



Achievement Stories from GEF Pacific IWRM

The GEF Pacific IWRM project acted as an important 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.

This 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.

This collection of achievements looks at successful mainstreaming efforts to provide policy makers and planners in the Pacific with ideas and lessons learned. The examples, which come from the national project managers, are not only illustrating adoption of IWRM, but other areas where the project successfully mainstreamed water related issues.

The collection is presented in four main themes; gender mainstreaming; sanitation solutions; collaborative water planning and; community capacity building.



Marshall Islands

Encouraging gender mainstreaming through the appointment of an influential Water Champion



At the start of the IWRM project in 2009, women's groups were not well represented at the planning level or during on-the-ground activities. In a way this is then only half the community that is being engaged and women's concerns are not being truthfully represented in the projects direction. In order to engage more women the IWRM team felt they need to engage a female water champion who could promote IWRM through the women's groups and so more women would feel comfortable to become involved.

The President of the time was Jurelang Zedkaia and his wife Hannah Zedkaia was the First Lady. She is well represented in her own right at the higher level of society and the people of RMI look up to and respect her. She has power and sway and people will listen to her if she gets behind a cause.

The IWRM focal point approached the First Lady and described the project and the objectives of trying to provide safe water and improved sanitation for the community of Laura, and asked her if she would agree to become the Water Champion for RMI. First Lady Zedkaia agreed to take on the role because she felt that it is part of her duties and that it is a good cause for her to support. She felt that women ought to be more involved in the project design and direction as they represent as significant part of RMI society and need to included.

"As the representative of my fellow female Marshallese I was proud to be engaged as the Water Champion for the first ever National Water Summit. Through this role I was able to encourage more women to attend and share their thoughts and concerns about our state of water and sanitation, their thoughts are valuable as they are primary care-givers of our families and understand the situation all too well. It is important for women to be involved at this high level event as they are often left out and so policies do not adequately address them." – First Lady Hannah Zedkaia

Prior to the water summit First Lady Zedkaia was engaged as the Water Champion to bring in more women's groups so that their voices could be heard in the development of the water policy. The Women United Together Marshall Islands group became heavily involved during the summit because of First Lady and also more local Laura Community felt confident to attend and voice their issues and concerns at the summit.

Now in the water and sanitation policy women and gender are explicitly mentioned in regards to safe access to water supplies and sanitation. This is through the dedicated involvement of the Water Champion uniting the women of Majuro to attend and participate in the National Water Summit.

"Through this role I was able to encourage more women to attend and share their thoughts about our state of water and sanitation..." First Lady Hannah Zedkaia

Hands-on experience builds capacity for implementing sanitation solutions

The Sarakata IWRM Demonstration project seeks to improve the ground water quality, sanitation-hygiene practices and health of the communities residing within the Sarakata Catchment area. The most affected areas are in the lower catchment and flood plain.

The Sarakata Flood plain is home to five large communities with a population of over 3,000. This large population puts a high demand on the natural resources and contributes to the high levels of groundwater contamination through the use of unsuitable sanitation systems.

To increase community awareness around sanitation issues we ran a series of workshops to demonstrate the important links between unsuitable sanitation systems and ground water contamination. We wanted to raise awareness amongst the communities about alternative toilet facilities, improving sanitation standards and minimising sanitation-related illnesses. The workshops also tied in construction training for compost toilets in the communities. Those interested people formed a Sanitation Enterprise Group who assisted the construction of the composting toilets for Pepsi, Solway and Butmas Community.

We hoped to reach a wide audience that included a lot of women as they are at the forefront of sanitation issues, raising children and managing the household. By gaining new skills, building and gaining confidence in their knowledge, women would be able to communicate with family and friends about sanitation issues and solutions, spreading knowledge throughout the communities.

On Sunday afternoons after church services we engaged with the community to inform them of the workshops. The aim was to reach as many people as possible. A lot of questions were raised and a lot of positive comments were made. Chief Nako from Pepsi said, "It is a great opportunity for the entire group to build on their skills and knowledge by building the composting toilets".

A week long workshop was conducted covering theory and construction. The number of people increased as they heard of the workshop and the good things the project is bringing to their community. It became clear during the week that theory alone is not enough and that interactive activities boost learning further. For example, the hands-on construction of the composting toilet by the Sanitation Enterprise Group combined with the workshop and training was a successful way for people to learn and engage.

Ms Lynne Mesek, the Secretary of the Sanitation Enterprise Group said "I have noticed how women especially have improved through theory learning but most of all through the practical learning". Community members even offered comments on how to make the workshops better, what times and who to invite to make it a greater success.

Mrs Isabelle from Pepsi said "Being involved in the constructions help women to improve their skills and knowledge, they have learned a lot and it becomes a challenge for them" She said "Women who are involved in the construction now have the experience to improve their sanitation issues within their own families and communities in Santo and their original home islands".

The project team made great effort to make the workshop a success. As project manager I learned the importance of giving communities plenty of notice about workshops and liaising with key community leaders to gain their support of the workshop. Through their influence we can hope to see a greater number and variety of people attend the workshops.

We also realized during the workshops that it is beneficial to have a greater number of youth attending, this is their world and they would gain a lot by learning new skills and ideas at a young age, taking it with them as they grow.

As a result of the workshop and training events people are more aware of their sanitation issues and the need to improve them. Women especially are more educated in their sanitation issues, can communicate openly with men and are making efforts to identify their sanitation needs.

"I now have new skills to build my own toilet and improve sanitation practices in my own home"

Mrs Mary Wilson said "What I have learned and been involved with in the last few weeks has encouraged me, I now have new skills to build my own toilet and improve sanitation practices in my own home". Women are now asking for more similar trainings and are eager to be active participants in the project and their own development.



Above: The Sanitation Enterprise Group with their Certificate of Participation

Empowering women through Community Disaster Management Committees



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. ect 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.



Incorporating gender mainstreaming into the Tuvalu IWRM project

During preparatory meetings for key stakeholders in Tuvalu, strong interest was revealed for gender mainstreaming beyond just WASH practitioners and the IWRM Team. This was underlined as more women than men attended a large proportion of stakeholder engagement activities. To address this the IWRM Team initiated a Gender Mainstreaming Workshop for community members in collaboration with Institute for Sustainable Futures. National Steering Committee members, women representatives from the 7 communities of Funafuti, government departments and youth groups were all invited to attend the workshop.

The IWRM Team invited the Director of Finance and other staff members in the department who were interested to go. He was unable to attend the meeting and suggested that I attend as it would be useful for us to gain knowledge about gender issues.

I have never been to a gender workshop before and know a bit about gender but have never learned why it is important. Through the workshop I have learned that we have to consider women, particularly as it comes to our traditional and conservative community, sometimes there is too much male dominance in Tuvalu, and for me it is good that they give this workshop to send the message out there that women are important members of society as well.

