The Legend of Water and La Kie (Pandanus Tectorii)

One of my favorite past time stories my grandmother—the late Hei Ateli Perez (RIP) used to recite growing up as a young child in Nukunonu, was the story of why water is bountiful in Fakaofo and why the la kie (Pandanus tectorii) flourishes only on Nukunonu.

My first visit to Fakaofo was in 1971 as a 10 year old. As I strolled around the village, I was greeted by a group of young boys drinking their water filled tauoga or coconut shells drawn from a ground well in an open malae (field). My curious and young cognizant mind somehow made connections to the past through what I tasted as magic water and the story that emanated from what I used to hear from my grandma. What I discovered that late afternoon was about a dozen fresh underground water wells strategically placed around the village. The villagers came to the wells with their bundles of coconut shells of all sizes to drink, bathe or collect water for household use.

The following narrative is a recollection of what I used to hear from my grandma Hei: “Before Christianity arrived, ancient Tokelau, had departmentalized the different components of the natural elements like rain, winds, seas, forests and the skies.

Each had a deified god that people acknowledged through prayers and chants. For example pleasant winds for navigation from the god of the winds, sunny clear weather for fishing from the god of the skies, bountiful rain from the god of rain, and or steadfastness from the god of the forests when felling a major tree for a canoe.

Similarly, the villages of Fakaofo, Nukunonu and Atafu each had their own deified gods which they believed to be their aitu or guardian spirit. They had the powers to be human-like beings as well as invisible spirit beings. Their main tasks were to safe guard their unique natural resources from being stolen or destroyed by the neighboring village’s aitu. Each village had a koo or a natural resource that were unique only to each island. Fakaofo—the la kie plant(Pandanus tectorii), Nukunonu—the vai (water) and Atafu—the kanava plant (Cordia subcordata).

One night, Hemoana the guardian spirit of Nukunonu visited Fakaofo. Undetected by Fenu the guardian spirit of Fakaofo, Hemoana uprooted the la kie plant, and ran all the way to Nukunonu and planted it there. To this day the la kie plantation flourishes on 2 acres of communal land in the middle of the island. The locals believed that this valuable plant originated from Fakaofo through the ingenuity of their guardian spirit—Hemoana.

Feeling sorry for his people from the events that had happened, Fenu thought of pay back time by planning to steal the vai from Nukunonu. Equipped with an agiti fahua taka (giant clam shell) Fenu took a night time excursion to Nukunonu. He found Hemoana fast asleep. He crawled up to the underground water well and using the agiti fahua taka, scooped up all the water that were in the well and sprinted towards Fakaofo.

Realizing what had happened, Hemoana suddenly woke up and the chase began. Hemoana closed in on Fenu as they sprinted the southern stretch of reef of Nukunonu beginning from Te Puka I Mua islet but Fenu was so determined to square off what Hemoana had done with Fakaofo’s la kie and ran with all his might. At the same time still clinging tight to the stolen vai.

Just as Fenu ran through the first rows of coconut trees of Motuakea (the most southern islet of Nukunonu), Hemoana tackled Fenu and managed to spill some water from the giant clam shell. Fenu somehow got away and made it safely to Fakaofo. However, situated on Motuakea islet today, is an underground water well believed to have been originated from the water that was spilled from Fenu’s giant clam shell.

As alluded to in the beginning of the narrative, Fenu’s feat in stealing water from Nukunonu explains why Fakaofo had more than enough underground water wells compared to Nukunonu and Atafu.”

Toitia the guardian spirit of Atafu was less adventurous then the other two guardian spirits and Atafu’s major natural resource the kanava still flourish to this day.

Malo ki toukai aitu e
Ki te poto taukou koa e
Kae he koo foki e teu ai touku nuku e

HALOA NA TUPUAGA E
HALOA NA POLOAKI MAI E
KO NA MEA FOKI IENA E
TAUPAU FAKALELEI E
AUA TE OMAOMAGA O TOKELAU
On Friday morning of the 12th of April 2019 at 9am, the annual commemoration of World Water Day commenced at Matiti School with the eager participation of its senior level students. Leading the programme were myself, Atafu Environment Officer Leuta Tamaoa and Fakaofo Waste Management Officer Tavita Gaualofa along with the support of our Economic Development Division team. The theme for World Water Day this year is "Leaving No One Behind" and is such that 'as sustainable development progresses, everyone must benefit'. This event was carried out as part of the WASH Project and advocacy – Water, Sanitation and Hygiene through SPC’s Water and Sanitation Programme. It is part of SPC’s support for Tokelau’s national priorities of improved water security, health and well-being in the communities.

