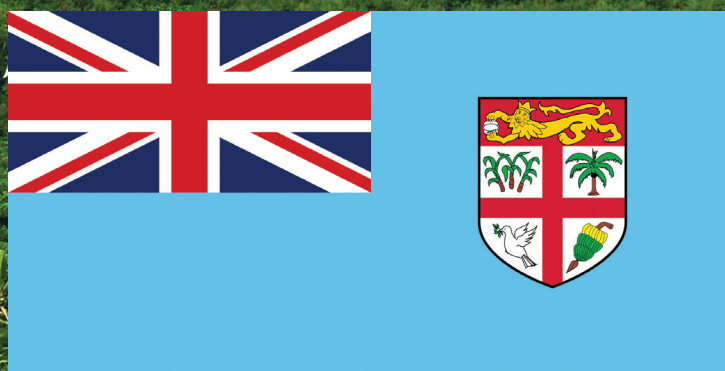


**GEF PACIFIC
RIDGE TO REEF PROGRAMME**

FIJI



**NATIONAL R2R PROGRAMME
DOCUMENT**



GEF Pacific RIDGE TO REEF Programme

Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries

FOREWORD

The Heads of States of 13 Pacific SIDS developed and in 1997 endorsed a GEF International Waters Strategic Action Programme (SAP) for Pacific Island Countries. That document identified priority areas for action in the international waters focal area as improved management of ocean and coastal fisheries, integrated watershed and coastal management, and water supply protection. On the basis of the Pacific SAP, the GEF International Waters focal area has subsequently invested in a series of regional initiatives. The first was the UNDP implemented project entitled “Implementation of the Strategic Action Program for the International Waters of the Pacific Small Island Developing States” initiated in 2000 and operated over almost 7 years to 2006.

In light of the critical water resource and sanitation issues facing Pacific SIDS, GEF support in the years following the conclusion of the IWP project has been targeted at improved coordination and planning of water resource and wastewater management to balance overuse and conflicting uses of scarce freshwater resources through the GEF Pacific IWRM Project. The latter was financed by the GEF, implemented by UNDP and UNEP, and executed regionally by the Geoscience Division of the Pacific Community (SPC) in partnership with 14 Pacific Island Countries.

The GEF Pacific IWRM Project built on achievements of previous investments via a focus on national IWRM demonstration projects aimed at providing an opportunity for participating countries to implement, and experiment with, new management models and methods. The practical on-the-ground solutions to water and sanitation issues demonstrated by the national IWRM projects acted to stimulate support at both community and national government levels for policy reform and the mainstreaming of integrated approaches as part of national sustainable development planning.

The experience and local capacity in integrated environmental and natural resource management generated through the GEF Pacific IWRM project has been recognized both regionally and within the 14 participating Pacific Island Countries as an appropriate entry point for the testing of innovative approaches and measures to integrate land, forest, water and coastal management, including climate change adaptation in Pacific SIDS. In this connection, the GEF multi-focal area, multi-GEF agency programme entitled “Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods” (or the GEF Pacific R2R Programme) was developed to provide an opportunity for Pacific SIDS to develop and implement truly integrated approaches for the sustainable development of island economies and communities. Programme activities are organised under the following programme components:

- National Multi-Focal Area Ridge-to-Reef Demonstrations in all Pacific Island Countries
- Improved Governance for Integrated, Climate Resilient Land, Water, Forest and Coastal Management
- Regional and National/Local Ridge-to-Reef Indicators, Monitoring and Evaluation and Knowledge Management
- Regional Programme Coordination

This National Programme Document summarizes the development of integrated approaches to water resource and coastal management in Fiji to date, including examples of specific results and lessons learned achieved through integrated approaches to environmental and natural resource management. Importantly, this document presents information about the interlinked GEF R2R STAR and GEF International Waters R2R Projects, including programme support activities which focus on science-based planning, human capital development, policy and strategic planning, results-based management, and knowledge sharing.

Marc Wilson

Regional Programme Coordinator
Pacific Community
Suva, Fiji Islands

INTRODUCTION

Given the close inter-connections between land, water and coastal systems in Small Island Developing States (SIDS), the integration of freshwater watershed management with coastal area management is considered essential to foster effective cross-sectoral coordination in the planning and management of land, water and coastal uses. In Pacific SIDS, such integrated approaches to freshwater and coastal area management have been termed 'Ridge to Reef' to emphasise the inter-connections between the natural and social systems from the mountain 'ridges' of volcanic islands, through coastal watersheds and habitats, and across coastal lagoons to the fringing 'reef' environments associated with most Pacific SIDS. Inherent in the approach is the philosophy of cross-sectoral coordination in the planning and management of freshwater use, sanitation, wastewater treatment and pollution control, sustainable land use and forestry practices, balancing coastal livelihoods and biodiversity conservation, hazard risk reduction, and climate variability and change.

Similarly, the integration of communities, stakeholders, and national governments within such a cross-sectoral planning framework is described by Pacific SIDS as a 'Community to Cabinet' approach. The following sections summarize achievements to date in the development of 'Ridge to Reef' and 'Community to Cabinet' approaches to integrated natural resource and environmental management in Fiji. An overview of the purpose of the Ridge to Reef Programme, its GEF R2R STAR Projects and GEF International Waters Projects is also provided.



1. RIDGE TO REEF CONTEXT

This section provides a brief background of the geography and environmental threats in Fiji. This information has been used as the basis for the identification of priority activities for the testing of 'Ridge to Reef' approaches to integrated land, water, forest and coastal management in Fiji.



2. COMMUNITY TO CABINET APPROACH

Community to Cabinet is a multi-stakeholder approach adopted in the Pacific Small Island Developing States to foster strengthened coordination and stakeholder involvement in the planning of investments in integrated natural resource and environmental management. This section outlines existing mechanisms for 'Community to Cabinet' coordination in Fiji.



