

Pacific women leaders reducing disaster risk







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Introduction

Women are excellent leaders, yet they are still underrepresented in decision-making and leadership in disaster risk reduction.

When you work in a field where you are in the minority, it can feel isolating. This collection seeks to recognize and celebrate just a few of the many amazing women leading disaster risk reduction efforts across the Pacific, in the hope that these profiles will inspire other women doing the same.

Women's equal participation and leadership in public life, including disaster risk reduction, is both an important goal in itself and essential for reducing disaster risk and achieving a broad range of sustainable development goals.

The United Nations Office for Disaster Risk Reduction (UNDRR) is committed to supporting women's leadership in disaster risk reduction, including through our flagship Women's International Network on Disaster Risk Reduction (WIN DRR). We know that diversity in leadership improves results, and well-designed disaster risk reduction initiatives that provide for women's full and effective participation advances gender equality and women's empowerment while building our collective resilience.



What is WIN DRR?

WIN DRR is a professional network to support women working in disaster risk reduction, in all their diversity. The overall goal of WIN DRR is to empower women to attain leadership and enhance their role in decision-making in disaster risk reduction in Asia Pacific. There are four components to the programme:

Building the evidence base

WIN DRR commissions research on women's decision-making in disaster risk reduction, documents good practices and case studies, and disseminates them widely.



Recognising women's achievements

WIN DRR supports women's participation in disaster risk reduction conferences and events, and presents annual awards for women's leadership.

Strengthening leadership capacities

WIN DRR provides professional development opportunities and leadership training, and mentorship and peer-to-peer support programmes for women working in disaster risk reduction.

Supporting institutions to enhance women's leadership

WIN DRR supports institutions working on disaster risk reduction to adopt strategies and policies to help reduce the barriers women face in advancing their careers, and enhance women's leadership.





"If you understand the risk, then you can understand how to cope with it"

Esline Garaebiti is the Director General of the Ministry of Climate Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management in Vanuatu.

"If you understand the risk, then you can understand how to cope with it," Esline says. "But if you do not understand, it is going to be hard - slowly you see the impact, but you don't know how to deal with it"

Esline has spent most of her career improving early warning systems. In her previous role, working as Geo-Hazards Manager for Vanuatu, she established the Oceania regional seismic network (ORSNET) between Vanuatu, New Caledonia, Solomon Islands, Papua New Guinea, Tonga and Samoa to improve the tsunami detection system in the region.

"Now we can detect an earthquake quickly, one minute after the occurrence," she says. "In the past it was 15 to 20 minutes before we detected the location."

This rapid detection means tsunami warnings are sent out faster, which enables those who may be in a tsunami's path to get to higher ground.

In her current role, Esline and her team have worked to establish committees at the community level that reflect the diversity of the community. "We are training people on how to identify their own gaps and their own needs," Esline says. "They can identify what they understand about disaster risk in their own communities."

Esline understands the importance of local, community-led solutions, "we need to encourage them to build capacity in their community."

"We are training people on how to identify their own gaps and their own needs. They can identify what they understand about their vulnerability in their own communities."

Esline Garaebiti

Esline cites an example of collaboration with the Department of Agriculture, who have identified varieties of crops that will be resilient to climate change impacts. "We go out to communities and teach new techniques to enhance food security. The Ministry of Agriculture distributes seeds to drought resistant crops."

Esline is also focused on how to make disaster risk reduction more inclusive. "Reducing risks requires the inclusion of women not only in risk management planning and the implementation processes but also in leadership roles," Esline says. "Involving women in disaster risk reduction in Vanuatu helps ensure that the needs of the most at-risk and marginalised people are considered in national, provincial and community disaster risk management planning, from prevention to the recovery."

She says women are improving the way disasters and climate change are managed in Vanuatu. "Women can be leaders, wherever they are starting from. They can one day become Minister for climate change or disaster risk. They can contribute to decision-making at every level."