The biggest challenge in Tuvalu with gender mainstreaming is because of our traditions, men always think it is to do with the ladies, that it is ladies business, to empower the women, but it's not just about women it's about both sexes working together. So our challenge is to have men accept that. Some of the men at the workshop were open to this idea, there were optimistic people and sceptics. Some men say they accept the ideas of gender mainstreaming but in practice, no. There is disconnect between what they are learning and how they behave. So about 50/50 at the workshop were okay or indifferent.

Next time they have a workshop they should invite more men and more people in general. It is important however that they keep involving men in this discussion. It might also be a good idea to have separate men and women's workshops then bring them together for a day or two of combined workshop. That way people can feel comfortable to ask questions in the beginning without men or women to offend, then all together we can discuss what has been taught.

I found the workshop really helpful, it made me see there is more to gender mainstreaming than I thought. Sometimes even us ladies think that we can do better than men and the men think they can do it better than us. But for our women in the workforce we need to recognise that we can do everything the same, both men and women, and that we



Above: Participants at the Gender Mainstreaming Workshop

should have the space to be equal. It really helped having Asita as a local representative presenting, who can explain in detail to us what is this, and what is that, because not everyone understands English that well. The training was so good that I recommend they do it every year, with more participants. Even some of the men wanted more in-depth training after attending this workshop.

As a result of the gender mainstreaming training in Tuvalu the IWRM project conducted women's meetings to discuss the technical aspects of the eco-sanitation toilets and how these sanitation facilities affect women and what are their perspectives on them. These women's group workshops gave the IWRM Project the insight that the eco-sanitation toilets would be better received if placed close to or inside the home. An aspect that has been incorporated in to the National Water and Sanitation Policy. Women also had objections to using the human compost and so further effort was made to resolve this through testing of the compost and sharing the findings with all stakeholders.

Due to cultural traditions women are usually not allowed to speak however this is starting to change and some women are now speaking at community events. Women who attended the event are now more confident to engage in workshops. There has also been ongoing stakeholder engagement with women's groups from outer islands to introduce and gather support for the eco-sanitation facilities and to understand any issues that they may have.

Tuvalu

Creative engagement heralds the introduction of composting toilets

Tuvalu is facing a critical sanitation problem. Old flush and septic systems are causing problems for the environment and public health. The IWRM Project approached the situation by suggesting the alternative of using compost toilets to tackle both sanitation and water use issues. A baseline survey conducted in 2009 highlighted concerns people had about the introduction of compost toilets. It became clear that the public held a lot of negative impressions about them. Through a prolonged community engagement campaign we managed to turn people's negative perceptions about the sanitation alternative to one of overwhelming acceptance. This is how we did it.

Through preliminary community research we discovered that amongst the community there was a perceived understanding that compost toilets were a downgrade in toilet design and thought of as no more than a pit toilet. Because of previous projects, people felt uncomfortable with the term 'compost toilet' and had many misunderstandings about its function.

We formed a Communications Committee made up of local communications specialists to investigate the cause of people's concern and find innovative ways to address them. They determined that there were two main issues. The first that the name 'compost toilet' generates unease and should be changed and secondly; that people want more education about what a compost toilet is and how it works before they are willing to have one in their home.

To address the first issue the committee organised a competition to come up with an appropriate Tuvaluan word that sums up the compost toilet. The winning submission came from Mr Maimoaga Uatea, the Deputy Director of PWD. His submission is the word "Falevatie" and is an abbreviation of "*Falefoliki se fakaoga vai mo tino mote enviroment*" which means "A toilet which is good for you and the environment". The slogan for the Falevatie is "*Kote ola lei tena o kaiga mote enevalomene*" and translates simply as "A sustainable toilet".

With the new branding we organised a 'Falevatie Roadshow' to take the toilet to the people and show how it works and what the new designs would look like. People were concerned they were going to get the same design from previous projects and needed to approve of the new one. As with any new product it is important that people know what they are 'buying' and are happy with how it looks and works. After all, it is a structure that will sit in their backyards and be used daily.

With the help of local volunteers and PWD staff we built a portable Falevatie, put it on the back of a truck and drove it around all the communities of Funafuti. Dedicated local volunteers walked alongside the Falevatie Roadshow, presenting the display toilet, explaining how it works and differs from old designs, and addressing the questions and concerns raised by community members.



Above: The 2010 Falevatie Roadshow was instrumental in changing negative perceptions about compost toilets.

Through these two activities and related community consultations we hoped to increase technical understanding in the community of how the system works and the many benefits it can provide their family and the environment, as well as communicating the Tuvaluan ownership of the project and toilet design.

Through the seemingly simple idea of changing the name, falevatie are now viewed by the public as part of a sustainable future for Tuvalu, and are even enshrined in the 2012 Water and Sanitation Policy. The Falevatie Roadshow was so well received by the community that many people afterwards put their name forward to construct one, so many that there is now a 200+ waiting list. Owners of falevatie have themselves organised an Owners Group where they share their experiences on use, maintenance and benefits of falevatie with each other and the wider community, generating a truly unique Tuvaluan experience of compost toilets.

Project Managers in similar situations need to have their "ear to the ground" and be open to engaging with the community so that seemingly small issues can be picked up and dealt with at the beginning of a project, ensuring that community involvement and ownership will secure the sustainability of its goals.

Tackling sanitation issues through community engagement and appropriate technology

Prior to the 1970's, Nauru toilets were pit-latrines, then a government housing scheme introduced fibre-glass septic tanks with septic overflow into the ground. The tanks need annual servicing from a sludge truck, which households had to pay for. Over time people were not regularly de-sludging the tanks and untreated sludge was being pumped out onto the reef and the de-sludging truck went out of service. In the 1990's issues of faulty toilets led to un-lined cesspits being dug for septic overflow.

To tackle this issue the IWRM project trialed two community-based toilet systems, improved septic systems and composting toilets. The greatest challenge was how to overcome negative local perceptions of composting toilets. Without interest in adoption from the community they were not a possible solution for Nauru and so began a targeted communications program to introduce the new technology.

After initial consultations with the communities, it became clear that local people had very limited knowledge about composting toilets. I realised that it was going to be very difficult to gain support for them and so began to approach the problem differently. I went back to reviewing the systems and considered what might help the community to better accept the concept. I identified a design used by the IWRM Project in Tuvalu where they had encountered similar challenges with community acceptance.

This revealed that household designs were more acceptable to people than a community one and similar to communities in Tuvalu, Nauruans did not want shared community facilities. They want individual household toilet systems. This resulted in a change to the original project design and one family and one school in Anetan and Ewa were identified to trial the composting toilets.

This was the first trial of composting toilets in Nauru and so we set out to test them. Firstly we placed a burning coconut husk in the chamber of the toilet to see if the ventilation pipe would draw the smoke up and out of the structure. We saw the smoke rising from the pipe and the inside of the toilet free from any smoke. Secondly I placed a container with fish in the chamber and came back the following day to find that there was barely a smell in the toilet cubicle, and this soon dissipated as soon as the lid was opened. I was impressed and convinced that the system works.