3. RIDGE TO REEF RESULTS

Pacific leaders have called for a strengthened emphasis in results-oriented sustainable development planning. This section benchmarks the main results of efforts to develop integrated management approaches in Fiji to date.



4. DOING IS SEEING THE NEED

The GEF Pacific Ridge to Reef programme embraces the 'Doing is Seeing the Need' philosophy adopted by the GEF Pacific R2R Programme. A story board of images is presented to provide examples of best practices in integrated natural resource and environmental management.



5. LESSONS FROM INTEGRATION

Human resources are central to the sustainable development of Pacific SIDS. This section presents experiences and lessons learned in integrated management by practitioners and stakeholders. The focus of these lessons is on the capacity built for integrated management and the related results.



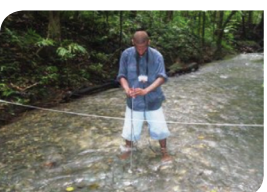
6. GEF PACIFIC R2R PROGRAMME

An overview of the "Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods" (or GEF Pacific R2R Programme) is provided in this section. Information about the interlinked GEF R2R STAR and GEF International Waters R2R Projects, and Programme Coordination Unit, is also presented.



7. FIJI R2R STAR PROJECT

A summary of Fiji national project to be financed through the GEF System for Transparent Allocation of Resources (STAR) is provided in this section. The planned contribution of this STAR project to the achievement of the targets for the regional Ridge to Reef program is outlined. The management arrangements for this project are also provided.



8. INTERNATIONAL WATERS R2R PROJECT

Priority actions identified for testing the integration of water, land, forest and coastal management to preserve ecosystem services, store carbon, improve climate resilience and sustain livelihoods in Fiji are outlined. A brief strategy for Fiji IW R2R national pilot project is provided along with the logical framework matrix. Key assumptions and risks are summarized to guide planning during the project's inception period.

1. RIDGE TO REEF CONTEXT



Country:	Fiji
Size:	18,270km ²
Population:	875,000
Population growth:	0.8% ^x
Density:	47.5/km ²
GDP:	USD 3.8billion
Growth Rate:	2%
Gross National Income:	USD 4,252

Fiji is an independent island state comprised of over 300 islands, and is part of Melanesia. These islands form a complex group of high islands of volcanic origin, along with barrier reefs, atolls, sand cays and raised coral islands. One of the most developed of the Pacific Islands, Fiji is blessed with forests, rivers, minerals and fisheries resources.

The islands exhibit considerable differences in their geographical characteristics. The large islands are mountainous and have significant permanent surface water sources, while there are many small islands, both inhabited and uninhabited, which have little or no permanent surface water and rely on groundwater and rainwater only. The water management issues for the large islands and small islands can vary significantly. High annual, inter-annual and seasonal variation of rainfall makes Fiji particularly vulnerable to floods and droughts.

Over 70% of the population has access to treated, metered reticulated water supply although continuity of supply is perhaps not ideal and maybe in question, particularly in the drier months. This high percentage is achieved because of the concentration of the population in urban settlements and urban corridors such as between Lautoka-Nadi and Nausori-Suva. The situation in the rural areas and settlements is different, with supply options through subsidized small rural surface or borehole schemes. The smaller islands support significant but much smaller populations and have variable water resources relying on conjunctive use of roof catchments, minor streams and boreholes for supply.

Over the years the human activities have affected the quality of water. Not only industrial waste and sewage, but other widespread sources of pollution have affected the quality of water and thereby damaging native fisheries and aquatic life in streams and rivers.

Catchment development, forestry, and agriculture, as well as the growth of urban areas, has also caused the quality of water to deteriorate. Mismanaged land practices also pose a threat to the ability of catchments to drain as they naturally should, leading to the heightened effect of flooding events.

Fiji does not have an overall national policy or comprehensive legislation that deals with water with various aspects of use and management falling under a number of jurisdictions. Commercial use of water and competition for resources, conflicting use of rivers and other sources, impacts of upstream industries, catchments areas and landowner demands are however on the increase and it is readily becoming apparent that current legislative instruments are in urgent need of revision and updating.

With its vulnerability to flooding, Nadi Basin Catchment was identified as the most urgent 'hotspot', and the first priority for an integrated water resources management (IWRM) demonstration project in Fiji. Nadi Basin Catchment serves as an immensely valuable resource for Fiji. It sustains a diverse range of industries including the agricultural, drinking water, forestry, and tourism sectors, all of which are vital to Fiji's economic health.

The lower catchment in particular contributes greatly to tourism and also provides for a wide range of leisure activities and an environment for all to enjoy. In recent years Nadi has experienced rapid urbanization and increasing population due largely to the thriving tourism industry that has seen the establishment of major international resorts and hotels in the lower catchment. Nadi has also experienced regular flooding events with recent catastrophic floods happening in 1999 and in 2009, 2011 and 2012 where damages ran into millions of dollars with the tourism and agricultural sectors being particularly hard hit.

The above issues have begun to be addressed through the cross-sectoral planning and management initiatives of the GEF Pacific IWRM Project. These needs are shared with many other watershed in Fiji within a Ridge to Reef context.

These include strengthening capacity for watershed assessment, mapping and planning, reducing stress on vulnerable freshwater resources by developing and implementing watershed management plans and developing the enabling environment for the replication and scaling-up of best practices in watershed management planning.

2. COMMUNITY TO CABINET APPROACH

There is a growing recognition in the Pacific region of the need for partnerships, alignment of donor support with national priorities, and country ownership in the development of results-oriented programs and projects. The Pacific leaders recently emphasized these needs noting the well-known challenges Pacific Island communities face in fashioning sustainable futures. These include geographical isolation, high levels of dependence on natural resources for nutritional security and livelihoods, and a highly variable environment characterized by numerous coastal hazards.

