PACIFIC WOMEN IN METEOROLOGY: SAMOA

Samoa's Meteorology Service



The Samoa Meteorology Service was established in 1889 during the German Administration. In 1997, it was declared as a Forecasting Office to issue weather forecasts for the Independence State of Samoa. Currently, SMD is under the auspices of the Ministry of Natural Resources and Environment. There are five sections that make up the SMD. Of the 46 staff working at the SMD, eight of them are women, ranging from the age of 22-35.

"Women bring major changes to a National Meteorological Service office, when I joined in 1980 there were no female staff, now we have eight, at least 25% of the total staff and progressing ahead in balancing gender." - Mr. Mulipola Tainau Ausetalia Titimaea, Director, Samoa Meteorological Services

MEET OUR STAFF



Ms. Faapisa Aiono is a Senior Scientific Officer in Climate, SMD. She holds a Degree in Environmental Science with an emphasis in Biology.



INSPIRATION

"During the three years of my degree, I studied geography units that contributed to my understanding of meteorological aspects. Frankly, a career in the Met Service was far from my thoughts as I always considered it as a job suitable for males.

I have come to understand how useful and important the role of the Met Office is in contributing in improving the resilience of the Samoan community to climate variability, climate change and severe weather events by delivering well-informed outlooks and information. Considering that I also played a role in those contributions inspires and encourages me to strive to be the best female meteorologist/climatologist."

CHALLENGES AND HIGHLIGHTS

Working in the Met Office, I have not encountered any problems regarding gender issues. The only challenge at the time was trying to gain confidence in public speaking, which I believe comes with experience.



Ms. Katie Pogi is a Scientific Officer in Geophysics with SMD. She completed her Bachelors with a double major in Chemistry and Earth Science. This multidisciplinary degree had a broad coverage, which is relevant to geological works in laboratories and out on the field for Geoscience with the Meteorology Division.



INSPIRATION

"Science is very interesting and has been my field of study since high school. It is this understanding and curiosity about other processes in the environment that encouraged me to pursue my studies in this field. Geo-science covers both fields I studied in University (Chemistry and Earth Science). Upon completion, I hoped to be placed in an institution where I could apply what I studied in university. I did not want to focus on one discipline, and I know meteorology offers this diversity through its Geoscience section."

CHALLENGES AND HIGHLIGHTS

"I believe that in the Pacific, men are very protective over women as women are believed to be the weaker sex. Women are sacred and therefore given the lighter load of any work. I feel it is this mentality that limits us women to explore and learn more in the workforce."

"Meteorology services are in need of diverse backgrounds in order to grow and I believe women have what it takes to empower, improve and sustain the great work at Meteorology Services. I encourage women to never feel inferior or inadequate to pursue a Meteorology career just because we feel it is a man's job." - Ms. Faapisa Aiono

"Samoa is a small Pacific Island country and most of the upcoming meteorological issues in the world such as Climate Change have disastrous impacts on the Pacific island countries, so it means a lot when were asked to represent and speak on behalf of our country." - Ms. Katie Pogi

Samoa Meteorology Division • +685 20855 • www.samet.gov.ws • ausetalia.titimaea@mnre.gov.ws

By Tile Tofaeono, Faapisa Aiono, Katie Pogi









PACIFIC WOMEN IN METEOROLOGY: PALAU

NOAA National Weather Service, Weather Service Office – Koror

The Koror office has been established for 62 years and provides weather, water and climate data, forecasts and warnings for the protection of life and property to the whole of government and whole of country. It provides day-to-day forecasting (temperature, precipitation), wave heights and rainfall data dating back to the early 1940s.

There are 14 staff members working at the Koror Weather Service Office: four are females, and ten are males.

"We have taken pride in supporting our families and now it is the time that we, women, accept ourselves as being great leaders and support our own countries to make a difference in this world!" – Ms. Maria Ngemaes, Meteorologist-In-Charge

MEET OUR STAFF

Ms. Maria Ngemaes is the Meteorologist-in-Charge of the NOAA NWS WSO Koror in the Republic of Palau. Ms. Ngemaes has degrees in Business Management and Meteorology.



INSPIRATION

"During my high school years, I was very interested in mathematics and science, and I was so good at them, I might add, that later on in my university years while working toward my Business Management degree, I told myself that I would seek and pursue further opportunities in weather-related jobs in Palau. I was so amazed and at the same time kept wondering why only men were working or had the opportunity to work for the Met Service. I challenged myself that I will go for this opportunity in this so-called "Men's World" and be a role model for girls and women, including the great challenge ever of becoming the first female Meteorologist in Palau and in the entire Micronesia."