As the positive impacts of reduced water use and the success of community uptake began to be reported, other members of the Anetan and Ewa communities have become interested in these systems and are requesting one for their households. In addition, other donors, projects and government have started to take a keen interest in composting toilets as a viable option for increasing water use efficiency, reducing environmental stress and improving sanitation



Teachers at Ewa School inspecting the compost toilet and learning how to maintain it

“...consultations built community confidence and understanding and instilled community ownership...”

The initial project planning phase is critical for ensuring sustainability. We recommend taking the time to explain the system and let people become familiar with the new concept. On-going consultation during the design and construction of the systems allowed for modifications. These consultations further built community confidence and understanding on how the systems functioned, how to maintain them and instilled community ownership of the final designs.

I have learned that there are many key aspects to making the introduction of new and controversial technology a success. First is finding interested people to host the demonstration and building them in neighbouring districts so as to create a 'hub' for awareness raising. Several things we found were essential to success are regular, on-going consultation with the families to ensure the end product would be something they would use and that after installation there is on-going monitoring of the toilets to ensure they are being used correctly.

In the future we would like to see additions to the design such as small water storage tanks for hand-washing, solar panels that provide for lighting and lower cost options for fittings and construction.

Being involved with the IWRM project has helped me realise my own interest and passion in reducing contaminants on Nauru's scarce water lens. It also makes me feel happy to provide an alternative to families who have problems with water supply and restricted land space for septic systems.

Cook Islands

Protecting lagoon water quality through improved on-site sanitation systems



The Cook Islands Integrated Water Resources Management Project began in 2011 and was successfully established within the community of Avana and Muri, Rarotonga. Direct contact and involvement with the community both in awareness and physical work activities resulted in a positive community response and acceptance of the project and has aided in the establishment of further similar work in the project area.

Concern about the health of the lagoon began following an eye irritant syndrome outbreak from a substance believed to have blown in from the lagoon and frequent algal blooms. Subsequent to this human health instance, the Ministry of Marine Resources began conducting regular water quality monitoring which found comparably high levels of bacteria and nutrients in lagoon water. These high levels were mostly attributed to inadequate onsite sanitation systems and animal waste that leach contaminants through the porous ground into the lagoon.

A large part of the IWRM work programme has been the installation of trial onsite sanitation systems that replaced the older systems already in the villages of Muri and Avana. This area was chosen as there had been already considerable attention drawn to the area for improving lagoon water quality especially since Muri is heavily populated with tourist accommodation and is a main tourist hub of the Cook Islands.

Prior to IWRM, the Muri Environment Care (MEC) Group, a local environmental NGO, had been spearheading environmental awareness similar to the IWRM Project. The Muri village traditional mayor, the local MP and a senior tribal leader are members of the MEC. A close relationship with MEC was established early on and therefore through early awareness activities and involvement of key local leaders, reaching and connecting with the local community

about this issue was well-supported and led to the eager participation of households.

The purpose of this work was to trial different combinations of onsite treatment systems and Land Applications Systems (LAS) for treated wastewater disposal, to assess which combinations work best in the particular setting of the Cook Islands. The new systems were installed at nine homes, seven in what is known as the 'Lagoon Protection Zone' which requires higher levels of treatment due to the more porous, sandy soil type and three in inland areas that do not require such a high degree of treatment. One of the seven systems installed in the Lagoon Protection Zone was installed at a community building. The aim of this was to trial how well the model installed would work with occasional heavy loadings.

The systems have been operating successfully during the time following their installation and this has paved the way for a new separate project for a larger scale upgrade of onsite domestic sanitation systems for the rest of the project area. This project has seen the almost complete replacement of 200+ outdated sanitation systems in the project area.

In turn, the success of this pilot project has resulted in a proposal, and funding commitment from development partners, for upgrade of over 1,000 onsite sanitation systems across the islands of Rarotonga and Aitutaki, over a 4-5 year period. It is likely that a similar approach will be utilised across the remainder of the Cook Islands. The original idea for, and the subsequent success of the IWRM trial project has therefore paved the way for a major investment across the Cook Islands which will lead to substantial benefits for the health of the people and the ecosystems of the islands, and therefore to the ongoing economic development and security of the country.



Above: Installation of package secondary treatment systems at a home in Muri, Rarotonga

Regional knowledge sharing builds community acceptance in waste management



Above: Local builders constructing a compost toilet at Laura Village, RMI

The main issue facing groundwater in the Laura Lens is the amount of contaminant being discharged into our only freshwater resource making it nearly impossible for human consumption. The two main sources of contaminants are human and animal wastes that have not been dealt with over the years, resulting in high levels of nutrients and pathogens. To reduce this contamination, we explored the options of compost toilets and dry-litter piggeries.

The project proposed that these disposal systems be trialled at Laura Village. Councilwoman Joubon Kabua said of the decision, "It is about time, we need more to help sustain our natural water resource". Initially the Laura community was reluctant to accept and trial these systems at the household level because of negative perceptions that they would smell, that they can't be clean without using water, and the perception of a compost toilet being a step down from a flush toilet. We needed to present to people the technical operation of the systems and to let them see and understand the benefits they could provide, both at the household and environmental level.

For the compost toilets we engaged the IWRM project manager from Tuvalu, Pisi Selganiu, to share his knowledge and approach to introducing compost toilets. Pisi had been successful at raising community acceptance of the toilets through hands-on engagement. Together with local community members we built a demonstration toilet and through community-led discussions about the systems and continuous knowledge sharing from the IWRM team, community perceptions began to change and led to the willingness of several households to trial the ecosan system at their homes.

Glen Fukumoto of the University of Hawaii, introduced the dry-litter system to us after successful implementation at various sites around the Pacific region. Again we approached those households that had domestic pigs and a commercial piggery, and discussed with them the impact that wash-down piggeries were having on the environment. Through open discussion we presented the alternative dry-litter solution and described its operation and benefits. We soon had many households on board to trial the system.

Local community members were contracted to construct the toilets and dry-litter pens to encourage community ownership, and increase technical construction skills and knowledge of how the system works. This was the turning point for these projects as when construction commenced, more community members became aware, asked questions and were eager to install the systems at their homes. To date, three compost toilets, thirty portable dry-litter pens, and a commercial dry-litter pen have been constructed around Laura Village. Many more are being requested as people notice the benefits their neighbours are experiencing by using them and become more aware of the importance of keeping the lens free from contaminants.

This experience has shown me the importance of gaining community support when introducing new technologies that significantly impact on how people go about their day-to-day lives. Engaging with influential members of the community also helped with uptake of the technologies. As Chief Iroij Leikman Zedkaia said to many community members "I support this project and will continue to for I know the outcomes that will be beneficial for the people of Laura", showing his support for a sustainable way forward and encouraging others to do so.

