu	**What Happens when there are frequent flooding events?** • There are 2 rivers that meet at the village front, and when they meet the water reverses back into the village and this is when they experience heavy flooding in the village.	**What would happen if these flooding events occur much more frequent (e.g. 4> times a month)?** • Create deaths in the village • Increase in Non-Communicable diseases (NCDs).	**What stands in the way of adapting to flood management?** • Less awareness in the community.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Houses that are located on the lower area are mostly affected • Most pricy possessions in the house are affected. • Small bridge is affected hence they won't be able to come to the village.	**How do these affect you and your community, including the ecosystems on which you rely?** • Decrease in the population • Decrease in live-stocks • Freshwater environment dries up.	**To what extent do you or your community have the means to manage these extreme events?** • They have partner up with certain NGOs in helping them with certain issues.	
	Score: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (Very Confident)
	How could this score be improved? • Improve the structure of their bridge.	**How could this score be improved?** • Construct flood evacuation center. • Planting of yams to help feed the family during such	**How could this score be improved?** • Seek assistance from the Ministry of Agriculture.	

		events		

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Cagilaba/ Hurricane	**What Happens when there are extreme tropical cyclone incidences?** • Damages in the houses • Plantation are affected. • Increase in NCDs • Damage roads	**What would happen if these tropical cyclones were as twice as strong?** • Everything will be affected from houses, food and population	**What stands in the way of adapting to increasing intensity of tropical cyclones?** • Most community members are just not too keen for changes, as their mindset have adapted to staying in the same situation.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Food availability decreases. • Bridge is affected hence there will be no crossing. • Less communication with the outside world.	**How do these affect you and your community, including the ecosystems on which you rely?** • Most members of the community will lose their lives • Decrease in food availability.	**To what extent do you or your community have the means to manage these extreme events?** • Most of them have certain knowledge on constructions.	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 3 (Moderate)	**Score**: 5 (Very Confident)
	How could this score be improved? • More awareness om how to survive hurricanes • Building cyclone proofs houses.	**How could this score be improved?** More awareness on how the community can withstand extreme weather conditions.	**How could this score be improved?** • Improve their networking skills in trying to get government departments to conduct awareness programs in their community.	

Rewasa Village

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Drought/ Lauqa	**What Happens when there are extremely drought events?** • Effects on the plantation • Root crops are mostly affected.	**What would happen if drought goes for a longer period (e.g 6>months?** • Water flow on taps is limited. • Plantation owners will be affected.	**What stands in the way of adapting to long period of drought?** • Less awareness in the community. • Community members are just not too keen on changes.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Most of their root crops did not grow. • Less source of income	**How do these affect you and your community, including the ecosystems on which you rely?** • Decrease in live-stocks • Decrease in the source of income	**To what extent do you or your community have the means to manage these extreme events?** • Some members have certain adaptive knowledge on certain events.	
	Score: 4 (Not So Bad)	**Score**: 3 (Moderate)	**Score**: 4 (Quiet capable)	**Score**: 5 (Very Confident)
	How could this score be improved? • Planting of yams to help feed the family during such events.	**How could this score be improved?** • Improve community work	**How could this score be improved?** • More awareness programs.	

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Cagilaba/ Hurricane	**What Happens when there are extreme tropical cyclone incidences?** • Damages in the houses • Plantation are affected. • Damage roads • Affect electricity	**What would happen if these tropical cyclones were as twice as strong?** • Everything will be affected from houses, food and population and also livestocks	**What stands in the way of adapting to increasing intensity of tropical cyclones?** • Laziness of some community members.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.

	How do these affect you and your community, including the ecosystems on which you rely? • Food availability decreases. • 2 or more families living in one house.	**How do these affect you and your community, including the ecosystems on which you rely?** • Most members of the community will lose their lives • Decrease in food availability.	**To what extent do you or your community have the means to manage these extreme events?** • Most of them have certain knowledge on constructions and most of the villagers themselves are working.	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 4 (Not so bad)	**Score**: 5 (Very Confident)
	How could this score be improved? • More awareness om how to survive hurricanes • Building cyclone proofs houses.	**How could this score be improved?** More awareness on how the community can withstand extreme weather conditions.	**How could this score be improved?** • Be alert. • More awareness.	