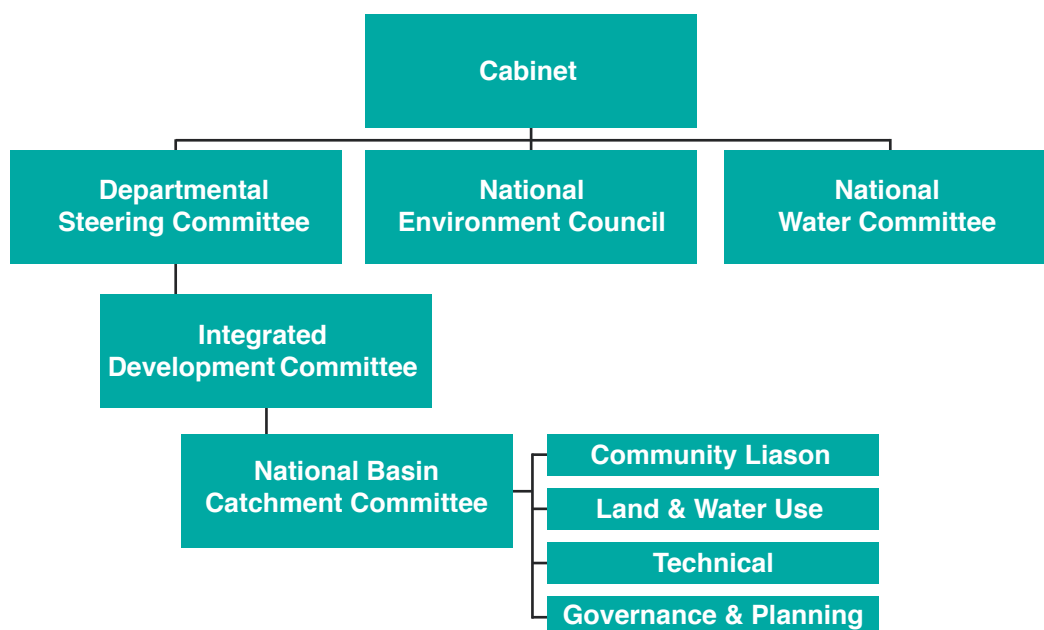
The above combined with considerable variation in island geomorphology, socio-economics and politics make locally-driven solutions to key issues influencing island sustainability and resilience a necessity. Of particular note are the complex land and marine tenure systems and institutional relationships between national and community-based governance structures. While the Pacific SIDS have largely adopted western-style constitutions and legal systems, such community-based governance and leadership arrangements remain highly influential at all levels. Accordingly, the participation of civil society organizations and community leaders in development planning is essential to increase the local relevance of management actions and their results in SIDS. The following outlines existing cross sectoral coordination arrangements and efforts to engage stakeholders in sustainable development planning.

Strengthening Cross-sectoral Coordination and Planning

There is no one minister or department that is responsible for water resources in Fiji, responsibility is shared based on the different uses and users of water. Different ministers have responsibility for water supply, irrigation, power generation, agriculture and environment. National coordination is provided by the National Water Committee, an ad hoc committee established by Cabinet in 2001 comprised of the heads of the key ministries that oversee water resources. Although the National Water Committee has been established there needs to be a higher level coordinating mechanism that has the authority to support the development of water resource strategies and policies.

Though there is no actively developed water resources management function in the government administration of Fiji, there are two agencies with some assigned responsibility. The Mineral Resources Department (MRD) has been assigned de facto water management responsibility and was responsible for the development of the 2005 National Water Policy that was put before government. Limited resources have meant that MRD’s operational input into water management has been minimal.

The Land & Water Resources Management (LWRM) of the Ministry of Agriculture has been assigned the ‘overall management of Fiji’s land and water resources...in an environmentally sustainable manner’ although it does not have the legislation to undertake that function. LWRM manages irrigation development and operation, rural drainage, flood control works and flood management measures on a catchment basis, estuarine dredging and catchment management.



Linking Local and National Coordination

The Nadi Basin Catchment Committee (NBCC) was one of the greatest achievements of the Fiji GEF Pacific IWRM Project. Its multi sectoral membership and demonstration of a successful model of catchment management has been praised and is now in replication at several sites in Fiji. The NBCC was first established in 2008 to oversee and coordinate the implementation of the Nadi Demonstration Project. The NBCC comprises of 24 members from government agencies, non government agencies, resource owners and communities living in the catchment. Collectively, its members represent the strength, capacity, policies and enforcement powers of the various departments and organizations involved in the management and use of the Basin's water resources.

Further to ensuring the smooth implementation of activities and achievement of outputs by the Demonstration Project, the NBCC is responsible for planning and coordinating the sustainable development and management of Nadi catchment water resources, with the aim of implementing an IWRM approach. To assist these efforts, subcommittees were formed to focus specifically on the four project components: Community Liaison, Technical, Governance and Planning, and Land and Water Use.

The NBCC is progressing its long-term plans for the effective management of the Nadi Basin Catchment area. Issues of interest and discussion in the NBCC's quarterly meetings range from water issues, land use, flood mitigation and protection, water supply, development plans, policies and legislations and gravel extraction. NBCC members have supported and assisted the installation of water level recorders, a flood early-warning system, initiated proper land use practices in the upper and mid catchment areas and initiated contact with communities. The influence of the NBCC is now well known and their input has been sought on a number of work programs under implementation in the Nadi Basin.