Tialeniu and Matauala in Fakaofo and Atafu had also held their own celebrations. The Director of EDNRE Mr. Mika Perez and most of the Environment Division were in Fakaofo at the time for other work activities and were able to attend the event as a team. The director gave the opening speech with the Environment Officers, Leuta Tamaoa and Mele ka Mativa and Water Security Officer Solonaima Mei giving the presentations. Waste Management Officer Tavita was master of ceremony.

At Matiti, the first two hours of school time were allocated for the programme and the opening remarks and prayer were led by Leuta and Tavita and were followed by individual introductions of each Environment Division staff members. We used the three presentations that had already been prepared in Fakaofo by our Environment Division team. I presented the introductory presentation on World Water Day whilst the last two, titled "How Other Pacific Island Countries Access Water" and "Water Contamination - Afaina ote Huavai", were presented by Leuta. Presentations were done in both English and Tokelauan to ensure all students understood.

In preparation for Water Day, our Water Security Officer Solonaima provided all three atolls with 5 cartons of small bottles of water, 6 boxes each of lollipops and twisties as well as a sack each of rice, onions and chicken pieces. With the help of our Economic Development team, Petelema Eti, Faioa 'Ala, Hohe Pase and Siauala Paul, twisties and lollies were wrapped and a meal of chicken chop suey with rice were prepared and served for students and teachers towards the end of our programme. After the last presentation by Leuta, a Q&A-type fun game was played in which students had to answer a series of ten questions and whoever answered a question correctly would receive a prize. It was a fun learning activity for all which also served as a way for us to determine that the message we brought was grasped and understood.

To conclude our programme, Tavita gave a word of thanks to the students and teachers and led us in a final prayer.

The Matiti School principal Maliana Luka also imparted her own closing remarks, acknowledging the importance of water security in our tiny nation and encouraging students to take heed of the information we had provided. The snacks, meals and water were distributed and the loads of remaining food and water were given for the pre-school and primary level students.

Despite a few technical difficulties at the start, the program ran along well. In all three atolls, the active participation of students and their understanding of the importance of water security and this year’s theme were good and is what we hope and aim to aid in growing and thriving through our actions and service for our water security in the future.
Mealy bug infestation in Fakaofo has reached a degree that it is infesting the whole island especially on breadfruit trees thus impacting food security on the island.

The environmental staffs and the Director of EDNRE made it to Fakaofo on the 29th of March 2019 and met the Taupulega for their blessing and endorsement to go ahead with the plan to remedy and control the mealybug on Fakaofo.

Director of EDNRE Mr. Mika Perez thanked the Taupulega of Fakaofo for the patience they have in waiting on the department to react on the situation. “We have been fighting against these invasive species for a numbers of years trying to eradicate and to minimize the population of these invasive species but did not work”. Finally, the department has in their possession conqueror oil that is the control to be used to fight the mealybug. This was sorted with financial assistance under the EDNRE Environment budget.

He reassured the Taupulega of the reinforcement effort of the department to work closely with the people of Fakaofo in the fight against mealy bug. “At this time, the department will work again on spraying of the breadfruit trees were infested of the mealy bug”, said Mr. Perez.

Upon receiving the blessings and approval from the elders of Fakaofo, the team without any further delays, started the work right away.

During the same mission, the department were also allowed to work on managing the Singapore daisy which is also an invasive species that the people of Tokelau had requested assistance from the EDNRE.

The Environment department, over the years tried to work on ways to eradicate the problem without much damaged caused to the environment at large when taking about the usage of chemical and pesticides. Mealy bugs are scale insect pests belonging to the family Pseudococcidae which tend to live together in clusters in plant parts. They suck sap from plants and excrete the excess sugars as a substance called honeydew, which facilitates the developments sooty mold.

There were attempts to control the problem using homemade remedy but its application was not consistent due to some unknown reasons. This actually accelerate the population of the invasive species and allowed the invasive species to be more resilient thus infested most of the island fruit vegetation especially breadfruits.

EDNRE underwent through thorough planning and discussion on how best to address the issue and finally made the mission a possible in the first quarter of this year.

Loia Tausi
The Department of Economic Development; and Natural Resources and Environment (EDNRE) completed a two-weeks of budget and annual work planning meeting for the next financial year of 2019/2020 at Te Mahina Motel in Nukunonu from the 15-25 April 2019.

The program was officially opened with an introduction and welcoming speech by the Manager of Economic Development Division Ms Petelema Eti then followed by a word of prayer conducted by Father Penehe. An elder of Nukunonu and the hui Pulenuku were also invited and were given the opportunity for their remarks.