Drauniivi Village

Activities	Indicator 1	Indicator 2	Indicator 3	Indicator 4
Drought/ Lauqa	**What Happens when there are extremely drought events?** • Water is affected (4hours/day) • Source of income is affected. • Livestock decreases.	**What would happen if drought goes for a longer period (e.g 6>months?** • Water flow on taps is limited (1hour/day).	**What stands in the way of adapting to long period of drought?** • Increase in forest fires. • Certain live-stocks affect plantations.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Most of their root crops did	**How do these affect you and your community, including the ecosystems on which you rely?** • Decrease in	**To what extent do you or your community have the means to manage these extreme events?** • Most members of the communities are employed and	

	not grow. • Less source of income • Most of their live-stocks die	live-stocks • Decrease in the source of income	some have certain knowledge in improving the development of the village	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (Very Capable)	**Score**: 5 (Very Confident)
	How could this score be improved? • Construction of fish ponds • Plant a lot of trees.	**How could this score be improved?** • Improve community work • More awareness and seek advice from Ministry of Agriculture on certain foods to be planted during these events.	**How could this score be improved?**	
Activities	**Indicator 1**	**Indicator 2**	**Indicator 3**	**Indicator 4**
Flooding/Waluvu	**What Happens when there are frequent flooding events?** • Half of the village is flooded. • Plantations affected.	**What would happen if these flooding events occur much more frequent (e.g. 4> times a month)?** • The whole village will be flooded.	**What stands in the way of adapting to flood management?** • Nothing really stands in the way.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • The side of the village near the river is affected and is mostly flooded. • Cassava plants	**How do these affect you and your community, including the ecosystems on which you rely?** • Decrease in live-stocks • No source of food available.	**To what extent do you or your community have the means to manage these extreme events?** • They have partner up with certain NGOs in helping them with certain issues. • Since most of them are working	

	do not grow well in this conditions.		and have certain knowledge on the improvement of the status of the village.	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 5 (No Problem)	**Score**: 5 (Very Confident)
	How could this score be improved? • Digging the side of the river to widen the width of the river to decrease the effects of the flooding.	**How could this score be improved?** • Planting of yams to help feed the family during such events. • More awareness.	**How could this score be improved?**	

Activities	**Indicator 1**	**Indicator 2**	**Indicator 3**	**Indicator 4**
Cagilaba/ Hurricane	**What Happens when there are extreme tropical cyclone incidences?** • Damages in the houses • Plantation are affected. • Affect electricity	**What would happen if these tropical cyclones were as twice as strong?** • Everything will be affected from houses, food and population and also live-stocks as there will be nothing else left in the village.	**What stands in the way of adapting to increasing intensity of tropical cyclones?** • Mindset of certain members of the community that do not want change in the village.	**How confident are you that the improvements in coral reef management delivered by the project will continue after it ends?** The village members are quite confident that it will continue after the project.
	How do these affect you and your community, including the ecosystems on which you rely? • Food availability decreases. • More than 70+ houses went down	**How do these affect you and your community, including the ecosystems on which you rely?** • Most members of the community will lose their lives	**To what extent do you or your community have the means to manage these extreme events?** • Most of them have certain knowledge on constructions and most of the villagers themselves are	

		• Decrease in food availability.	working.	
	Score: 2 (Serious)	**Score**: 1 (Very Serious)	**Score**: 4 (Not so bad)	**Score**: 5 (Very Confident)
	How could this score be improved? • More awareness to how to survive hurricanes • Building cyclone proofs houses.	**How could this score be improved?** More awareness on how the community can withstand extreme weather conditions.	**How could this score be improved?** • More awareness to let the people know of what can be done during extreme events.	

Kadavu Province

Matasawalevu Village

<table>
<tr><th colspan="4">Sea Level Rise</th></tr>
<tr><td>Indicator 1</td><td>Reasons why it has significant impacts</td><td>What happens when there are extremely high wave incidences?
How do these affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

By planting more coastal plants and need more awareness on the importance of replanting of mangroves.</td><td>Reasons why it has less significant impacts

Because they already have some mangrove trees on the beach front.</td></tr>
<tr><td>Indicator 2</td><td>Reasons why it has significant impacts</td><td>What would happen if these waves were twice as high?
How do these affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

Need more awareness in the communities.</td><td>Reasons why it has less significant impacts

Because they don’t have a lot of development</td></tr>
<tr><td>Indicator 3</td><td>Reasons why it has significant impacts</td><td>What stands in the way of adapting to increasing high waves (e.g. king tides)?

To what extent do you or your community have the means manage these extreme events?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

Need more awareness for the upcoming generations.</td><td>Reasons why it has less significant impacts?