Stakeholder Engagement

Fiji's national pilot project of the regional R2R IW project will work to: generate local and national support for integrated R2R approaches; establish linkages, synergies and mechanisms for learning exchange, particularly between and among community leaders and project stakeholders of the national GEF System for Transparent Allocation of Resources (STAR) projects planned under the broader Ridge to Reef programme; develop local experience in linking IWRM to coastal area management; and stimulate cross-sectoral participation in the planning of coordinated investments in land, forest, water and coastal management in the participating countries. Given the range of stakeholders identified above, the preparation phase of the regional R2R IW project in Fiji has been based on a consultative process involving national government agencies, community representatives, and civil society organizations. Stakeholder inputs elicited during the preparation phase have been incorporated in the results framework for the pilot project included in the final section of this document.

Ridge to Reef stakeholders

- Fiji Meteorological Services
- Public Works Department
- Min of Agriculture (Land & Water Resource Management Division)
- Department of Town Country Planning
- Lands & Mineral Resources
- National Disaster Management Office
- Department of Environment
- Ministry of Health
- Solicitor General Office
- Ministry of Tourism
- Department of Forestry
- Department of Fisheries
- Ministry of I Taukei Affairs
- USP
- FSPI
- I Taukei Land Trust Board
- Nadi Town Council
- Live and Learn Environment Education
- Mamanuca Environment Society
- World Wide Fund for Nature
- IUCN
- Taiwan Technical Mission
- Airports Fiji Ltd
- Fiji Sugar Cooperation
- Nadi Chamber of Commerce
- Vodafone ATH Fiji Foundation

3. RIDGE TO REEF RESULTS

The need for results-based approaches to the management of development assistance programmes and projects has received recent high-level recognition.

In adopting the Paris Declaration on Aid Effectiveness in 2005, national government Ministers responsible for development from both developed and developing countries joined with Heads of multilateral and bilateral development institutions in committing to “work together in a participatory approach to strengthen country capacities and demand for results-based management”.

This commitment was reaffirmed in the 2008 Accra Agenda for Action which called for accelerated progress on aid effectiveness by better demonstrating the results of development efforts and openly accounting for them.

The Pacific Islands region and its development partners have responded accordingly. For example, in 2012 the Pacific Leaders considered a review of the effectiveness of development efforts in the Pacific and called for strengthened emphasis on results in planning and financing development. The following benchmarks the main results of efforts to develop integrated management approaches in Fiji to date.

PROCESS

Establishment of a Catchment Management Committee

During the inception of the project in year 2009 it was realized that under the principle of subsidiarity, there was an urgent need in Fiji to decentralize approaches to the lowest decision making bodies and establishment of a catchment committee would be an ideal solution. Prior to the formation of the Nadi Basin Catchment Committee, decisions within Nadi basin were made sectorally with little consultation or long-term strategic planning between the different sectors.

Hence one of national targets was to demonstrate a governance model for catchment management through the Nadi Basin Catchment Committee (NBCC) for future national upscaling and integration into Government policy. In year 2009 a Nadi Basin Catchment committee was formed within an independent chair appointed in year 2010. The committee was later endorsed by the cabinet in 2011. Mid 2012 involved an independent review of the Committee governance arrangements.

In early 2013, a special task force was formed to establish an exit strategy for the project. This was imperative to make sure that the systems and processes developed / improved under the project are sustained.

In late 2012 the NBCC became an integral part in the review of water resources policy, rural water policy, ground water policy and the Water management & sanitation policy.

Project Design and PM&E Plan endorsed by the Project Steering Committee

The design of this project dictated that proposed activities would be refined during the first six months of the project in close consultation with stakeholders.

A participatory approach was to be utilized to ensure that the project includes communities and wider stakeholders as part of a participatory monitoring and evaluation plan. It was targeted that the PM&E will be implemented by August, 2011.

The project activities were refined by early 2010 whilst by end of 2010 the PM&E was implemented and endorsed by the Nadi Basin Catchment Committee. This was further reflected in the mid-term review of the project as well.

Nadi Basin Integrated Flood Management Plan

The project was designed to use a key concept of IWRM, decentralization, whereby decisions are to be made at the lowest appropriate level following full public consultation. The target was to improve coordination and cross-sectoral working relationship amongst land and water management stakeholders and communities in the catchment. With the formation of the catchment committee and the initiation of number of cross sectoral activities by the project, there has been an increased interaction between institutions and agencies. An example being the formation of the Standard Operating Procedures for the flood siren which has brought a number of agencies to collaborate and work together.

The PMU continues to work in collaboration with a number of its strategic partners to communicate issues on water resources. The PMU along with The University of Fiji marked the World Water Day with creative and comprehensive programs expanding to include the whole western division of Viti Levu, Fiji.

Awareness and capacity building workshops and programs were expanded across the catchment targeting marginalized and vulnerable communities. The project has presented in number of joint forums such as Disaster, Climate change and National Integrated coastal Management.

Proportion of community engaged in water related issues to reduce vulnerability of water resources.

During inception it was established that water resources in the catchment were vulnerable to human activities and there was an urgent need to create awareness and empower communities.

The target was to have at least 30% active engagement of the community in water related issues. In early 2011, IWRM water literacy program was launched in schools in the catchment which saw most of the schools actively involved in water related activities.

Further there had been increase in number of communities and schools involved in the save the tree program.

In 2013 the Inter-Secondary Western Division IWRM Quiz competition was launched during the World Water Day celebration at the University of Fiji.

This outreach and initiative was only possible through active collaboration between the Project with support from the University of Fiji and Ministry of Education.

This quiz involved 50 secondary schools in the western division that provided a platform for young children to express their views on environmental issues, natural resources and the importance of sustainability.

Lessons learned incorporated into other project(s), catchment flood management plans and/or Regulations

The project aimed to replicate lessons learned by the end of the project. The project shared a number of lessons learnt at various levels and in varied capacity.

The Project Manger attended a three-day consultation session to provide the Voh-Koné-Pouembout Water Management Committee (CGE VKP) with practical ways to move forward on its own governance and to discuss possible means of improvement for New Caledonia as a whole.