Esline Garaebiti is the winner of the WIN DRR Leadership Awards for Excellence for 2022. The awards recognise women's achievements in DRR across the Asia-Pacific region. The Excellence Award is proudly sponsored by SM Prime.

Learn more

<u>Inclusive and accessible multi-hazard early-warning systems:</u> <u>learning from women-led early-warning systems in the Pacific</u>

ORSNET is the Oceania Regional Seismic NETwork, which gathers seismic networks of island countries of the South West Pacific.



Priya works as a 24/7 Operational Meteorologist at the <u>Fiji</u>
<u>Meteorological Services</u>. She prepares and disseminates public, marine and aviation forecasts and warnings in a timely manner. She says an inclusive approach is important to DRR to reduce vulnerabilities and increase resilience for those at most risk.

"Women are at the centre of making communities more resilient to climate and weather-related hazards," Priya says. "With more women engaging actively in the DRR process, women's adaptive capacities are increased which has lasting benefits on their families and communities. Women are advocates for change instead of passive objects of research of being most 'vulnerable'."

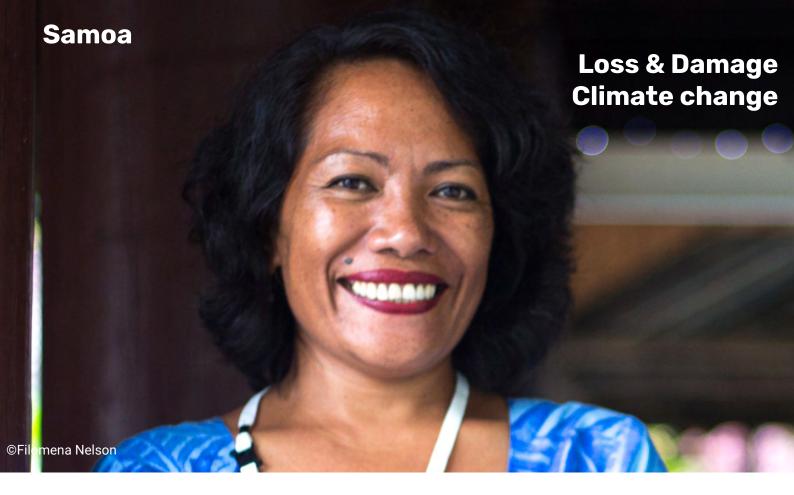
"Without gender equality, a sustainable, more equal future remains beyond our reach."

Priya Singh

"Without gender equality, a sustainable, more equal future remains beyond our reach," she says. "As a meteorologist, this inclusive approach at work has transformed the balance of power of men and women, filling the gaps in policy making."

Priya's work has saved many lives and reduced disaster risks. "The work I do has a large impact across the community," she says. "My forecasts and warnings provide people with information to take early action in preparation for tropical cyclones or flooding events, reducing disaster losses and increasing their resilience."

Learn more



"There are seats at the climate table for Pacific women"

Muliagatele Filomena Nelson is the Climate Change Adaptation Advisor at the Secretariat of the Pacific Regional Environment Programme. She helps Pacific women become active participants in the process of international climate negotiations.

Filomena started her career in disaster management 20 years ago with the Ministry of Natural Resources and Environment of the Government of Samoa. "There was no national disaster management plan and people were working in silos," she recalls "There was no law on disaster management and there was no contingency plan."

She says government ministries and partners were doing their own thing without talking to people in the communities affected by and exposed to these events. Most of all, she says, there "was no shared vision for disaster response."

Filomena says most of the focus was on cyclone response, due to previous cyclones that devastated the country. She worked to build the national disaster management office to expand the definition of disasters. The goal was to establish an agency that could reduce risks by connecting accessible scientific data with communities that are exposed and vulnerable to hazards.

When the Disaster Management Act was passed in 2007, Filomena saw a gap in the early warning system. "Hazards were ranked and some communities were known to be highly vulnerable to tsunamis," she says. "My job was to improve the early warning system. The goal was to get communities involved by running nationwide emergency evacuation drills."