Director of EDNRE Mr. Mika Perez expressed his sincere gratitude towards the invited guests for accepting the warmth invitation though they were tied up with the nuku and the Taupulega program but they avail their time to attend the department’s opening meeting function.

The challenges of 2018/2019 Annual work Plan were firstly reviewed on the first day of the meeting following the presentation of the last budget planning meeting in Atafu 2018. The department was divided into two divisions which was the Economic Development Division and Environment Division for their divisional annual work plan and budget 2019/2020 planning session.

Mr. Perez congratulated his staff for their hard work and dedication in delivering the reliable service throughout the last financial year. He also encouraged staff to continue with the well done job and to strive to work outside the box.

“You do not have to stay within the box all the time. Use your initiatives, skills, knowledge to make use of EDNRE investment on you and also in order to achieve sustainable developments that will help improve the livelihood and the quality of life of our people”, said Mr. Pérez.

On the second last day of the meeting, managers of each division reviewed divisional staff job descriptions individually and their performances before they presented their annual work plans with their respective proposed budget to the director of EDNRE.

The two weeks meeting was indeed a good opportunity for staffs to identify their weaknesses that may have hindered the successful implementation of their planned activities in the past years and use those experiences for the new challenges ahead.

The EDNRE AWP & Budget meeting was officially closed with closing remarks and a word of prayer from Father Penehe Kolo at Te Mahina Motel on Thursday 25th April 2019.

Photo: Utuola E-News

♦ Margaret S Paul

Margaret S Paul

Economic Development, Natural Resources and Environment (EDNRE) Staff present during the meeting:

Mr. Mika Perez
Ms Loia Tausi
Ms Petelema Eti
Ms Solonaima Mei
Ms Teagai Jasmine Tovio
Mr. Christian Perez
Ms. Leuta Tamao
Mr. Tavita Gaualofa
Mr. Peha Mavaega
Ms Sosefina Pase
Ms Faioa Ala
Ms Margaret Siuvalu Paul

Fakaofa Taupulega Rep:
Limoni Fouina
The Pacific Aviation Investment Program invited again the successful participants of phase 2 to continue enhancing their knowledge in pursuing phase 3 of Public Procurement from the 6th -10th of May 2019 in Tonga. This course of phase 3 of Public Procurement is designed for procurement officers or those in functions that include close interaction with procurement. The aim of this course is to provide participants with a clear understanding of:

- **Advanced Procurement Planning**
  To develop the capacity to manage the planning processes associated with the procurement of goods, services and works

- **Communication and Negotiation skills**
  To improve the communication, negotiation and personal professional development skills required by those involved in advanced level procurement

- **Advanced Contract Management**
  To manage the evaluation, contract development, and contract administration process associated with advanced level procurement.

The successful participants were included 2 participants from Samoa, 20 students of Tonga, 6 of Tuvalu and 1 participant of Tokelau. Before the training began, the participants were given the opportunity to introduce themselves and as well as their representative respective organisation they come from.

However, the training lecturer Mr.Paul Muller also introduced himself and congratulated the successful participants for putting forth their best effort in phase 2. “Whatever the outcome is, you have to be satisfied with it if you know it you put it in your best effort”, said Mr.Muller.

Mr.Muller encouraged the participants to have a positive attitude and constantly strive to give their best effort and they will overcome their immediate problems and find they are ready for greater challenges in achieving their goals as procurement officers. Moreover, the training covered ten course modules which spread across the five days of the training. As part of the training, the participants revised each module and were tested at the end of each session to see their understanding on the modules.

At the end of the training, participants were able to develop procurement strategies providing best fit to specific procurement requirements and also able to apply the principles of conflict management.

The training was coordinated by UNDP in partnership with Chartered Institute of Procurement and Supply (CIPS) under the funding of World Bank.

Public Procurement training phase 3 was officially closed with the presentation of certificates of phase 2 and with a farewell dinner at Likualofa Resort on Friday 10th May 2019.

I would like to thank our Minister Hon. Mr Kelihiano Kalolo, Director of EDNRE Mr Mika Perez and also respective colleagues for supporting me with this training, I also would like to encourage my colleagues and whoever is reading this article to make use of any opportunity that comes our way and especially Procurement is new to our community and we have limited of skills in this area. Therefore, we need to pull up our socks and strive for the best of our country in the future.