The PMU-IWRM presented to the Sigatoka stakeholders on the activities carried out in the Nadi Catchment with the intention that it will be incorporated into building flood resilient communities within the Sigatoka catchment.

National staff across institutions with IWRM knowledge and experience

Prior to the project, staff across the water sector had limited knowledge or practical experience of IWRM practice or concepts.

The aim of the project was to increase through various activities. From inception to date, IWRM Nadi Demo Project has been instrumental in building capacity of national staff in the Fiji Meteorological Services and Water Authority of Fiji. It has also provided specific training in advance telemetry and hands-on training hydro-met station installation.

In collaboration with International Union for Conservation of Nature , the project has been able to build capacity of core NCCC stakeholders in the use of key technical and management support tools developed by the global WANI and other tools, as well as to encourage the integration of the ecosystem based 'ridge-to-reef' concepts and principles in the Nadi River Catchment Management

Replication strategy developed and implemented to mainstream lessons learned

To ensure the continuing success of lessons learned through the IWRM project a replication strategy was to be developed through the project. The replication strategy will need to reflect the roles and responsibilities in mainstreaming the lessons learned. The Replication strategy has been developed and number of initiatives has been mainstreamed in the local and national level.

STRESS REDUCTION

Sustainable forest & land management practices established and trialled with landowners to reduce runoffs and sediment loads

A bio-physical survey of the Nadi Basin catchment was conducted mid 2010 and it established that majority areas of the upper catchment are of grasslands. It was further determined that landuse practices in the upper catchment, mid catchment and riparian zones contributed to heavy runoff and sediment pollution. It was targeted to establish demonstration plots and to train farmers in best agricultural practices. Three demonstration sites were established with the formation of a Landcare group in the upper catchment. Unfortunately in 2013 rehabilitation work had to be carried out to the nursery in Navunitawa that was destroyed in the cyclone Evans.

Rehabilitation of degraded areas, two 'hotspots' in the catchment

In line to its objective of using an integrated flood risk management approach to improve flood preparedness and management within the Nadi Basin, the project has identified two 'hot spots' covering an area of approximately 80 hectares. These areas were once covered with native forests however over the years some areas have been commercially forested, removed for personal use by the communities and destroyed by uncontrolled burning. The target was to rehabilitate these areas. In early 2011 two incentive based tree planting initiatives were in launched – "growing money on trees" and "we got it from tree" were conceptualized for schools and communities respectively. To date about 60 hectares of the area has been rehabilitated with fruit trees and staple food trees- coconut and breadfruit trees.

Construction of Flood mitigation structures

Prior to the project flood mitigation infrastructure was insufficient. A target of the project was to establish flood management Structures to reduce the impact of flooding. With the effort of ridge to reef, a holistic catchment management technique, technical solutions are also part of the integrated approach. A total of three retention dams were constructed to assist in managing flood waters.

4. DOING IS SEEING THE NEED

The GEF Pacific IWRM project acted as a valuable entry point for strengthening integrated approaches to natural resource management in Pacific SIDS. Existing national coordination mechanisms involving operation of inter-linked national APEX bodies for IWRM and local coordinating committees for IWRM demonstration projects have been effective in guiding stress reduction in the water and sanitation sector and driving reform of national IWRM policy and planning. That project also acted as a valuable entry point for capacity development, helping to foster application of inter-disciplinary skills and local knowledge and integrating this into monitoring and evaluation to ensure that causes of environmental stresses and the results of interventions are understood by stakeholders.

A need exists, however, to scale up the GEF Pacific IWRM approach to strengthen the integration of land, water and coastal management to better accommodate issues associated with biodiversity conservation, to build on synergies between investments in IWRM and sustainable forestry practices, and to strengthen the sustainable management of coastal 'blue forests' from the perspectives of hazard risk reduction, ICM application, and livelihoods. The Pacific Ridge to Reef programme embraces the 'doing is seeing the need' philosophy adopted by the IWRM project via the promotion of pilot activities aimed at generating local and national support for integrated Ridge to Reef and Community to Cabinet approaches and to establish linkages, synergies and mechanisms for learning exchange, particularly between and among community leaders and project stakeholders.

Pilot activities will also develop local experience in linking IWRM to coastal area management and will stimulate cross-sectoral participation in the planning of coordinated investments in land, forest, water and coastal management in the participating countries. The related and linked national STAR projects will deliver the targets of the overall programme relating to strategic objectives of the GEF biodiversity, climate change mitigation and adaptation, land degradation, and sustainable forestry management focal areas.



High School Eco Quiz for World Water Day; Learning centre at Nadi Library; CDMC training



NBCC quarterly meeting; Community Disaster Management Committee



Meeting of the Nadi Basin Catchment Committee, 2012



Preparing seedlings for re-vegetation in the highlands;

5. LESSONS FROM INTEGRATION

**“This is the first time I’ve had any recognition of my hard work and we had a great feast to celebrate”
Mrs. Rafik
Chairperson
CDMC**

Empowering Women Through Community Disaster Management Committees

By Vinesh Kumar, IWRM Project Manager

Prior to the implementation of the GEF Pacific IWRM Project in Nadi Basin there was a fragmented approach to disaster management in the catchment. The Nadi IWRM Project helped 27 communities establish Community Disaster Management Committees (CDMC’s) and Plans. The process involved women from the villages, many of whom became the chairpersons of the CDMC’s. This has helped to empower the women of the communities and to formally recognise their important and often overlooked role in disaster response and recovery.

The previous fragmented approach to disaster management was typified by a lack of coordination among the communities, and between the communities and response agencies. This led to lives lost during flooding events, delayed response times and the recurrence of slow and costly recovery. Normally in the villages of Nadi Basin, women are the ones who bear the brunt of a disaster and are at the centre of recovery, working to handle the situation and take care of families.