The project team and I realised that a combination of open discussion and on-the-ground construction led to the most positive outcome. Discussion alone wasn't enough and people needed to see and understand the final product in order to make an informed decision to support the project or not. We are now having more and more requests everyday for assistance in building dry-litter. We are starting to notice a difference in the contaminant levels of the Laura Lens and a reduction in odour from domestic pig-pens, pig-pens and many households have signed up to construct compost toilets.



Above: The completed commercial dry-litter piggery. Dried leaves form a bed that soaks up pig waste and is converted into nutrient rich compost.

Solomon Islands

Capacity building in water safety planning through the water safety sub-committee



The Water Safety Sub-Committee before tackling assessments

Honiara City currently faces a serious water dilemma. Population increase, uncontrolled residential development, and a frequency of illegal connections coupled with the limited capacity to supply water while reducing source pollution is leading to frequent contamination and limitation of the town's water supply. At the end of 2012, the IWRM Project Management Unit (PMU) established a sub-committee to look into Water Safety Planning (WSP) for Honiara City. A Water Safety Sub-Committee (WSSC) was established and trained to perform risk assessments to guide the development of the Honiara Water Safety Plan and address some of their pressing water issues.

This was a timely intervention, as Ms Kim Irofufuli of the Environmental Health Division said, *"People in Honiara are becoming aware of the importance of water quality so they want safe drinking water but do not realize safe drinking water also involves the safety of the water at the source, catchment and distribution of the water. They do not realize that if the water is interfered with in any way (such as illegal connections) then water quality is compromised"*.

The WSSC team includes two women and seven men, senior staff from the Ministry of Health & Medical Services, the Environmental Health Divisions of Honiara City Council & Guadalcanal Province, the Public Health Lab, the Solomon Islands Water Authority (SIWA) and the IWRM PMU.

After confirming the WSSC, the PMU ran a series of meetings and workshops to introduce the WSP concept and the approach needed to carry out the activities. The aim of the workshops and meetings was to familiarise the WSSC with each component of the water supply system and how to assess the possible hazards and associated risks. Through practical fieldwork, members documented what they knew about the status of the water supply, the hazards and risks under current supply conditions and the need for improvement(s).

The WSP is a new approach where we are observing the system and preparing plans to avoid serious contamination situations. It was an excellent way to get members from different government agencies physically involved in observing the water catchment and learning the theory behind WSP in order to understand and appreciate the requirements of the water resource system as a whole. I had thought this approach might bore some members but because of the seriousness of our water challenges, everyone was attentive and actively involved in the process.

Mr. David Hoota said, *"These activities increased my knowledge of our water supply systems and networks and their limitations. It also improved our participation in the project. As I now know how our work is linked to the overall improvement of water supply quality and water safety approach in the country"*.

We did the first hazards assessment at one of five water sources, treatment, storage and distribution system to familiarise and train the WSSC. During our discussions team members raised questions and comments on aspects of the assessment they were not familiar with. This open dialogue helped the team understand what to look for and assess during the second field training. The WSSC completed the remaining field assessments successfully with only minor involvement from the IWRM PMU.

After completing the workshops/meetings and the assessments, the WSSC had achieved the following:

- Gained knowledge and basic experience on how to organise and carry out the hazards & risks assessments and analyses using the multi-barrier approach to water safety and public health
- Understood and appreciate the need and importance of water safety and the challenges involved in implementing the plan
- The activities completed by the team enabled the Solomon Water to proceed with the working draft WSP document and priority areas to implement once funding is secured

The WSP approach has now raised the importance of public health using the multi-barrier method of minimizing risks to water supplies by applying it in other areas. The capacity among the WSSC has been raised significantly as they are now aware of the various hazards and risk associated with the catchment area and are now fully capable of undertaking future assessments independent of the IWRM Team. These are skills that can be easily transferred to other rural and urban water supply systems.

Ms Kim Irofufuli commented at the completion of the activities, *"These have helped my understanding of the water supply process. Seeing the results and the coordinated effort of the stakeholders to improve Honiara's water supply has made me more confident that the water we as consumers receive in our homes is becoming safer to drink and also to use for other household needs"*.

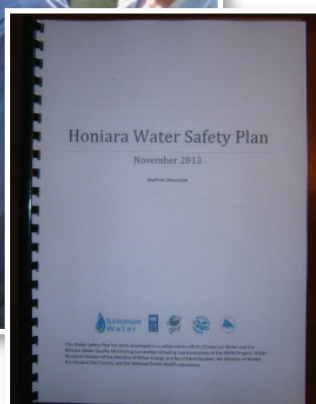
I think it was important to identify and appoint a Water Safety Sub-Committee as a first step toward Water Safety Planning and the subsequent detailed training of techniques used to develop the plans. The team has expanded now to involve staff from Solomon Water who are directly involved in the water supply distribution and water quality monitoring sections. They have now reached a stage whereby the WSSC received support from the General Manager of Solomon Water to proceed with the Honiara Water Safety Plan by prioritizing risks and costs to implement tasks under the plan.

After compiling the draft Honiara Water Safety Plan the Solomon Water team said, *"Dealing with lack of resources; in many cases, we found that we knew what should happen, but also knew that this was impractical. We have tried to focus on practical and implementable actions. The work of the WSSC helped us identify these. As time goes on, these actions can be revised to a more 'ideal' situation"*.

Having attended a WSP workshop prior to project implementation I felt confident to lead the team and the initiative to start. I also felt that the WSSC, if endorsed by the Solomon Water Management, would be a first of its kind and the credit would be given to the team for successful completion of the job. As the IWRM Project Manager and motivator of the process I am proud and happy that it has been such a successful capacity building exercise.



Water Safety Sub-Committee members in the field assessing water supply and risks. The completed Honiara Water Safety Plan draft.



Palau

Collaborative development of a Watershed Management Plan in Airai State

By Governor Victoria Kanai



Above: Governor Kanai speaking at the Palau National Water Summit

“Through participating in the plans development the capacity of our staff increased by teaming them with people who could guide them through that process.”

Before the IWRM project there was no water project that considered helping Airai State manage their watersheds. Projects carried out in Airai were usually on assessments of the watershed or water quality. These projects made recommendations at the end on what Airai State could do but they didn't fully carry out management planning with the community's input.

Airai State was asked at the IWRM Project inception phase to become members of the steering committee as the project is taking place in the Ngerikiil Watershed located in Airai State and through this involvement I came to know of the IWRM project. The project was going to be able to help us understand Ngerikiil Watershed fully and we were finally going to get someone to help us with the monitoring of the state of the watershed. From the beginning I was optimistic that the project was going to achieve progress on the environmental goals through trialling best management practices.