♦ Margaret S Paul
The 2019 Pacific Environmental Security Forum (PESF) took place from 21-24 May in Wellington, New Zealand. It was the ninth annual environmental security event, which was organized by U.S. Indo-Pacific Command (USINDOPACOM) and the New Zealand Ministry of Foreign Affairs & Trade (MFAT). The event brought together partners in both civilian and military personnel from across the Indo-Pacific region to discuss climate security, resource protection, biosecurity, multilateral cooperation, and environmental security transformation.

With over 160 participants attending from more than 40 countries and organizations. The PESF commenced with senior leadership from New Zealand and the United States providing strategic guidance. New Zealand's Minister of Defence, the Honorable Ron Mark, delivered an impassioned speech calling PESF participants to act on climate change. Minister Mark identified environmental security as a civilian and military responsibility that all countries should prioritize. Minister Mark was followed by the U.S. Ambassador to New Zealand, the Honorable Scott Brown. Ambassador Brown highlighted environmental security work already underway by the United States, and emphasized that public-private partnership can aid in the process. Event activities included presentations, panel sessions, work group activities, a site visit, and other exercises.

New Zealand Minister of Defence Ron Marks opened the conference and in his opening remarks,

Make no mistake, climate change will have grave implications for biodiversity and biosecurity. This is an area that requires new and innovative thinking if we are to preserve our natural ecosystems and ways of life. Not to mention our economic prosperity.

Tokelau was represented at the 9th PESF by the Administrator of Tokelau Ross Adern and Director of EDNRE Mikaele Perez.
A farewell dinner party was organised by EDNRE department in honour of the end of the 3 years contract basis of the Manager of Economic Development Division at Talikilagi Hall on Friday night 7th June 2019.

Ms Petelema Eti Tefoepua was recruited by EDNRE department in 2016 as a Manager of Economic Development Division. There was an outpouring of praise and gratitude for Ms Petelema but even so, words could not encapsulate the success and positive work she brought to the department and as well as the nation as a whole in the last three years of her service in the public service of Tokelau.

The function began with the word of prayer conducted by Father Penehe then followed by tributes from the Taupulega representatives and the Director of EDNRE. Their speeches were heart touching and it was truly an emotional affair during the farewell dinner.

Director of EDNRE thanked Petelema on behalf of the Minister and EDNRE department conveyed his sincere appreciation towards the work Ms Petelema had carried out throughout her contract with EDNRE. He also thanked Petelema for the time and knowledge she had shared during her time as a management officer of EDNRE.

“I and the department would like to wish you the very best in all your future endeavours” said Mr. Perez

Later the program was followed with the presentation of gifts to Ms Petelema Eti prepared by EDNRE staff. It was the night of mixed emotions for all present at the Talikilagi hall.

Mrs Eti was also given the opportunity to say her farewell speech. “I am leaving soon with a wealth of knowledge I will treasure. Working at EDNRE and as well as in Tokelau has been a fantastic learning experience and I am thankful for the skills I’ve acquired”, said Mrs Eti. She further stated an old saying “Every beginning has an end and every end is a new beginning”.

“I have enjoyed my time here and I appreciate having had the opportunity to work with you. Thank you for your support over the years. I wish you all well in your future endeavours. Even though we have had many differences and don’t always agree, I want to thank you for being an open-minded people”.

Mrs Eti also thanked Fatupaepae and Aumaga for having her back in times of short notice in the need of handicrafts. “I run to you as my mothers and fathers, and I thank you so much for supporting me in the work our department is carrying out”.

She wished for everyone to continue to experience success, to feel fulfilled in all they do.

In conclusion of the program, the Manager of Environment Ms Loia Tausi expressed vote of thanks towards Ms Petelema for the wonderful time they spent working together within the department. She also appreciated all the work Ms Petelema had done not only working in the Economic Development Division but as well as supporting them in the Environment Division.

“I wish you a very good luck for what you have planned in life. I wish you a very happy life ahead and may you have a best in your future endeavours”, said Mrs Tausi.

The program continued with the live band and entertainments from EDNRE staff and was closed with the benediction by Father Penehe Kolo.

♦ Margaret S Paul
From our environment division here in Nukunonu, we have been heavily involved with the fight against the We Delia also formally known as Yellow Singapore Daisy. This plant was believed to be brought in by a local for decoration planting purposes. Nowadays, it has been classified as an invasive species here in Nukunonu. Wedelia prefers growing in clear areas. In this case, it has covered up family land areas taking out important crops such as coconuts, pawpaw and banana. Therefore, Tau-pulega requested Environment Division under EDNRE to help and come up with a solution in the aim to eradicate this invasive on land.