CHALLENGES AND HIGHLIGHTS

"Palau is a matriarchal society, and women in Palau are very vocal and active on any issues and agendas in government and non-government agencies. I believe that being a woman working in the Met Service here in Palau would not give us women any challenges at all, besides the ability to efficiently manage or work in an office previously managed by men."

"I come from a matriarchal society where I didn't have much of a challenge getting into the field of meteorology. I came to understand as years went by that each country, whether it has a matriarchal or patriarchal society, has different expectations. We have come a long way. So ladies, let us join hands."

- Ms. Maria Ngemaes



NOAA NWS WSO Koror • Ngerbeched Road, PO Box 520, Koror, Republic of Palau 96940 • T: (680) 488-1034 / (680) 488-6287 • F: (680) 488-1436 • www.noaa.gov/koror • www.facebook.com/wsokoror/

Ms. Kikuko Mochimaru is a Staff Meteorologist.
Ms. Mochimaru holds an Associate of Science
Degree in Business Accounting and a Bachelor
of Science Degree in Meteorology, provided
by the Micronesian Student Program funded
by NOAA NWS Pacific Region Headquarters in
Honolulu and NWS Office Koror, Palau.



INSPIRATION

"My friend and now boss Meteorologist-In-Charge Maria Ngemaes mentioned an opportunity for a full scholarship at the University of Hawai'i at Manoa for a Bachelor of Science Degree in Meteorology. This opportunity was made true in August 2007. I graduated in May of 2012. Since I have returned, NWS Office Koror has monitored two Super Typhoons Bopha (Dec. 2012) and Haiyan (Nov. 2013), and the currently decaying El Niño of 2015/2016."

CHALLENGES AND HIGHLIGHTS

"I do not have any challenges that are gender related. My challenges are technically oriented: internet fluctuations; programs not functioning properly; troubleshooting when technicians are not able to assist; finding resources on the internet to use as a guide or tool for weather, climate, ocean and marine services targeted specifically for Palau.

Half of my occupational life was mostly in the United States (Hawaii and California) and later in Palau from 1998 to the present, so I have enjoyed worked in an "equal opportunity" environment. For a short period of time, I did pre-recorded weather briefings for a local television station, and positive comments came from all ages about the information I was providing. The highlight of it all was when little girls said they wanted to be "The Weather Lady". Another highlight was the opportunity to provide outreach to the schools and organisations in Palau on site or via radio, newspaper and television interviews and having the satisfaction that everyone had a better understanding of weather and climate."

"Have strong faith in God. Seek support from family and friends. Stay focused. Prioritise work and personal life, and keep them separated. When the going gets tough, get tougher. Share your knowledge and guide others. There's no such thing as a stupid or silly question, the stupid or silly thing is the question not asked. Have faith in yourself. Know that your mind is a powerful instrument; make a plan, set your goals, fulfill your goals, and repeat the process." – Ms. Kikuko Mochimaru

By Ms. Maylene Joshua, Weather Service Specialist









PACIFIC WOMEN IN METEOROLOGY: FIJI

Fiji Meteorological Service



The Fiji Meteorological Service (FMS), established in 1943, is responsible for providing weather forecast and warning services for Fiji and many Pacific island nations. FMS operates the National Weather Forecasting Centre (NWFC) at Nadi, which serves Fiji's weather information needs.

The NWFC marine bulletins cover all Fiji waters, while the public bulletin also gives a broad indication of winds and state of sea surrounding the islands.

FMS also operates the Regional Specialized Meteorological Centre Nadi —Tropical Cyclone Centre, which provides weather forecasts, cyclone and other severe weather warnings, and advisory information for the tropical South Pacific region. This function is served under the World Weather Watch Programme of the World Meteorological Organization.

There are 112 staff members working at the Fiji Meteorological Office: 24 are females, and 88 are males.

"Meteorology has been a male-dominated field; however, a number of women globally have become successful meteorologists. Maintaining a balanced workforce between males and females makes good business sense and helps to better serve clients. Women professionals can play a large role in encouraging young girls and women in pursuing an education in science, particularly meteorology and hydrology. In order to foster the participation of women in science, there is a need for peer support, mentorship, and empowerment." – Mr. Ravind Kumar, Director of Fiji Meteorological Service

WOMEN IN METEOROLOGY AROUND THE WORLD

Women represent less than one-third of professionals in meteorology and hydrology, and women hold less than 20% of leadership roles such as Chief Meteorologist. Improving the access of women and girls to the science and technical training, technology and opportunities available within these important fields depends on both education and example.

Increasing the visibility of successful women within these technical careers significantly boosts the engagement of this vital segment of the global population.

In the Fiji Met Service, of the 24 female staff, their expertise covers a broad range, with women holding positions of scientific officer, technical officer, weather observer, accounts officer, librarian, administration officers and technical officers in hydrology as well as senior technical officers in climatology.