Lynna Thomas, the IWRM Project manager had been keeping me informed about what the project was doing and Umai Basilius and Palau Conservation Society were partners in the IWRM project. I asked them to use their expertise and what they had learned from the project to draft a watershed management plan so that we can use this plan to access funding for the management of Airai State Watersheds. I was happy because Lynna and Umai were able to guide my State Watershed Taskforce in the management planning process,

They kept me involved the entire time so I knew what was needed in order to get the job done. In my capacity as governor, I was happy to be able to bring in community members to the community consultations so that we could draft a plan that was truly for Airai State instead of coming from someone outside. I was also happy because they were able to help my staff increase their capacity for management planning so that if the IWRM Team members are not around later we could still carry on the work.

I have learned a lot and gained a deeper understanding about water and how our actions in the watershed affect the quality of water and eventually our near shore fisheries and communities. Through participating in the plans development the capacity of our staff increased by teaming them with people who could guide them through that process. I have learned the importance of proper practices in the watershed as it not only affects the quality of the water that we drink but also the environment and the oceans where the river drains. Water issues are now something that I am involved in and as a result of this engagement have been an active participant at all Water Summits, providing input to policies and taking these back to the Governors Association.

My team and I now understand more deeply that it is important for the communities that host sources of water in Palau to take care of them and that our actions affect the sources of water and eventually the oceans where we get our food. Only by working together with the community members as well as partner agencies can we overcome our lack of capacity at the State level so that we can accomplish such things as formulation of an Airai State Watershed Management Plan.



Above: Governor Kanai (middle) with Micronesia's Presidents, tree planting during the Micronesian Chief Executive Summit 2011

Community to Cabinet: Securing Alofi's water supply

Prior to the GEF IWRM project, water management in Niue was broadly considered the responsibility of government, with very little community engagement. Household water use rates were amongst the highest in the world, reflecting a lack of understanding and ownership of water resource management. Alofi town faces issues of water supply management and one of the main problems is due to an aging water reservoir that services the whole town. To avoid the intermittent water supply situation found in other parts of Niue we embarked on developing "Community to Cabinet" Village Water Management Plans (VWMP) to enable communities to identify and address their critical water resource issues.

During 2010 we initiated the VWMP by engaging the Village Councils and communities. We visited community members and informed them of the project objectives and explained the channels of communication available, such as visiting the office, calling or emailing. Communities began to invite our staff to attend their meetings to present information. In this way we developed understanding about community issues and needs, working together for sustainable solutions. During the annual community village inspections, community members expressed how useful it was to have water and sanitation issues identified, as well explained and options presented.

The development of VWMP in both Alofi South and Alofi North has provided a mechanism for the community to communicate with its national partners including the Cabinet Ministers, as well as different groups within village communities. During development we included gender-mainstreaming activities to ensure that women, who look after the families, had their concerns heard and met. The process also increased the capacity of communities to support the implementation of drinking water safety plans. This in turn has contributed to a measured reduction in household water use.

From the VWMP the community identified and prioritised the replacement of the water reservoir servicing Alofi that was losing up to 50% of its total supply due to leakage. This loss represents more water than the community as whole uses. These priorities were fed into the National Drinking Water Safety Plan and Niue Infrastructure planning processes.

Actions to reduce water loss were prioritised and it was decided to procure and install new tanks to replace the old leaking ones. The Head of Public Works approached NZAID and GoN on a one-on-one basis to co-finance the procurement phase. Once commitments were made from NZAID and GoN, the Head of Public Works then met with Finance to determine national financial management considerations and finally submitted a Cabinet paper requesting Cabinet approval for the funding.



Above: Gender mainstreaming activities during the development of the Village Water Management Plans

Once Cabinet approval was gained, IWRM made a call for expressions of interest for supply and construction of the new water reservoirs. Once Niue National Tender Board Committee approved, the tender was awarded and contracted to GoN Public Works. A joint partnership between IWRM Project, NZAid, GoN and AusAid was maintained with regular coordination and planning meetings and enabled the costs of two new reservoir water tanks to be met. The tanks were installed in 2012 and are fully functional,

"The VWMP provides a mechanism for the community to communicate with government about their needs and priorities".

providing a secure and reliable water supply for the people of Alofi town.

The development of VWMP in both Alofi South and Alofi North provides a mechanism for the community to communicate with the government about their needs and priorities. It has proven to be a useful tool for addressing critical water management issues while empowering local people to take responsibility for their environment. It is a process that should be utilised across all development fields in Niue.

I attribute the success of the process to how we built robust relationships from the beginning, inclusive community engagement and open dialogue. I realised through the experience that it is important to foster regular communication between the communities, agencies and government departments so that all stakeholders are aware of issues and opportunities and generate a common understanding.

Samoa

IWRM training builds capacity and improves catchment protection



At the summit of Gasegase catchment behind Apia, is an area of 2000 acres of native forest owned by the Catholic Church. This land is at the beginning of all the river sources in the catchment that flow to Apia providing water for the population. The Catholic Church Land Board (CCLB) had decided to sub-divide the land and sell to the public for housing and farming. When we learned of the plan we were concerned that the land would become degraded and impact on the water resources downstream if not carefully managed. We raised our concerns with the CCLB and through persistent engagement at all levels were able to negotiate the protection of over 400 hectares of the area.

The concern with the decision to sub-divide was that when people moved to the area they may inadvertently degrade the natural environment through development, farming, agriculture and deforestation, impacting on the quality and quantity of water downstream. The Ministry of Natural Resource and Environment (MNRE) learned of the subdivisions once they had already started and under the guidance of the IWRM project formed a Research Technical Team (RTT) to investigate the development. We found that the subdivision was occurring on a protected water catchment area and had already begun to be degraded with most trees cut down, infrastructure in place and a lot of land sub-divided and sold.

The RTT became aware that though the CCLB were asking for 40 acres to subdivide in their applications, they were actually developing beyond this and encroaching on protected land. We asked the CCLB for an environmental impact assessment (EIA) for the whole development area and put a halt to any new subdivision plans approval until the EIA was complete. We hoped that the Church would adhere to the request for them to cease subdivision and would not disturb the watershed or destroy the natural habitat. However once the development had started those in charge of the activities seemed hesitant to cease and initially the outcome was not a success because the landowner committee failed to listen to the concerns we presented about the state of the watershed.

We understood then that we were going to have to find a convincing way to deliver the message of conservation to the CCLB to change their mindset about watershed protection. Fortunately during this time I was studying through the IWRM Graduate Certificate and was learning a lot more about the technical aspects of watershed processes and what was required to protect any area for sustainable use and rehabilitation. Equipped with technical knowledge and the negotiating skills to deliver the right message we developed a new strategy to engage the CCLB.