In many of the villages where the committee has been established, women have been chosen as the chairperson. Mrs Rafik, chairperson of the Wailoaloa CDMC, says “This is significant in a male dominated area and has given us an active role in the decision making of the community”. Through active inclusion of women in the development of the CDMC and Plan, the project has been able to provide recognition of the important role that women play in disaster response and recovery. It has been a source of great pride for many women and as Mrs Rafik says “This is the first time I have had any recognition of my hard work and we had a great feast to celebrate!”

Mrs Rafik was running the Wailoaloa Women’s Group which the IWRM project approached to be the foundation for the CDMC. This came about because Mr. Vinesh Kumar, the IWRM Project Manager, had previously run separate consultations with the Wailoaloa Women’s Group, discussing the issues in the area, in particular the major problems that flooding causes. Because of Mr Kumar’s attention to the needs of the women in the community they became confident in their understanding of disasters in the area and asked for the CDMC training in Wailoaloa village.

Through involvement in the establishment of the CDMC and the subsequent management plan Mrs Rafik says of the experience “I now have the confidence to facilitate the community in a disaster and am much more confident to talk in front of a group about our disaster situations”.

Mrs Rafik went on to discuss the powerful ripple effect the CDMC has had on people, particularly women, that now people are starting to see disaster response and recovery as everybody’s business and that they need to be part of the solution. “We discuss with other women in other communities the benefits of using this system to respond to disaster and we are proud of our role in looking after the community”.

Since the establishment of the CDMC’s there have been no lives lost in the villages during flooding events. The Nadi IWRM Project continues to provide support to these communities and was instrumental in the establishment of the Nadi early warning flood system. The project continues to provide support to these communities and was instrumental in the establishment of the Nadi early warning flood system.

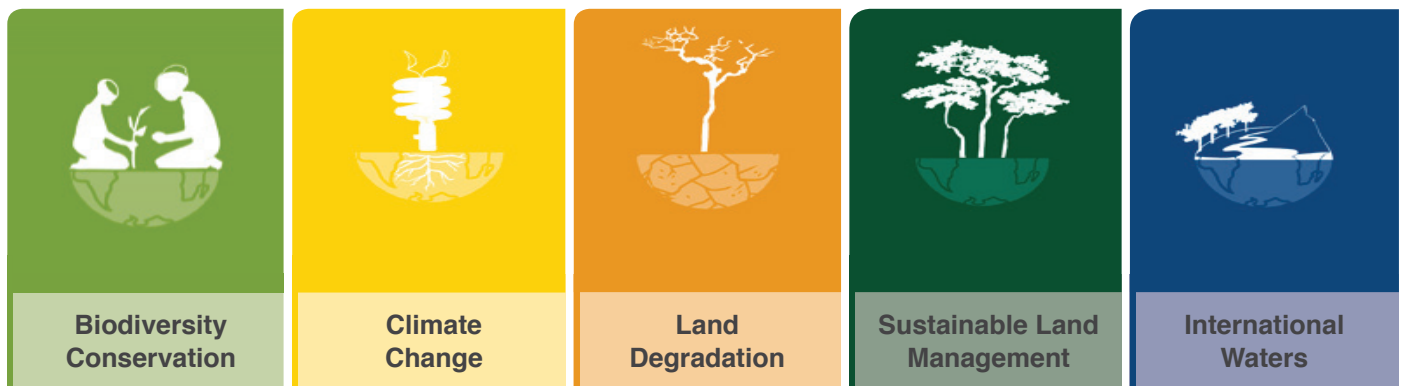
As the project manager I have learned throughout the process of engaging communities, listening to their concerns, facilitating workshops and assisting with plan development how important it is to have active community participation. With community buy-in everyone acknowledges the importance of what is being done and works together to maintain systems and processes. This is critical for the longevity of any project goal.

6. THE GEF PACIFIC RIDGE TO REEF PROGRAMME

The GEF Pacific Ridge to Reef (R2R) Programme was developed to guide the strategic investment of GEF grant and national funding in actions aimed at achieving the sustainable development of Pacific SIDS within a truly integrated environmental and natural resource management framework.

A GEF Multi-Focal Area Approach

Initiatives of the R2R programme aim to deliver tangible and quantifiable global environmental benefits by focusing on a more cross-cutting approach to water, land and coastal management that captures the complementarities among the following GEF focal areas



A Multi-GEF Agency Approach

The GEF Pacific Ridge to Reef Programme is a multi-agency initiative involving the United Nations Development Programme (UNDP), the United Nations Food and Agriculture Organization (FAO), and the United Nations Environment Programme (UNEP) as GEF implementing agencies. Coordination support is provided by the Pacific Community (SPC), a regional intergovernmental organisation that works with Pacific Nations across a wide range of areas relevant to programme implementation, including water resource management, geoscience for development, public health, forestry, fisheries, disaster management, youth, gender and culture.

R2R Programme Goal and Components

The goal of the GEF R2R programme is “to maintain and enhance Pacific Island countries’ ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal management that contribute to poverty reduction, sustainable livelihoods and climate resilience”. Programme activities are organised under the following components:



GEF R2R STAR Projects

Significantly, the programme involves the execution of 13 GEF R2R STAR¹ projects which address national priorities and development needs while delivering global environmental benefits in line with the abovementioned GEF focal area strategies.

These UNDP, UNEP and FAO implemented projects are executed nationally on a bilateral basis in partnership with local stakeholders. To ensure cohesion, complementarity and efficiency of GEF investments under the R2R programme, each GEF R2R STAR project has been provided US\$175,000 of International Waters (IW) funding in addition to their national STAR allocations.

The intent of this IW funding increment is to enable effective linkages with the GEF International Waters R2R project, the adoption of integrated approaches aimed at addressing critical water-related issues, and intra-regional capacity building and knowledge sharing.