The warning system they developed used a combination of alerts with established channels like mobile phones. It also included traditional knowledge and used church bells as tsunami alarms.

"We have a lot of churches in Samoa, and we combined that into the early warning system for tsunamis."

When she began, Filomena says she was criticized when she spoke to church leaders. "People said to me. "You do not have faith. Why do you want to do this? People have jobs and school and don't have time to participate in your emergency drills."

In the drills, people were required to evacuate from coastal areas and to go to designated evacuation sites inland. Before the evacuation drills, very few people even knew what a tsunami was. "'Tsunami' is not a Samoan word and people think 'What is that?' We had to translate what that means or what it might look like."

"When Samoa experienced a tsunami in 2009, people then said 'thank you for the work you did that prepared everyone'."

Filomena says it was not easy getting involved in disaster risk reduction because it was dominated by men. "The heads of the police and the fire service were all men," she recalls. "They said: 'The system worked back in the day, and we do not need a new warning system.' As a woman, when you are trying to explain yourself or bring a new idea, you expect to get push back from men."

"As a woman, when you are trying to explain yourself or bring a new idea, you expect to get push back from men."

Muliagatele Filomena Nelson

Filomena says women now play pivotal roles in disaster risk management in Samoa. There are 10 women in the disaster management office and an increasing number of women leading government agencies that have a role to play in disaster risk management in Samoa. Filomena sees more women getting out of their comfort zones and working in disaster risk management and emergency services, citing the surge in female firefighters in Samoa.

"It is great to see the changes," Filomena says. "There are a lot of women collaborating in the leadership space within government agencies and in civil society. We need to provide the space for women to work in disaster risk management and climate change, and to get encouragement, empowerment, and training so they have the knowledge and tools to become even more impactful."

The office where Filomena now works at the Pacific Community, is working on risk reduction and risk assessment, unpacking the findings from assessments to inform policy responses. As an example, Filomena says they support the Land Transport Unit, which handles road-related design and construction to make risk-informed decisions. "It's about putting more emphasis on environmental and social safeguards and ensuring they are integrated into designs and through construction and maintenance of the road networks."

Filomena says her ultimate goal is to equip more Pacific women negotiators with the skills to actively participate in UNFCCC climate negotiations. "It is important that women know there is space for them," she says. "In the UNFCCC process, there is a training program for new negotiators and especially women negotiators. There is a pool of resources and technical expertise to build up emerging women negotiators in the process. There are seats at the climate table for Pacific women."

Learn more



"We are stewards of the land and the water that is passed on to us"

Berna Gorong is a Conservation Planner at the Nature Conservancy in the Federated States of Micronesia. She works with communities to develop nature based solutions to disaster risks and the impacts of climate change.

In 2005, Berna's community was facing a critical decline in the catch from their traditional fishing grounds. "I started work in the field of conservation by supporting my community as they moved to develop marine conservation areas."

Through discussions with the neighboring community they created a no take zone, where fishing is not allowed, that covers a total of 77 hectares. "People started observing a difference in the fish that they were seeing in the area, especially as they moved closer to the no-take zone," she says.

Berna says the project was successful because the community took ownership. "We were able to set up surveillance and enforcement programs to ensure that the mandates that had been established for those areas were followed."

Communities in the Federated States of Micronesia are highly vulnerable to climate disasters. Berna's island is in an area called the 'Typhoon Highway'. When Cyclones occur, inundations cause food security issues. "A lot of taro patches are in low-lying areas so they are vulnerable to high tides during the full moon."

Berna is from Yap, which experiences drier weather conditions compared to the rest of the Federated States of Micronesia. "We are experiencing more rain than normal because of climate change," she says.

"We are seeing problems because of the wet conditions: we are seeing more diseases impacting the plants."

She says part of her work at the Nature Conservancy is supporting women to cope with the impacts of climate changes like drought. Berna coordinates events bringing women together to learn from each other about soil enrichment and tips from technical expertise on how to improve soil conditions for gardening or farming.