We developed a presentation that highlighted the essential catchment processes, the impact that deforestation and excavation has on a catchment both locally and downstream and most importantly the necessity of conserving what was left and rehabilitating the already damaged areas. Organising meetings with the proper church leaders and upper management of the CCLB we presented this to them. The head of the church exclaimed "You should have told me about this earlier. We need to protect our water resources so this land has got to be preserved". Those in attendance were unaware of the environmental implications of the subdivision in the upper catchment area and once informed they agreed to stopping any future subdivision

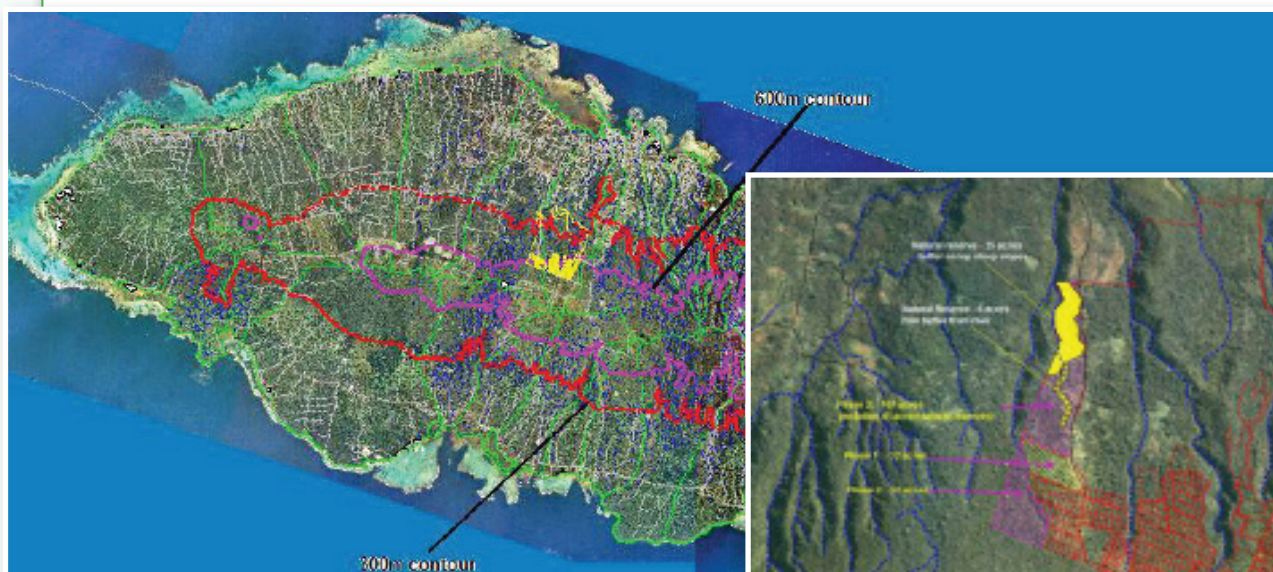
From this hugely successful meeting we organised a follow up meeting with the whole management of the CCLB and proceeded to propose a solution that would allow them to subdivide some land but leave the vulnerable watershed regions to be administered by us. Using GIS based land mapping that showed the areas that needed to be protected in order to conserve environmental integrity we showed what areas needed to be protected and what was suitable for development. We gave the CCLB two options; to sell the protected areas to the MNRE for management or manage the protection of the areas themselves. To our great relief the CCLB agreed to sell the protected areas to the MNRE for environmental stewardship.

The final outcome of this process is that the Government of Samoa has committed to the purchase of 485 hectares of land required to protect the watershed. This is an unexpected achievement that has brought the issue of watershed catchment management to the forefront of the political agenda and was far from the expectations of anyone at the beginning of the process. Once the land is purchased it is planned that the area will be replanted to return it to its natural state.

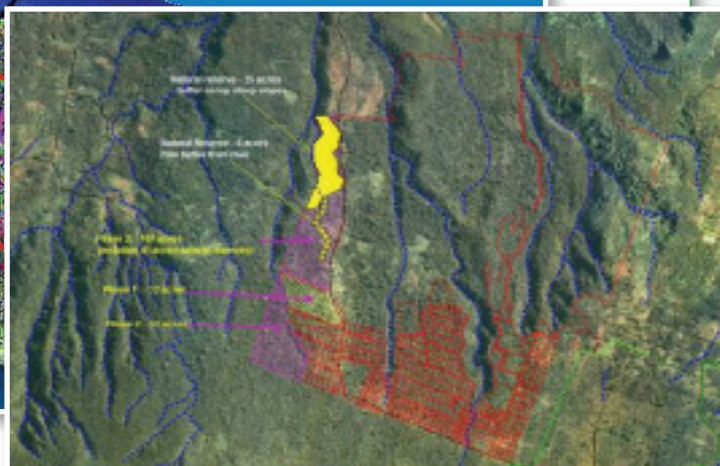
"..through the IWRM Graduate Certificate program I learned skills to confidently develop and present acceptable options for the protection of the watershed"

The whole process from initial knowledge of the subdivision to gaining government approval of land purchase took over two years and I have learned a great deal throughout. Initially I was overwhelmed and frustrated by encounters with the CCLB and felt I needed greater technical knowledge to fully express the importance of the situation. I gained this through the IWRM Graduate Certificate Program and learned the skills to confidently develop and present acceptable options for the protection of the watershed. This allowed us as a team to make great progress identifying what land needed to be protected and what was acceptable for development. It became clear to us midway that we needed to be approaching the right people, which is when we organised a meeting with Church leaders and management. This was a turning point for the project and a great lesson to us in negotiating agreements.

It has been a relief and delight to see the CCLB change their mind completely about the catchment area. From being very reserved about the idea of ceasing subdivisions to agreeing to sell their land and recognising the importance of catchment management and watershed conservation. This has shown our team that with the right know-how and messaging we can make a change in our communities.



Above: Lands now protected through the work of the IWRM Project. Above the pink line, no development. Above the red line, limited agriculture is permitted with permits



Above: In red, the protected area lands around the rivers that will be purchased by the Government of Samoa



Vanuatu

Securing livelihoods and protecting coastal health with tilapia fish farming

The Nambauk River is the source of food and income for many villages that lie along it. Through community consultations with three of these villages the IWRM Project discovered that fish stocks had drastically reduced in the area and communities wanted to find a sustainable solution to the overfishing they had been experiencing there. Through extensive workshops and community engagement activities the IWRM Project in collaboration with the villages, has set up two demonstration tilapia fish farms. One has had its first successful harvest and the other is seeing the growth of fish.

To initiate this process the IWRM Project engaged the services of the Department of Fisheries Aquaculture Officer and ran a series of awareness raising meetings to highlight the impact of overfishing in the area and to discuss options with the villages. Integral to this process was Chief Abraham of the Nambauk Community. Chief Abraham has been involved in the IWRM Project through the conservation areas, being one of the first Chiefs to give up land for the conservation area.

He was also involved in the reforestation efforts that the project has undertaken in the catchment and was part of setting up the nursery in the community as well as the establishment of the semi-aerobic solid waste treatment facility. This energetic man says of his involvement, "I am really excited to be carrying on the environmental work my brother, started and being a part of all the work the IWRM project is undertaking".

