



Integrated Flood Risk Management in the Nadi River Basin

Fiji Islands

Snapshot of Results

Project Objective

The objective of the IWRM Nadi Demo Project is to improve flood preparedness and integrate land & water management planning within the Nadi Basin using an integrated flood risk management approach.



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Stress Reduction

- ✓ **Sustainable forest & land management practices established and trialed with landowners to reduce runoff and sediment loads**

The Nadi Basin has experienced rapid urbanization and increasing population in recent years. There has also been aggressive deforestation and agriculture in the upper catchment. This has led to increased stress on water resources in the catchment and in-turn increased vulnerability of the communities to natural disasters such as flooding. The aim of the IWRM Nadi Demo project is to reduce stress on the water resources and to build flood resilient communities

A bio-physical survey of the Nadi Basin catchment was conducted establishing that the majority of the upper catchment are grasslands. It was further determined that land use practices in the upper catchment, mid catchment and riparian zones contribute to heavy runoff and sediment pollution.

In 2011, two demonstration sites were established with the formation of a Landcare group in the upper catchment to train farmers in best agricultural practices.

- ✓ **Rehabilitation of degraded areas at two 'hotspots' in the catchment**

Two 'hot spots' covering an area of approximately 80 hectares were identified as being 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.

Two incentive based tree planting initiatives were established – "Growing Money on Trees" and "We got it from Trees". To date, 1800 coconut plants and 554 breadfruit trees have been planted across the catchment.



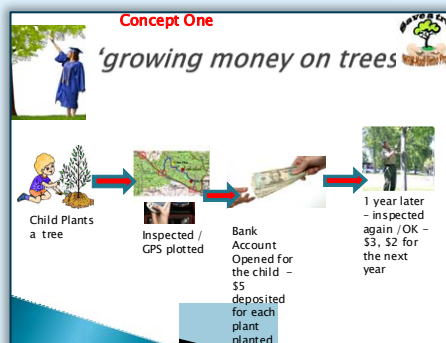
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Nadi Basin Catchment Committee

- Bryan Watson
Chairman
- Joeli Cawaki
- Collin Simmons
- Alipate Waqaicelua
- Timoci Tuisawau
- Meli Saukuru
- Mr Rupeni
- Inoke Wainiqolo
- Jope Davetanivalu
- Tevita Tuinalele
- Malakai Finau
- Ilaitia Navunisarivi
- Na Draki
- Manasa Tagicakibau
- Losana Rokotuibau
- Aaron McGrath
- Dr Ram Raju
- Prudence Rouse
- Verenalagi Vesikula
- Aisea Tuidraki
- Semaia Koroi
- Tui Nadi
- Tui Nawaka
- Osea Bolawagatabu



Tree planting in the Upper Nadi Catchment



Fiji IWRM Demonstration Project Video
<http://www.pacific-iwrm.org/Fiji-video.html>

Process

✓ Establishment of a Catchment Management Committee

Prior to the formation of the Nadi Basin Catchment Committee (NBCC), 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 NBCC for future national upscaling and integration into Government policy. The Committee was established in 2009 and endorsed by cabinet in 2011.

✓ 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 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 would 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.

✓ Nadi Basin Integrated Flood Management Plan

In line with the objective of the project an Integrated Flood Risk Management Plan was to be developed. In order to have this plan in place a number of processes had to be initiated. Part of the process was the establishment of an early warning system and setting up of community based disaster management committee (CDMC) by 2011. By mid of 2012, an integrated flood warning system and 14 CMDC's were established.



NBCC members during the review process



Simulation exercise for CDMC members run by disaster response agencies



Key stakeholder realigning and prioritizing some project activities after the 2012 floods.

✓ Sectoral engagement in formal multilateral communication on water issues

The project was designed to use the concept of decentralization and a principle of IWRM whereby decisions are to taken at the lowest appropriate level following full public consultation.

Improved coordination and cross-sectoral working relationships amongst land and water management stakeholders and communities in the catchment was envisioned.

With the formation of the catchment committee and the initiation of a number of cross-sectoral activities by the project, there has been increased interaction between institutions and agencies. For example, the formation of the SOP for the flood siren has aligned a number of agencies to collaborate and work together.

✓ Increased 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, the 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.



Nadi residents participating in the launch of the IWRM Nadi Demo Project