Because of less development</td></tr>
<tr><td>Indicator 4</td><td>Reasons why it has significant impacts</td><td>How confident are you that the improvements in coastal management delivered by the project will continue after it ends?</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><th colspan="4">Sea Level Rise</th></tr>
<tr><td></td><td></td><td>Not confident;
2 = Low confident; 3= Moderate; 4= Confident; 5 =Very confident
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

Need more project awareness and follow up with communities.</td><td>Because of awareness made by RESCCUE project and Ministry of Fisheries.</td></tr>
</table>

<table>
<tr><th colspan="4">Drought</th></tr>
<tr><td>Indicator 1</td><td>Reasons why it has significant impacts</td><td>What happens when there are extremely drought events?
It will be very worse to the farmers who plant crops and yaqona

How do these affect you and your community, including the ecosystems on which you rely?
Our crops were badly affected especially to our yaqona plants.

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

By practice some methods of planting e.g inter-cropping during dry season</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 2</td><td>Reasons why it has significant impacts</td><td>What would happen if drought goes for a longer period (e.g. 6> months)?
It will affect our daily lives as we are mainly focus on using land for planting

How would this affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?
Need more help from government and NGOs</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><th colspan="4">Drought</th></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Indicator 3</td><td>Reasons why it has significant impacts</td><td>What stands in the way of adapting to long period of drought?
By enforcing farmers to plant crops according to its season.

To what extent do you or your community have the means manage these extreme events?
We have seek advice to Agriculture officer on which crop to plant based on the weather

No Capability Low Capability Manageable Quite Capable Very Capable
1 | 2 | 3 | 4 | 5

How could this score be improved?
Need more awareness from different government departments</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 4</td><td>Reasons why it has significant impacts</td><td>How confident are you that the improvements in water management delivered by the project will continue after it ends?
Not Confident ; Low Confident; Moderate; Confident ; Very confident
1 | 2 | 3 | 4 | 5

How could this score be improved?
Need more awareness and follow up with community.</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><th colspan="4">Flooding/ Not Appropriate to community</th></tr>
<tr><td>Indicator 1</td><td>Reasons why it has significant impacts</td><td>What happens when there are frequent flooding events?
How do these affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
1 | 2 | 3 | 4 | 5

How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><td colspan="4">Flooding/ Not Appropriate to community</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Indicator 2</td><td>Reasons why it has significant impacts</td><td>What would happen if these flooding events occur much more frequent (e.g. 4 > times a month)?
How would this affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 3</td><td>Reasons why it has significant impacts</td><td>What stands in the way of adapting to flood management? To what extent do you or your community have the means manage these extreme events?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 4</td><td>Reasons why it has significant impacts</td><td>How confident are you that the improvements in flood disaster management delivered by the project will continue after it ends?

Not Confident ; Low Confident; Moderate; Confident ; Very confident
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><td colspan="4">Ocean Acidification/ Not Appropriate to community</td></tr>
<tr><td>Indicator 1</td><td>Reasons why it has significant impacts</td><td>What happens when there are continuous coral bleaching? How do these affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 2</td><td>Reasons why it has significant impacts</td><td>What would happen if these coral bleaching affects 50%> of your iqoliqoli reef?
How would this affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 3</td><td>Reasons why it has significant impacts</td><td>What stands in the way of adapting to coral bleaching? To what extent do you or your community have the means manage these extreme events?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator</td><td>Reasons why it has</td><td>How confident are you that the improvements in coral reef</td><td>Reasons why it</td></tr>
</table>

<table>
<tr><td colspan="4">Ocean Acidification/ Not Appropriate to community</td></tr>
<tr><td>4</td><td>significant impacts</td><td>management delivered by the project will continue after it ends?

Not Confident ; Low Confident; Moderate; Confident ; Very confident
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?</td><td>has less significant impacts</td></tr>
</table>

<table>
<tr><td colspan="4">Tropical Cyclone</td></tr>
<tr><td>Indicator 1</td><td>Reasons why it has significant impacts</td><td>What happens when there are extreme tropical cyclone incidences?
It can damage our houses, crops and environment
How do these affect you and your community, including the ecosystems on which you rely?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?
Communities need to be alerted on every cyclone season</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 2</td><td>Reasons why it has significant impacts</td><td>What would happen if these tropical cyclones were as twice strong?
It can even kill people

How would this affect you and your community, including the ecosystems on which you rely?
Communities will be struggle to recover as we are from a remote areas.