With Chief Abraham on board the project ran a week long workshop involving the communities to establish the farm. This involved digging the pond, lining and filling it up with water which had to be left for one week to settle. The community members collected manure to fertilise the pond and then this was left for two weeks during which time fingerlings were sourced from other communities. After two weeks about 400 fingerlings were transferred into the pond. There is a four month cycle from fingerling to full grown fish. The community is completely responsible for the upkeep and maintenance of the fish farm and receive all proceeds from the harvest.

From the first trial 28 kilos were harvested. After paying respect to the chief and the pond keeper, 20 kilos were sold at the market with a value of 500vatu/kilo. The community made 24,000vatu on the first harvest, which was put into a community bank account for the maintenance of the pond. The community were very excited as they could again eat decent sized fish and that also they could make money through the tilapia harvesting. Mrs Estella says "I was so happy that the fish farm worked so well, and we can now have fish without going to the coast and to the rivers". A common concern among inland communities is that without fish from the river they have no access to the coast to fish there for themselves.

"These new fish farms have become even more successful than our demonstration site and that is how we share the experience to others that need it"

The success of the demonstration fish farm was such that the Nambauk School and two private farmers have both established fish farms, at their own cost. "These new fish farms have become even more successful than our demonstration site and that is how we share the experience to others that need it", says Chief Abraham who along with the Nambauk community provided support and knowledge along the way.

In addition to the private fish farms that have been established following the IWRM initiated demonstration site, the Sarakata IWRM Steering Committee agreed to set up another demonstration site in Fanafo on the other side of the catchment where a similar scenario of overfishing is occurring.

A group of community members from Fanafo and 2 other villages were invited to attend a workshop and awareness raising at the Nambauk site to display the operations of the fish farm. As of November 2013 the fingerlings had just been added to the pond in Fanafo and now it is just a matter of time before the fish are fully grown and the community can experience the benefits of this sustainable food source.



Above: Tilapia fish farming in Vanuatu

Exploring innovative options for catchment management



Above: Undertaking the biodiversity of the Kovi/Kongulai catchment

When the IWRM Project started there was no committee or group to organise the development or management of the Kovi/Kongulai Catchment. There was a trusteeship who received money from lease agreements but they did not undertake any works on the ground or develop management strategies. To inspire new thinking on how to manage the catchment and see its ecological value as a potential benefit the IWRM with the communities developed an eco-tourism plan for the Kovi/Kongulai Catchment.

The IWRM Project began to liaise with the community through the two chiefs of Kongulai and Kovi. Through their role as community representatives the chiefs were able to improve the projects understanding of the community's needs and incorporate their traditional knowledge into the project. The chiefs also facilitate community consultations and workshops with the IWRM creating a two-way street of information and understanding.

Mr. Kalisto Ngao was appointed as a casual staff member to operate the hydrological installations in the catchment. His appointment increased community involvement in the project and improved peoples understanding and ownership of the technical aspects of catchment management. Mr Ngao goes out each week to take readings and reports to the IWRM project office. These data are used to monitor the Kovi stream's water level and flow behaviour. During other catchment investigations and assessments, members of the community went out and assisted consultants to undertake biodiversity, water quality and health surveys.

Through their involvement in the surveys, community members gained experience in survey techniques, technical knowledge about their water catchment and how we can impact upon it. Participants in turn provided the project with extensive and essential traditional knowledge about the ecology and biodiversity of the area. People are now starting to understand the value of the natural assets in their area. As Mr. Peter Pukuvati said, "I used to see the insects and everything as creatures of no value. When I saw the results of the bio-diversity survey I see now that they are integral parts of the environment and are valuable for themselves".

From the assessment of what is actually in the catchment the community has become interested in the idea of an eco-tourism plan as they now recognise the richness of their environment and how this might be interesting to other people. Through partnership with IUCN the project secured funding from the Kiedanrem Nature Conservation Fund of Japan who funded the development of the Kovi/Kongulai eco-tourism plan. Currently tourists can come to the area and pay a local person to be their guide however there is no formal mechanism for this and no management plan, the eco-tourism plan seeks to formalise all these activities so they can be limited and monitored.

"I am currently involved in another association that links culture and the environment from a traditional context and I see this as the next step for our catchment, eco-tourism could be the idea to venture into", said Chief Primo Pukukesa, when asked about the significance of moving toward eco-tourism.

The community and IWRM Project hope this will be an example for other communities to explore options for sustainable financing to take care of their catchments and generate money for their communities. By venturing into eco-tourism the catchment can be preserved and the community will have some incentive to manage and look after their land and water resources.

The eco-tourism plan was completed through local consultation and will now be used to leverage additional funding from other line government ministries and donors to support its implementation. These interventions include camping, bushwalks along the streams, and caves in which was found some early cave paintings. Further works need to be undertaken to identify the cultural value of the area, in particular the newly discovered cave painting and locations of cultural importance for preservation purposes.

Through the development of the plan I have realised the importance of learning from community what their aspirations are for their area and together discovering ways to use the unique biodiversity to the advantage of both the environment and the communities livelihoods.

Right: a local species of mantis recorded through the biodiversity assessment



Samoa

Lending a helping hand and gaining community support for IWRM

By Mayor of Tuifiopa



The pond at Tuifiopa after being dammed from debris after Hurricane Evans



Young community members involved in the clean up to restore fresh water to Tuifiopa families

The Samoa IWRM project has been heavily involved with communities in the Malololelei Catchment completing river clean ups and tree planting activities. I first heard about their work through these activities and our communities involvement in one of the river clean ups.

After hurricane Evans the water pond at Tuifiopa community became blocked up with debris and sediment and was acting as a dam causing flooding around the community. The swimming pond had become too dirty and turbid for people to use for washing or recreation.

We initially approached the hurricane relief organisation that told us that we would need a bulldozer to come in and clear the area and that it would be expensive and eventually seen to. We couldn't wait any longer and so decided to approach the IWRM Project. We had some reservations about approaching them as there is usually a lot of "red tape" involved when asking for assistance from a government department.

"Because of the experience the IWRM team has in engaging the community the process was smoother..."

The IWRM team also thought initially that it would require a bulldozer to clear however because of the cost and time involved they came and discussed options with the community and we decided on clearing it away by hand. Because of the experience the IWRM

team has in engaging the community the process was smoother and we reached an agreement quite quickly. The IWRM Team engaged the whole community, from young teenagers to elderly; each was given \$20 a day to help. There was about a 300m long riverway that had created a dam from the debris and mud that had washed down after the hurricane. People were asked to clear 5m of mud each day, this took 4 days with about 20 people helping each day.