MEET OUR STAFF



Ms. Varanisese Vuniyayawa is a Senior Technical Officer in the Climate Division of the Fiji Meteorological Service

Holding a diploma in Basic Computing & Data processing, the science of meteorology may run in Ms. Vuniyayawa's blood.

"I had an uncle who was a meteorological observer and about to retire. He asked me if I was interested in working for the weather office and said that his boss was then looking for someone with a computing background. Having just graduated and looking for a job, I took the opportunity and challenge (knowing that it is a male-dominated job) and applied. I was fortunate to be chosen and had to undergo three months of training in a WMO Basic Observers Course with 14 male colleagues (I was the only female!). My interest in computing and databases has kept me going in FMS's Climate Service Division."

As a woman working in a male-dominated profession, Ms. Vuniyayawa has faced some challenges both because of cultural and traditional reasons as well as the nature of the work.

"The work of an observer is mostly recommended for males because they will be transferred to remote islands (where the Met station is isolated or far from the village) and also work shift hours. In my first 3 months of work, I was not given any night shifts for security reasons, so I only had two shifts, the day-time shifts.

"Being a working mother is a challenge, especially when I have to leave my family and attend outside (local and international) meetings and workshops. My longest trip away from home was two months in Japan, and I had to leave behind my five children."

Ms. Vuniyayawa also faced a major challenge working and managing staff and resources at Fiji Meteorological Service. Now, I am at the supervisor-management level and currently have five male technical officers under my supervision."

Despite challenges and a large workload, there are highlights as well: Ms. Vuniyayawa has established a solid personal network with other Pacific Island women working for Met services while attending workshops and meetings.

"Where there's a will, there's a way... I have two favourite verses: "Trust in the Lord with all your heart and lean not on your own understanding" (Proverbs 3:5), and "Nothing is impossible, but with God, all things are possible" (Matthew 19:26). Whenever I have difficulties or issues in the office, I pray and ask for divine intervention, and it works!!" – Ms. Varanisese Vuniyayawa.









Ms. Priya Singh is a Scientific Officer – National Weather Forecasting Centre

Priya Singh is a Scientific Officer at the National Weather Forecasting Centre for the Fiji Meteorological Service. Her educational background is in meteorology (BSc Atmosphere and Oceans Science), targeted towards a career in the Meteorological Service.

"I was inspired to work at the Meteorological Service after reading and watching news about severe weather around the world while I was in high school. It made me want to know more about how these types of weather originate and how the ocean and atmosphere interact."

For Ms. Singh, her highlights include many different trainings to expand her knowledge about a variety of meteorological

phenomena as well as meeting new people. One of her more interesting training activities is learning about Southern Hemisphere meteorology.

"The advice I would give other women who may be interested in a career in the Met Service would be to prepare yourself well for shift works and overseas trainings if you have just started a family.

"Work at a Meteorological service might require you to travel outside country and be on call 24 hours a day, 7 days a week, so you might have to forgo family commitments, arrange caretakers for your children, and report to duty in due time."

"You might always be on the run while working at Met Service; however, the job here is very interesting." Ms. Priya Singh



Mrs. Marica Ratuki Turaganivalu is a Senior Engineer in the Technical Division of the Fiji Meteorological Service

"Success is liking yourself, liking what you do, and liking how you do it." - Maya Angelou



Marica Turaganivalu is a Senior Engineer in the Fiji Meteorological Service, and her job along with three other staff is to maintain the operations of automatic data acquisition systems. These systems include the three weather radars, 32 automatic weather stations, a wind profiler and several other pieces of equipment.

"I have a degree in Engineering (Electrical and Electronics), and in all the time I was studying, I never expected to one day work in the Meteorological Service. I was wondering, what would an Engineer be doing in Met Service? Fortunately, I met one of the Meteorological officers during a meeting in Suva five years ago and he informed me that they were advertising some new engineering posts and that I should apply," said Ms. Turaganivalu.

"I have never looked back since. The work is very interesting, and we are always travelling around the country (visiting some very remote and amazing places) while carrying out maintenance work, as well as the odd trip or two overseas for some specialised training in between."

The opportunity to meet and work with a lot of people from the region as well as around the world due to the regional service that the Meteorological Service provides is a highlight for Ms. Turaganivalu. This work gives chances to network and share knowledge and experiences in the job and what officers face in carrying out their work.

"Though I have not had the opportunity to meet any other female engineers in the Meteorological Service, I am sure that there are many women out there who are or will join my profession and make a difference in the world," said Turaganivalu.