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?
Need more awareness from National Disaster Committee</td><td>Reasons why it has less significant impacts</td></tr>
</table>

<table>
<tr><th colspan="4">Tropical Cyclone</th></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Indicator 3</td><td>Reasons why it has significant impacts</td><td>What stands in the way of adapting to increasing intensity of tropical cyclones?
Some of the communities doesn’t take the warning seriously

To what extent do you or your community have the means manage these extreme events?

Very serious Serious Moderate Not so bad No problem
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?

Need more awareness to communities</td><td>Reasons why it has less significant impacts</td></tr>
<tr><td>Indicator 4</td><td>Reasons why it has significant impacts</td><td>How confident are you that the improvements in tropical cyclone disaster management delivered by the project will continue after it ends?

Not Confident ; Low Confident; Moderate; Confident ; Very confident
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>
How could this score be improved?
Communities need to be reminded at every cyclone season.</td><td>Reasons why it has less significant impacts</td></tr>
</table>

NABUKELEVU-I-RA VILLAGE

<table>
<tr><th>ACTIVITY</th><th>INDICATOR 1</th><th>INDICATOR 2</th><th>INDICATOR 3</th><th>INDICATOR 4</th></tr>
<tr>
<td>SEA LEVEL RISE</td>
<td>
What happens when there are extremely high wave?

It enters the school compound

How do these affect you and your community, including the ecosystems on which you rely?

It will destroy our primary school where our children go to and for the ecosystems; there are no more coconut trees found along the coastal area.

<table>
<tr><td>Very serious</td><td>Serious</td><td>Moderate</td><td>Not so bad</td><td>No problem</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>
What would happen if these waves were twice as high?

It would destroy the whole school and that includes the teachers quarters

How do these affect you and your community, including the ecosystems on which you rely?

Our marine ecosystem most especially the fishes and other marine species can be lost.

<table>
<tr><td>Very serious</td><td>Serious</td><td>Moderate</td><td>Not so bad</td><td>No problem</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>
What stands in the way of adapting to increasing high waves (e.g. king tides)?

Mentality of the people maybe. They just think they know what to do, and they never do it.

To what extent do you or your community have the means to manage these extreme events?

We have been thinking to start with our planting of mangroves, in that way we can protect or minimize impacts done in future when there are king tides.

<table>
<tr><td>Very serious</td><td>Serious</td><td>Moderate</td><td>Not so bad</td><td>No problem</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>
How confident are you that the improvements in coastal management delivered by the project will continue after it ends?

We will start working on building our seawalls which we have been planning to do, and that we are confident that we will improve managing our coastal surroundings.

<table>
<tr><td>Not confident</td><td>Low confident</td><td>Moderate</td><td>Confident</td><td>Very confident</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><th>ACTIVITY</th><th>INDICATOR 1</th><th>INDICATOR 2</th><th>INDICATOR 3</th><th>INDICATOR 4</th></tr>
<tr>
<td>DROUGHT</td>
<td>What happens when there are extremely drought events?

During drought, water dries up and crops and farms are being destroyed

How do these affect you and your community, including the ecosystems on which you rely?

It will disrupt the supply of water as water source will dried up and also damaged our crops.

<table>
<tr><td>Very serious</td><td>Serious</td><td>Moderate</td><td>Not so bad</td><td>No problem</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>What would happen if drought goes for a longer period (e.g. 6>months)?

It would damage our whole plantation and destroy our root crops in which we depending on it for survival

How would this affect you and your community, including the ecosystems on which you rely?

Majority us farmers plant yaqona mostly for commercial purposes and other root crops for subsistence. When drought happens, it will take a toll on every root crop including yaqona plantations, and it will destroy almost everything and this will affect our everyday living as we will have nothing to eat and nothing to sell to support our family with.

<table>
<tr><td>Very serious</td><td>Serious</td><td>Moderate</td><td>Not so bad</td><td>No problem</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>What stands in the way of adapting to long period of drought?

Ignorance of people

To what extent do you or your community have the means to manage these extreme events?

Instead of just focusing on planting dalo, we should plant cassava and kumala (sweet potatoes) more as this can withstand heat and be a source of food to us during a period of drought.

<table>
<tr><td>No Capability</td><td>Low Capability</td><td>Manageble</td><td>Quite Capable</td><td>Very capable</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr>
</table>
</td>
<td>How confident are you that the improvements in water management delivered by the project will continue after it ends?

<table>
<tr><td>Not confident</td><td>Low confident</td><td>Moderate</td><td>Confident</td><td>Very confident</td></tr>
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<tr>
<td>TROPICAL CYCLONE</td>
<td>
What happens when there are extreme tropical cyclones?