Imagine it, all those hands cleaned that area and I was thinking that only a machine could clean it up. I was pleasantly surprised that our community had the ability to move so much dirt and debris and the job was performed by our people and not machines, saving a lot of money in the process. The pond is now clear again and people can use the water for washing and swimming and the community is no longer flooded.

I was happy with the approach that IWRM took in helping us and was extremely impressed with the project's efficiency to initiate the work within a couple of weeks of our first talks. Otherwise we would have had to wait many months. Because of the approach that the IWRM Project takes when consulting and working with communities, I now have a greater confidence in government organisations that when we speak they will listen.

I am now very vocal about the work of the IWRM project and what they are trying to achieve in the area and will continue to work with them to promote IWRM and the importance of looking after our watershed.

Raising awareness around water-related issues through childhood education



Above: School children supporting IWRM through the WWD activities

Before the implementation of the IWRM project there was nothing about water at the community level and there was nothing about water in the education curriculum. School children never learned about water, its importance, the role of water in the environment or how humans can impact on its quality and quantity.

The project sought to change this because of the newness of the IWRM concept at a national level and at the community level. We thought we may not be able to change the mindset of older generations but we can teach these concepts at schools and allow children to see things differently and learn new information. Through education we hope to provide this information as a platform and let the children act as the carriers of new ideas, taking it to their families and communities.

In the beginning we engaged schools by utilising the international event of World Water Day (WWD) to get the information out and see how effective it would be at reaching the community. The knowledge of water and IWRM is being transferred at the local level using a creative method to deliver and understand this message.

The IWRM Team meets with the Education Department and teachers before each WWD where we direct them to web pages that have good resources for children, introduce them to concepts and provide assistance with understanding the role of water. Mrs Sibila Ika from the infant school said "It is important that our children understand the role of water in our lives and environment, through the WWD events and awareness raising that IWRM does, we can see that they are really starting to learn more about this."

Right: School children performing a play, presenting their interpretation of a water theme at the WWD celebrations, 2011

We engaged the infant schools, prep to grade one, and wanted to see how they would interpret this new information and how effective it would be. Initially we gave out themes and had the children make up plays about this theme as part of a competition. In the first year we were surprised at the amount of information they were able to interpret. As the project has evolved, the activities of WWD is left up to the schools discretion but some activities include song and short story writing, poster designs, plays and community walks. The students and teachers alike now look forward to WWD as a community event, as one student said, "We really look forward to WWD and using the different themes to interpret the role of water".

"...now that we have a composting toilet, we have learned how our waste can impact on the water."

At the schools that have compost toilets we have undertaken a lot of awareness about the toilet itself and how to maintain but this is really a conduit to have the discussion about water conservation and how everyone's behaviour can affect the water systems in Nauru. Because the toilet at the infant school is well maintained the children are not fazed at all that it is a new system of sanitation, it has just become the toilet they use and they see no difference with the flushing toilet. "When the IWRM project came to school to talk about the compost toilets we were wondering what this toilet was and how it could be helping with the water in our community. But now that we have a toilet we are learning how our waste can impact on the water", said students from the infant school. To the kids there is no big deal about using and having a compost toilet, it is the same as any other toilet.

I realised that changing the mindset of older generations is difficult, but sharing new knowledge to the younger generation is a great way of building capacity in the community. I have learned that through well planned and ongoing engagement at the schools, we are able to raise the visibility of water issues amongst the whole community.



Palau

Community to Cabinet at work: Palau's first National Water Summit

The IWRM Project Coordinating Unit (PCU) in collaboration with the Ministry of Natural Resources and Environmental and Tourism (MNRET) prepared for and ran the 1st Palau National Water Summit. The Summit was organised as the first step in the development of a National Water Policy and was an opportunity to bring together various stakeholders from community to government, providing the space to openly discuss important water issues in Palau. Through the Summit it was anticipated that we would engage a wide section of the community and receive feedback from the community about what they saw as their vision for Palau's Water Policy.

The PCU along with the MNRET put a lot of effort into promoting and advertising the Summit to ensure that it was well attended by as wide a range of people as possible. We were able to provide an incentive for community members to attend by offering a free t-shirt to the first 100 people that registered for the summit. This proved to be an excellent way of getting a lot of the general public to come along who may otherwise not have. The PCU visited with different stakeholder groups such as the Governors Association and the Council of Chiefs and gave small presentations about the summit and what we were hoping to achieve in the form of the Water Policy.

We advertised for a month prior to the Summit to provide people with ample time to prepare their schedules. Advertising included a TV show on OTV with members of the wider IWRM team and a Radio Talk show discussing the Water Summit and the outcomes that we were looking forward to. Newspaper ads and flyers inviting all members of the community to the Summit were also distributed. We realised that achieving good attendance at a high level event would require plenty of advance advertising, briefing different stakeholder groups to spark their interest and ensuring they are involved in the process.

Because of these preparatory measures we were able to achieve a high turnout at the Summit and generate a lot of interest in what the IWRM project was doing. In his opening address, President Toribiong urged participants to work together as the creation of the Water Policy was only the first step in ensuring the conservation and protection of Palau's water resources in the years to come stating, "Only together can we ensure water forever".

In order to create this space for community engagement we understood the importance of reaching the community and getting feedback on what information they required. As a team we incorporated information that community members wanted to know into the summit proceedings, thus tailoring the meeting to the actual needs of the community, ensuring their genuine participation in its outcomes. During the meeting we facilitated a question and answers session and group discussions where people could raise opinions and concerns. Mr. Jinx Brikul a water operator said "I am happy I came to the Water Summit because, as my shirt says 'Community Choice', and the summit provided me with an opportunity to raise concerns about my needs as a water operator in Palau".



Mr. Jinx Brikul participating in the water summit

I was proud that we successfully provided Palau's first water summit. I learned the importance of planning ahead and on proper advertisements that ensure people are well informed about the event ahead of time. We were equally pleased when people continued to attend subsequent Policy meetings. Mr. Joe Aitaro, the Protected Areas Network Coordinator, said, "These are important events in a small island like Palau where the emerging impacts of climate change are even more of a reason to manage the water we have today, in order to secure our children's future." Seeing community members involved in the development of their own Water Policy showed a commitment to the future and made the policy development a truly participatory process.

Before this event I wasn't sure of people's willingness to be involved in high level meetings and policy development; however during the Summit I realised that with enough appropriate information they do. As a result of attending the National Water Summit people became more aware of the issues facing water resources in Palau, the need for a National Water Policy and how it can alleviate problems with water and sanitation, and gave them a chance to participate in its development. Because of so many people attending the summit, the Palau Water Policy can now say it is representative of the visions of the people of Palau.

The meeting was a catalyst to subsequent meetings that led to the finalization of a National Water Policy and its endorsement by His Excellency President Johnson Toribiong in April 2011. It was a great achievement for IWRM because not only did it encourage people to find out more about water resources in Palau, it allowed us to tailor the Water Policy according to the actual needs of the Palauan people.