GEF International Waters R2R Project

The operation of the R2R programme is supported in areas of science-based planning, human capital development, policy and strategic planning, results-based management, and knowledge sharing through the International Waters R2R project which is executed regionally by the Pacific Community. R2R pilot projects, to be implemented through the R2R IW project, are designed to strengthen R2R integration by establishing synergies among the work of the various sector agencies and the GEF R2R STAR Projects, between governments and communities, and civil society and the private sector.

Programme Coordinating Unit

The Programme Coordinating Unit (PCU), hosted by the Pacific Community's Geoscience Division (GSD) in the Fiji Islands, is tasked with the provision of technical, operational, reporting and monitoring support as requested by the participating Pacific Island Countries.

The PCU also facilitates the consolidation and sharing of sectoral knowledge and expertise to support the uptake of best-practice management approaches in policy-making and planning. Led by the Regional Programme Coordinator, the PCU possesses multidisciplinary expertise, including administration and financial management officers, to support programme coordination.

¹ The Global Environment Facility's System for the Transparent Allocation of Resources (STAR)

7. FIJI'S NATIONAL R2R STAR PROJECT

Implementing a "Ridge to Reef" approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji

To preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience and sustain livelihoods through a ridge-to-reef management of priority watersheds in Fiji.

Component 1: Conservation of Terrestrial and Marine Biodiversity

Outcome 1.1 Improved management effectiveness of existing and new protected areas

Outcome 1.2 Improved financial sustainability for terrestrial and marine protected area systems

Component 2: Conservation, Restoration and Enhancement of Carbon Stocks through Sustainable Forestry

Outcome 2.1 Carbon stocks restored and enhanced in priority catchments

Outcome 2.2 Increase in contribution and support from tourism entrepreneurs reported by CCAs in and around CCAs for biodiversity conservation (tracked by their resource investment / contribution in relevant actions)

Component 3: Integrated Natural Resources Management

Outcome 3.1 Integrated catchment management plans integrating conservation of biodiversity, forests, land and water formulated and implemented in priority sites

Outcome 3.2 Strengthened governance for integrated natural resources (land, water, biodiversity, forests) management

Component 4: Knowledge Management

Outcome 4.1 Improved data and information systems on biodiversity, forests and climate change, land and coastal and marine management and good practices

INFORMATION BOX

GEF Agency: UNDP
 National Lead Agency: Department of Environment
 Funding Source: GEF Trust Fund
 GEF Focal Area: Multi-Focal Area
 Indicative Grant Amount: USD 7,387,614
 Indicative Co-financing: USD 30,221,812
 Approval Date: 2013

8. GEF PACIFIC INTERNATIONAL WATERS R2R PROJECT

This regional project will support 14 Pacific Island Countries in the development of “Ridge to Reef” and “Community to Cabinet” approaches designed to guide the integration of water, land, forest and coastal management required to fashion sustainable futures for island communities.

The project also aims to address the recent high-level recognition and calls for results-based approaches to the management of development assistance programmes and projects, and will provide support in areas of coordination, capacity building, technical assistance, and monitoring and evaluation for the operation of the GEF Pacific Ridge to Reef Programme. Components and outcomes of this programme are:

<p>Component 1: National Demonstrations to Support R2R ICM/IWRM Approaches for Island Resilience and Sustainability</p> <ul style="list-style-type: none"> • Successful pilot projects testing innovative solutions involving linking ICM, IWRM and climate change adaptation • National diagnostic analyses for ICM conducted for prioritizing and scaling-up key ICM/IWRM reforms and investments • Community leader roundtable networks established for strengthened ‘community to cabinet’ ICM/IWRM
<p>Component 2: Island-based Investments in Human Capital and Knowledge to Strengthen National and Local Capacities for R2R ICM/IWRM approaches</p> <ul style="list-style-type: none"> • National and local capacity for ICM and IWRM implementation built to enable best practice in integrated land, water, forest and coastal management and CC adaptation • PIC knowledge on climate variability, coastal area planning in DRM, integrating ‘blue forest’ and coastal livelihoods consolidated and shared to support evidence-based coastal and marine spatial planning • Incentive structures for retention of local ‘Ridge to Reef’ expertise and inter-governmental dialogue on human resource needs for ICM/IWRM initiated
<p>Component 3: Mainstreaming of R2R ICM/IWRM Approaches into National Development Planning</p> <ul style="list-style-type: none"> • National and regional strategic action frameworks for ICM/IWRM endorsed nationally and regionally • Coordinated approaches for R2R integrated land, water, forest and coastal management and CC adaptation achieved in 14 PICs • Physical, natural, human and social capital built to strengthen island resilience to current and emerging anthropogenic threats and climate extremes
<p>Component 4: Regional and National ‘Ridge to Reef’ Indicators for Reporting, Monitoring, Adaptive Management and Knowledge Management</p> <ul style="list-style-type: none"> • National and regional formulation and adoption of integrated and simplified results frameworks for integrated multi-focal area projects • National and regional platforms for managing information and sharing of best practices and lessons learned in R2R established
<p>Component 5 - Ridge-to-Reef Regional and National Coordination</p> <ul style="list-style-type: none"> • 5.1 Effective program coordination of national and regional R2R projects

R2R pilot projects, to be implemented through the R2R IW project, are designed to strengthen R2R integration by establishing synergies among the work of the various sector agencies, between governments and communities, and civil society and the private sector. The following pages present the results framework for Fiji’s IW pilot project.