She says the success of her community's conservation has created a momentum for discussions about protecting nature as a resource to reduce disaster risk. Berna has been engaging with women by providing a forum for them to learn from each other. In 2020, she piloted the first women's learning exchange for Federated States of Micronesia and was able to bring together 10 women's groups representing municipalities from across Yap State.

"Our planners are now considering naturebased solutions and moving from short-term plans to long-term and sustainable solutions."

Berna Gorong

At the women's learning exchange, she invited government partners to present on climate and development projects that were in the pipeline. "For the women, this was a first just hearing this information that they never get to see or hear. It really inspired them."

At the forums, women presented the climate and conservation work they are doing. "It inspired other women's groups who said they did not know this had been taking place and they want to do the same in their communities."

She sees a major shift underway in planning in Micronesia. "Our planners are now considering nature-based solutions and moving from short-term plans to long-term, risk-informed sustainable solutions."

Berna says a collaborative approach with the community is important. "For people in remote communities, it is all connected; the fish, the habitat and these protected areas protecting their livelihoods and protecting them," she says.

When she facilitates community dialogues, Berna helps connect the dots between disaster risk and traditional knowledge or practices. "It is important because once you link to their traditional role and responsibility, that is when you can see that they take ownership of the work."

Berna says the concept of stewardship is central to traditional knowledge in the Pacific. "We are stewards of the land and the water that is passed on to us. For climate and conservation action in Micronesia, that was the essential link."

Learn more

Nature based solutions for disaster risk reduction

Nature Protects People Learning Platform



"Risk reduction is an end-to-end solution"

Rhonda Robinson is the Acting Director for the Geoscience, Energy and Maritime Division at the Pacific Community. In 2018, she became the only female Deputy-Director within the Division leading the Disaster and Community Resilience Programme.

When Rhonda Robinson finished her studies in Biology and Chemistry, she began her career working on a sanitation project. "I did not even understand what sanitation was and I thought it was going to be this opportunity to do important things then I realized it was about human waste management."

Twenty years on, Rhonda says the provision of access to safe sanitation continues to be a major priority for the region because development is not keeping pace with the growth of the population. Her experience in water and sanitation (WASH) taught her that all projects need to be intersectional. "It is not just about the provision of infrastructure," she says. "It includes all the other bits and pieces. In risk reduction, it is the same thing; it is an end-to-end solution."

As her career progressed the connection of her water projects brought her focus to disaster risk reduction. This emphasis has given Rhonda a detailed understanding of what risk reduction looks like in remote communities as well as at the national level. She is inspired to work across silos in order to build resilience in WASH and food security.

"Water provision is a point of leverage for improving sanitation because all communities need to improve access to water," she says. "Understanding the connections is really important."

Rhonda and her team work across the climate change space to address the pressures in pollution and inadequate infrastructure. The overarching goal of Rhonda's work is to build resilience against the impacts of climate change and disasters. "Understanding the risk approach in a more coherent way than we were doing in the past is helping us adapt more quickly" she says. "A risk lens helps us understand what is going on with water and sanitation and the risks related to water and sanitation."

Rhonda also says pollution from inadequate human waste disposal on islands is a more immediate health threat than climate change. "Having proper infrastructure in place and having the capacity to drive fixes and maintenance interventions means you are better prepared to withstand whatever climate change is going to throw your away," she says. "The key is to understand where your risks are and this helps with planning, design and delivery."

"It's about recognising and including people with particular needs."

Rhonda Robinson

With risk-informed sanitation solutions, Rhonda says governments will not build new waste systems by the coast because sea level rise is going to have an effect. "You are equipped with data to inform the decision-making and the modeling that goes with it."

One of the many initiatives that they manage is a project that supports remote island communities to improve water supply systems. "Water supply allows us to open a discussion on hygiene so we do training on hygiene and give out menstrual hygiene kits including reusable menstrual hygiene pads."

She says understanding the overlapping issues is crucial to the solutions. "The last thing you want is to use a pad and then dispose of it, because of the waste caused. When you are in an isolated remote community as a menstruating girl or woman you want to be able to recycle these things."