Our farms and our houses are destroyed

How do these affect you and your community, including the ecosystems on which you rely?

It will destroy our main source of income which is our yaqona farms, and destroy our houses.

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What would happen if these tropical cyclones were as twice strong?

Probably there would be some serious cases like deaths and majority of the houses will be destroyed including our crops

How do these affect you and your community, including the ecosystems on which you rely?

There won’t be sufficient food for everyone as most of it will be affected by the cyclone.

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<td>
What stands in the way of adapting to increasing intensity of tropical cyclones?

Mostly the unnecessary cutting of trees

To what extent do you or your community have the means to manage these extreme events?

When there is tropical cyclone, we usually prepare ourselves, those in the low lying areas especially the school and teachers quarters move to higher ground, we put up hurricane shutters to manage the extreme hazards that will be caused.

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How confident are you that the improvements in tropical cyclone disaster management delivered by the project will continue after it ends?

Youths and children should be well taught on signs that signifies a natural disaster is about to strike, so they can be well prepared and can lessen the impacts caused.

Also, houses that are being built in the village, there should be a standard house built to withstand any impacts of cyclones.

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Note: There are no VRA on Flooding and Ocean Acidification in Nabukelevu ira village.

And in attendance, a total of 10 men present in the consultation.

GALOA VILLAGE

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<td>SEA LEVEL RISE</td>
<td>What happens when there are extremely high wave?

The waves entered the school compound, including teacher’s quarters and some houses in the villages that are along the seawall.

How do these affect you and your community, including the ecosystems on which you rely?

It will destroy our primary school where our children go to and for the ecosystems; some native trees that were planted along the seawall have died mainly because of high waves.

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<td>What would happen if these waves were twice as high?

It would destroy the whole school and that includes the teachers quarters

How do these affect you and your community, including the ecosystems on which you rely?

Our marine ecosystem most especially the fishes and other marine species can be lost. Native tree species will die and houses too will be destroyed, in this case, the teachers’ quarters in the school compound.

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<td>What stands in the way of adapting to increasing high waves (e.g. king tides)?

It’s just the mentality of the individual and the poor decision making that they do will cost us more damages and destruction.

To what extent do you or your community have the means to manage these extreme events?

There have been talks going on to relocate the school.

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<td>How confident are you that the improvements in coastal management delivered by the project will continue after it ends?

We will start working on building our seawalls which we have been planning to do, and that we are confident that we will improve managing our coastal surroundings.

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<td>DROUGHT</td>
<td>What happens when there are extremely drought events?

Crops died, water source dried up.

How do these affect you and your community, including the ecosystems on which you rely?

We need water everyday as this is a basic necessity, if water source dries up, we would be affected the most. There will be a shortage of food, and also our main income generation crop would also be affected which is yaqona.

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<td>What would happen if drought goes for a longer period (e.g. 6>months)?

Crops would be damaged, no water supply for the village.

How do these affect you and your community, including the ecosystems on which you rely?

There would be no food and water supply if this drought continues for more than 6 months. Plants will die from drought, and the land will eventually die.

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<td>What stands in the way of adapting to long period of drought?

• Cutting of trees
• Uncontrolled bush fire
To what extent do you or your community have the means to manage these extreme events?

For farming areas, if there is a particular area that is susceptible to drought, we move to other areas that are not and plant there.

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<td>How confident are you that the improvements in water management delivered by the project will continue after it ends?

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<td>TROPICAL CYLONES</td>
<td>What happens when there are extreme tropical cyclone incidences?

Both houses and crops are destroyed in any event of tropical cyclones

How do these affect you and your community, including the ecosystems on which you rely?

There will be damaged houses and families are going to be affected, crops will be damaged as well, hence shortage in food supply and our mangroves will be heavily affected as well.

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<td>What would happen if these tropical cyclones were as twice strong?

Most probably all the houses in the village are going to be destroyed.

How do these affect you and your community, including the ecosystems on which you rely?

People will be left homeless, and native tree species will be destroyed and the same for our mangrove trees. There will a shortage of food for everyone

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<td>What stands in the way of adapting to increasing intensity of tropical cyclones?

Sometimes people are just too ignorant, they know the signs and its being forecasted, but still they pay no attention or whatsoever to prepare themselves for any disaster.

To what extent do you or your community have the means to manage these extreme events?

Just be well prepared and houses built should be strong enough to withstand any strongest cyclone

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