As the work started to take place behind the scenes; EDNRE had been working closely with Pacific Biosecurity (Victoria University, New Zealand) and SPREP (Apia) organizations. Pacific Biosecurity under the Ministry of Foreign Affairs and Trade (MFAT) New Zealand worked to send over the best selection of herbicides under the careful supervision of Monica Gruber, who leads the Pacific Biosecurity Unit and has many years of experience battling with invasive species amongst the Pacific Region.

During the month of March 2019, Bradley Myers from SPREP whom is a weeding specialist based at SPREP Apia arrived in Nukunonu to train EDNRE Environment Staff on how to use the herbicides and spray the wedelia amongst our village. After our training we set out to conduct the spraying. It was completed under two days and monitored for data recording as well.

To this date, we have sprayed throughout three times every month. There has been a great improvement and also good feedback from local families happy that wedelia has finally been cleared of their land.

Christian Perez
PRESS RELEASE: Urgency of climate action highlighted for U.N. summit preparatory meeting

GENEVA/ABU DHABI, 28 June 2019 (WMO) - Earth is set to experience its five warmest years on record from 2015-2019, according to the World Meteorological Organization (WMO). Increasing greenhouse gas concentrations will fuel the global heat – and accompanying ice melt, glacier retreat, sea level rise, ocean heat and extreme weather for generations to come.

The visible and increasing urgency of climate action will therefore be in focus at a meeting in Abu Dhabi on 30 June - 1 July, intended to galvanize initiatives that will be announced at September’s Climate Action Summit convened by United Nations Secretary-General António Guterres.

“Increasingly we hear the phrase climate emergency,” said WMO Secretary-General Petteri Taalas. “It is not just about climate. Climate change impacts the ocean, water resources, food security, ecosystems and the sustainable development of the entire planet,” he said.

Mr Taalas is a member of the Steering Committee for the Climate Action Summit. He is co-chair of the Climate Science Advisory Group, along with Leena Srivastava, Vice Chancellor of India’s Energy and Resources Institute (TERI) School of Advanced Studies. The Group will submit its detailed reports to the Climate Action summit to inform world leaders about the state of the climate as well as science-driven solutions for transformative action and raising ambition in key sectors.

The WMO delegation will take part in a number of round table discussions at the Abu Dhabi meeting, including on raising ambition, on energy transition for climate action and on climate and health.

Mr Guterres has invited world leaders to the Climate Action Summit from 21 to 23 September to deliver concrete, realistic plans to enhance their nationally determined contributions by 2020, in line with reducing greenhouse gas emissions by 45 per cent over the next decade, and to net zero emissions by 2050.

The global temperature has risen to close to 1°C above the pre-industrial period, according to WMO’s Statement on the state of the global climate in 2018. Time is running out to achieve commitments under the Paris agreement to keep the temperature increase by the end of the century to well below 2°C and to pursue efforts to limit it even further to 1.5°C.

Greenhouse gas concentrations in the atmosphere are still rising. Carbon dioxide stays in the atmosphere and ocean for centuries, and so will continue to drive temperature increase and ocean acidification in the future.

“The last time the Earth experienced a comparable concentration of carbon dioxide was 3 to 5 million years ago when the temperature was 2-3°C warmer and sea level was 10-20 meters higher than now,” said Mr Taalas.

The four warmest years on record were in the past four years, and we are on track for 2015-2019 to be the warmest five years on record. The warming trend continues unabated so far in 2019 and the months January to May were the third warmest such period on record.

May 2019 Antarctic sea ice extent was the smallest on record, and Arctic sea ice extent was the second smallest on record, according to the US National Snow and Ice Data Center.

Heatwaves and high temperatures continue to increase in frequency and intensity across the globe, with many new temperature records in both hemispheres. The unusually early heatwave in Europe – with temperatures in France and Spain exceeding 40°C - is just the latest in a series of extreme weather events.

Temperatures have topped 50°C in India, Pakistan and parts of the Middle East in recent weeks. The delayed arrival of the southwest Monsoon has strained water resources, including in Chennai, India’s sixth largest city.

Drought has triggered food insecurity in the Greater Horn of Africa, whilst southeast Africa is still recovering from devastating tropical cyclones earlier this year which claimed more than 1 000 lives in Mozambique, Malawi and Zimbabwe.

Hundreds of the world’s leading political figures, including ministers, as well as representatives of business, local authorities, civil society, youth and the UN system, and climate action experts are expected to gather in the capital of the United Arab Emirates for the stock-taking meeting, which will be attended by UN Secretary-General Guterres.

Source: The World Meteorological Organisation
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