Rhonda is excited to see Pacific women getting involved in disaster risk reduction, but she says it is a difficult field. "There are no shortcuts," she says. "If you are passionate about this, then you need to put in the work to get to where you want to go."





Mary Alalo works to help communities in Solomon Islands reduce disaster risks and prepare for climate change by involving women in risk-informed development planning.

"Solomon Islands is highly vulnerable to natural hazards like flooding, earthquakes, tsunamis and climate change," Mary says. She's part of a government project to help communities prepare for disasters by including women's voices in the discussion.

She's seen the devastating impact of climate change first hand on her home island of Ontong Java.

"We are impacted by coastal erosion and sea level rise because they are low-lying Islands," Mary says. "Half of the graveyards are already under the sea and and the bones of those who have died are exposed. So when it comes to climate change, it is already real for us who live in low-lying islands."

Mary facilitates community discussions about climate change and preventing disasters in areas that are identified as more vulnerable to extreme storms, floods and tsunamis. Most importantly, Mary helps women set the priorities for disaster planning in their community.

Over the past decade, Mary has worked with communities across the country. She recalls one community that had been hit by a tsunami a few years earlier causing widespread damage and loss of life.

"The village is close to the beach and for them to evacuate to safety they had to use a steep bush trail," she says. "We helped the community by building good evacuation routes so that whenever they need to evacuate they can do it safely."

The decision to build the improved bush tracks for evacuation routes was driven by women's participation in the process. Community-wide discussion ranked the needs of different groups like the elderly and women with young children, making the development of the trails the top priority.

Mary says it's women who are hit hardest by disasters and climate change. "Most of our communities are affected by water problems either from flooding or droughts and in all these situations women are the ones who collect the water," Mary says. "The longer it takes or more difficult it is then they spend less time on income generating activities like gardening or selling produce at the market."

"Women are the backbone of the Solomon Islands."

Mary Alalo

Despite patriarchal norms in Solomon Islands, women play crucial roles in the community, and Mary and her colleagues make women's participation central to the process. "Women in Solomon Islands are the backbone of any family and the country as a whole. It's important to make it mandatory that women should be a part of the community consultation," Mary says. "Then the men have no choice but to make sure women are there."

Mary says more women are taking roles in disaster reduction and development projects and this shift makes it easier to connect with women in the community.

"When we started the project, I was the only woman on the team and now we have three other women," she says. Despite the progress in creating roles for women on her team, Mary says there is a long way to go to ensure women and girls have a voice in the discussion about disaster preparedness, at all levels.

"I think the government needs to encourage more women to engage in education that is focused on climate and disaster risk reduction," Mary says. "Our national curriculum for primary and secondary school needs to include climate and resilient development."

While Mary works in the capital of Honiara, her home in Ontong Java is weeks away by ship, so she cannot visit often. She knows that no matter how many communities they work with, the need will always be greatest where it's hardest to reach.

"In my heart, I really want these remote vulnerable communities to be reached," Mary says. "They are the most vulnerable when it comes to climate change impacts and disasters."





Maselina is a Founding Member for the Deaf Association of Samoa. During outreach activities, Maselina leads training and workshops throughout the inhabited islands of Samoa with Deaf and hearing community members related to human rights education, disaster risk reduction and gender-based violence.

"As a deaf child living in rural Savaii, I didn't have a lot of access to important things," says Maselina. "At four years old, I started attending school but with no interpreter, I couldn't communicate with my teacher. I didn't have the opportunity to learn sign until I was 13. Now I can sign, I can tell people how I feel. I can ask for help. I have the opportunity to work. Through my work, I advocate for my deaf brothers and sisters who haven't had the same opportunity of access."

"It's about recognising and including people with particular needs."