"If you like to challenge yourself, travel and work out in the sun, join our Section, Technical Systems!" - Mrs. Marica Ratuki Turaganivalu

By Ravind Kumar and interviewees

Fiji Meteorological Service • Private Mail Bag NAP0351, Nadi Airport



Ms. Swastika Prasad is Scientific Officer in the Climate Division of the Fiji Meteorological Service

The career in the field of Meteorology is a rewarding yet a challenging one. You will need to be up to date with latest information and developments in science of weather and climate. With the qualification of Bachelor of Science in Environmental Science majoring in



Physics, Ms. Prasad began her career in Meteorology as an attachée to Climate Services Division, where she was employed as a temporary relieving officer and later appointed to a permanent position as a Scientific Officer. While working, she also studied and graduated with a Post Graduate Diploma in Climate Change.

"With my eight years of career as a climatologist, I find my job very interesting," said Ms. Prasad. "When I joined university for the bachelor's program, amongst all my college friends, I was the only one who chose to do a major emphasis in Physics. I had lots of discouragement from them (believing that physics at tertiary levels are for men), but I remained determined with what I chose, and I am happy that today this qualification has brought me to the field of Meteorology.

"As a climatologist, I am required to work in the day time only; however, during severe weather, we are required to work during weekends; thus, you need to ensure that your family is well and safe and arrange for caretakers to look after kids (which is very difficult as everyone one wants to be with their loved ones during the height of disasters). I am very fortunate that my supervisors are very considerate when preparing shift roster and ensure not to put me on night shifts (considering that I have two very young kids and my husband also does shift work). This is a short-term challenge for me; however, once my children have grown up, I should be comfortable doing any shift work."

Due to evolving science and technology, capacity development through national and international trainings, workshops and meetings forms part of career development in Meteorology. As a working mother, Ms. Prasad finds it difficult to leave her kids in hands of caretakers and travel for international training.

"The toughest trip that I had was when I had to leave my baby boy who was only eight months then to travel to Korea for training. However, I keep reminding myself, "No pain, no gain": to achieve something in life, you will need to sacrifice and forgo something." - Ms. Swastika Prasad









PACIFIC WOMEN IN METEOROLOGY: PAPUA NEW GUINEA

Papua New Guinea Meteorology Service



The PNG National Weather Service was established in the late 1960s as a meteorological service with the stated purpose of supporting:

- · national security;
- · navigation for shipping and civil aviation; and
- assistance of persons and authorities engaged in primary production, industry, trade and commerce.

Of the 86 staff working at the PNG National Weather Service, 11 are women, with several of them having held positions at the PNGNWS for up to 30 years. The youngest female staff member is 30 years, with the eldest being 66 years of age.

"Over the last five years, we have recruited more women in Meteorology than we have done in the last 20 years. This is encouraging to see as meteorology used to be a male-dominated field" – Mr. Sam Maiha, Director, PNGNWS

MEET OUR STAFF

Ms. Kisolel Posanau is a Climate Information Officer at the PNG National Weather Service. She holds a Bachelor of Science degree majoring in Environmental Sciences at the University of Papua New Guinea.



Ms. Nanao Baoauka is a
Agrometeorologist with the PNG
National Weather Service. She
holds a Bachelor of Arts degree,
majoring in Environmental Science
at the University of Papua New
Guinea.



INSPIRATION

"My interest in meteorology started during my studies at the University on climate and meteorology. This interest prompted me to pursue a career in meteorology, so I joined the PNG National Weather Service when the positions were advertised."

CHALLENGES AND HIGHLIGHTS

"Being able to work with male colleagues and at the same time being a mother at home to my two sons is a challenge. We also make compromises when we go on duty travel and leave our children behind with our families."



By Mr. Kasis Inane

Papua New Guinea National Weather Service • PO Box 1240 Boroko , Papua New Guinea T: (675) 324 4578 • F: (675) 325 5201 • E: kinape70@gmail.com • www.pngmet.gov.pg

INSPIRATION

"I took some courses related to Meteorology and attended some fieldtrips to the PNG National Weather Service during the four years of my study at the University of Papua New Guinea. The fieldtrips to the PNG National Weather Service particularly inspired me to work in the Met Service. The presentations by the Met Officers on meteorology during the fieldtrips really caught my interest."

CHALLENGES AND HIGHLIGHTS

"The challenges I face are issues like time management between work and family/personal matters. I find it challenging to go on duty travel alone to countries I have never travelled to before and getting to adapt to the new environment, especially in countries that experience the four seasons. The job itself is also tough: with so many data to digitise, digitising one weather station's data within a week is challenging."

"Do not doubt yourself - always tell yourself that you can make a difference at work no matter how small you contribute to a task. Love your job." – Ms. Kisolel Posanau

"Meteorology is interesting, and pursuing a career in it will take you to places around the globe, meeting and connecting with different people and professionals from Met Services around the world." – Ms. Nanao Baoauka









Secretariat of the Pacific Regional Environment Programme (SPREP) PO Box 240 Apia, Samoa sprep@sprep.org www.sprep.org