INFORMATION BOX

GEF Agency: UNDP

Regional Executing Agency: SPC - GSD

National Lead Agency: Ministry of Local Government, Housing & Environment

Funding Source: GEF Trust Fund

GEF Focal Area: International Waters

R2R IW RESULTS FRAMEWORK

Components	Outcomes	Indicator	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
1. Sustaining local coordination mechanisms (NBCC) and management measures and broadening their scope to support an R2R approach in the Nadi Basin	1.1 NBCC operational and guiding sustainable development with an emphasis on flood risk planning, biodiversity and conservation and livelihoods issues and engagement of the tourism sector	Extent and continuity of government agency and private sector participation in NBCC meetings	NBCC established and functional with main focus on the development and structuring of the early warning flood system, needs to expand objectives	Roles and responsibilities of the NBCC reviewed to include biodiversity and conservation issues, engagement of the tourism sector as well as flood risk planning; NBCC advising national decision makers and regional fora	NBCC Terms of Reference, quarterly meeting reports, participants list, joint management decisions	Willingness of participants to engage in joint management decisions
	1.2 Mainstreaming flood early warning system and IFMP implementation in local, divisional and national government planning	Status of endorsed asset handover and MoU between MET and NBCC	Flood early warning system is currently operational through the IWRM project and NBCC	Commitment from MET and partner agencies to take responsibility of the operation of the flood early warning system, including investment in on-going maintenance, staffing and procurement	Signed and endorsed documents	MET and partner agencies have capacity for on-going operation and maintenance of the flood early warning system
	1.3 Donor and private sector engagement via investment fora	Status and effectiveness of the Sustainable Investment Symposium (SIS) Status of Private Sector Investment Plan	Limited opportunities to engage private and tourism sector	Network of private sector, tourism sector, local government agencies and community boards meeting annually through Sustainable Investment Symposium (SIS) and; discussing the needs and opportunities for partnerships for investment in actions to support sustainable development	Annual meeting reports including participant lists and joint development agreements Private sector investment plan	Willingness of tourism and private sectors to engage in sustainable development of the Nadi Basin Catchment Willingness of different sectors to collaborate on joint development and management plans

Components	Outcomes	Indicator	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
2. Strengthening the recognition of blue forests as a hazard risk reduction asset in Nadi coastal zone	2.1 Identifying priority areas and actions for establishing mangrove management plans	Status of integrated model study, governance and regulation review, and mangrove function investigation Uptake of scientific and technical recommendations	CISRO Storm surge and World Bank/NIWA flood inundation models; international research of mangrove role in catchment protection though no integration of these into a coherent plan	Completed study that links storm surge and flood inundation models together and assesses the role of mangroves as hazard risk reduction asset Review of land tenure and zoning governing the use of mangroves in the Nadi area and identifying gaps in policy and regulations Investigating the role of mangroves as flood and storm surge protection to identify priority locations in the Nadi area	Study on the role of mangroves in protecting against both storm surge and flood inundation in the Nadi area Report on regulations and zoning aspects of mangrove use published Report on priority areas and actions for sustainable mangrove management	Technical capacity to review and link scientific models and draw conclusions
	2.2 Pilot activities to reduce stress on vulnerable mangrove communities with a focus on generation of sustainable livelihoods	Status of mangrove eco-farming and alternative charcoal production activities	Limited options for sustainable development of mangrove stands to reduce environmental stressors	Demonstration of innovative community level activities to develop sustainable livelihoods while reducing stress on mangrove stands piloted at 2 villages; including but not limited to alternative charcoal production and mangrove eco-farming 30 charcoal producers (40 percent at site) engaged in alternative (non-mangrove) charcoal production activities	Consultation meeting reports, including agreements on design, site selection and roles of stakeholders Report on assessment of the operational status [Yr 3]	Residents willing to adopt new mangrove management techniques On-going commitment to operation of new techniques
	2.3 Development of management plans for priority mangrove sites	Status of endorsement of Mangrove Management Plan	Lack of an integrated management plan for priority mangrove areas in Nadi	Mangrove Management Plan for priority mangrove sites in Nadi area developed and agreed to through community and agency consultation; endorsed by NBCC 606 ha under Mangrove management plan in Momi Bay, Fiji Islands	Endorsed Mangrove Management Plan for the management of priority mangrove communities and associated biodiversity	Agreement on management plan initiatives

Components	Outcomes	Indicator	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
<p>3. Supporting implementation of the Integrated Flood Management Plan via strategic partnerships and awareness raising</p>	<p>3.1 Monitoring of illegal clearing and gravel extraction in Nadi Basin with supporting enforcement and community awareness raising</p>	<p>Status and continuity of government agency and local authority participation in RRS meetings</p> <p>Status of Monitoring Plan and extent of data collected</p> <p>Number of official warnings or fines dispensed for illegal activities</p> <p>Percent increase in target population with applied understanding of illegal activity impacts</p>	<p>Lack of regular monitoring and infrequent enforcement of existing laws; limited understanding among target populations of illegal activity impacts on catchment health</p>	<p>Risk Reduction Sub- committee (RRS) of the NBCC established and functional to; develop and implement a Monitoring and Enforcement Plan for illegal activities within the catchment; establish partnership with local authorities to enforce laws regarding illegal extraction and clearing; increase target population awareness of laws and impacts regarding illegal gravel extraction by 50% via locally appropriate awareness raising programme</p>	<p>RRS Terms of Reference and biannual meeting reports (joint management decisions and participant lists)</p> <p>Endorsed Monitoring and Enforcement Plan</p> <p>Online catalogue of illegal activity events and fines or warnings given</p> <p>Consultation meeting reports, awareness programme documents, participatory interviews</p>	<p>Willingness of local authorities to participate in monitoring and enforcement activities</p> <p>Capacity for enforcing applicable laws and regulations</p> <p>Capacity for consistent data collection and online management</p> <p>Awareness and capacity building materials are sufficiently well designed to engage community members and resource users</p> <p>Continuity of participation of target audience in awareness raising events</p>



The GEF unites 182 countries in partnership with international institutions, non-governmental organizations (NGOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives.

www.thegef.org



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www.spc.int



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