Maselina luta Fiso

Maselina began working in disaster risk reduction during the onset of the COVID-19 pandemic, when she led an advocacy campaign to ensure the provision of sign language for the first time during a State of Emergency in Samoa. Maselina now leads advocacy campaigns with the Deaf Association of Samoa engaging stakeholders to continue to ensure the needs of persons who are Deaf and hard of hearing in Samoa are met. As part of this, she engages with the Samoa Meteorological Office, the Ministry of the Prime Minister and Cabinet, and the National Disaster Management Office.

Throughout her advocacy work, she leads interventions and campaigns on behalf of the Deaf community at national, regional and international levels. Maselina is a member of the National Disability Reference Group for the UN Joint Program on Social Protection, a member of the National Steering Committee for the Samoa Shifting the Power Coalition Project, and a member of the Executive for the Commonwealth Children and Youth with Disabilities Network.

OMaselina luta Fiso



"Once you have knowledge, it will prevent you from panicking"

Maireng Sengebau Is the Executive Director for Palau Red Cross Society.

With Palau facing the full force of climate change impacts, she is working to prepare communities for future disasters.

"Climate change impacts are already visible in my country," says Maireng. "Women are doing their part in reducing climate risks in their gardens, taro patches, shorelines and lakes."

As Executive Director for Palau Red Cross Society, Maireng is responsible for establishing and strengthening community DRR planning across the country. She established Disaster Action Teams in all 16 states of Palau and strengthened the capacity of local community actors, particularly women, in disaster risk reduction.

Maireng is a champion of engaging youth and under her leadership Palau Red Cross Society, has developed a youth-corps of volunteer youth change agents in risk reduction, prevention and humanitarian response.

She says the goal is to empower women and young people through community awareness and education, and support knowledge sharing on how people can protect their household and their communities. "All community members have roles in disaster risk reduction and need to be empowered to take on these roles," Maireng says.

"By giving community members knowledge and skills, you not only validate them, you gain invaluable volunteers with first hand knowledge of their communities."

Maireng says women are the force behind everything in Palau, and while Palau is a matrilineal society when it comes to government men still dominate the decision-making process and the allocation of resources. "In order for us to move into the future and to combat climate change and its impacts, we need to work equally side by side with both men and women in the community," Maireng says.

She says the disaster action teams have started a movement. "We train the community to prepare before, during and after a storm," Maireng says. "Once you have knowledge, it will prevent you from panicking. We give women in the communities the tools they need, and one of those tools is to be confident in yourself that you can handle this."

"By giving community members knowledge and skills, you not only validate them, you gain invaluable volunteers with first hand knowledge of their communities."

Maireng Sengebau

Now communities know where to access accurate information and warnings. When it starts raining or becomes windy, women now know that they need to get on Facebook or listen to the radio to find out what is going on and if there are warnings in place.

She says it is critical to ensure that early warning messages are shared in language that people understand, and most importantly that people know how to act and what they need to do to reduce disaster impact from those warnings. "They know it is their responsibility to find out if this weather is different from everyday weather, and what they need to do to reduce potential disaster impacts," Maireng says.

Despite the progress, Maireng says the system is still not equipped to handle the everyday emergency of climate change. "When there is a big emergency or when there is a big disaster, we receive a lot of financial and technical assistance. But communities are struggling with the day-to-day impacts of climate change."

Maireng says the goal is to equip communities with skills and resources to be prepared. "It's not just the big disasters that we need to concentrate on. We need to be forward-thinkers and find policies that will drive solutions to all the risks we face."

Learn more

Enhancing disaster preparedness for effective response



"People are not thinking of how to reduce disaster risks. Only when a disaster happens, then it is important."

Scholastica Nepel is a lawyer and uses her skills to support projects relocating atoll communities, ensuring women are supported to share their views and shape the policies that impact them.

"We have the first resettlement of climate refugees with the Carteret islanders," Scholastica says. "To mitigate the effects of climate change, the residents were relocated to the mainland of Bougainville."

She was part of a team that supported islanders and their families to voluntarily and legally relocate. They had to leave their remote islands because rising sea levels made life very challenging. "They are losing their garden areas from sea level rise," she says. "We are working to assist the islanders to resettle on the mainland."

The process of relocation is complex, partly because land is owned by clanships and it is not easy to bring in people from a different area.

"We had to negotiate with the clan members, the landowners of that area, and enter a memorandum of understanding," Scholastica recalls. "Once they agreed, then the government had to pay compensation for their land to allow the resettlement of the Carteret families onto the land."

Scholastica says the most challenging part was having language and clear legal definitions where everyone understood the full meaning and implications. "To have the people understand what it meant to allow the Carteret people to be relocated to their land was not easy."

She says legal challenges have been resolved but the displaced community needs support to adapt to life on the mainland. Carteret islanders are coastal people and Scholastica says many found it difficult to adapt to the change in lifestyle on the mainland.

From the discussions with climate impacted communities, Scholastica says there are more women's voices in disaster risk management in recent years. "A lot of climate change awareness is headed by women in Bougainville," she says. "Women have been coming out and getting involved in climate issues."

"Women are now involved in decisions to ensure that roads are being built or regularly graded so there is easy access for women to come to the market."

Scholastica Nepel

Bougainville is a largely matrilineal society, so women have a strong voice in decision making and there are women leaders at every level. "Women are elected as Chair of Community Governments. Women speak up during high profile discussions," Scholastica says, "We are here, we are allowed to speak and allowed to make decisions during meetings."

Bougainville's economy is based on subsistence farming, with women traveling to markets to sell their produce. "The market is where they sell their goods to get cash to pay for the necessary things in the household like soap, clothes and their children's school fees for the next year. But after a disaster many women just cannot make it to the market."

Newly elected women leaders are discussing road and sea transport infrastructure as a way of helping women and children in rural areas, to improve both development and prevent disaster impacts. "Women are now involved in decisions to ensure that roads are being built or regularly graded so there is easy access for women to come to the market."

Scholastica says there needs to be more focus on preventing risk. "If a banana boat goes missing, they find the last location then come in to rescue. But there is no awareness as to how you could reduce risk by checking weather and better safety for boats. People are not thinking of how to reduce disaster risks. They do not think it is important."

Learn more

Disaster displacement: How to reduce risk, address impacts and strengthen resilience



"It starts from having a woman leading"

Galumalemana Titi Agnes Tutuvanu-Schwalger is the Chief Executive Officer of the Land Transport Authority of Samoa (LTA). In addition to leading a team of 100 and managing a portfolio of \$200 million in projects, she is a mother of four and supports a network of emerging professionals as a mentor in the field of engineering and road construction.

"When I first started off, the only disasters that we were dealing with were cyclones and flood response," says Titi. "The landscape has changed to focus on climate resilience and disaster risk reduction."

She says when the Land Transport Authority first started working with national emergency response teams, they waited until they received the calls for help from the public and then responded accordingly. "We have taken a step-up in terms of how we organise ourselves to focus on prevention and preparedness," Titi says. "We have a team that monitors the weather. We already know the areas of our road network that are critical and that are vulnerable to disasters."

During periods of heavy rain, LTA knows which sections of the road network are prone to floods and have contractors ready to mobilise. "During an actual disaster we've been more organised by utilising technology," she says.

"We use WhatsApp to get real-time information from on site to communicate what is going on. We share information on what we need to do, where we need contractors, what resources we need to mobilise straight away."

She says that live updates from her teams on the ground helps them provide safe transport information that can save lives. "We can update our Facebook page," she says. "The public gets more information on what is going on with our roads and they can plan their trips and decide whether they need to go or see if it is unsafe."

"Everyone has their own talents, their own strengths and is able to work together to form a solution to the current issues."

Galumalemana Titi Agnes Tutuvanu-Schwalger

LTA has carried out a detailed vulnerability assessment of the road network in Samoa, with assistance from the World Bank. Under Titi's leadership, the organisation created a climate-resilient strategy based on an assessment that prioritises the infrastructure of roads or bridges that need to be upgraded, so that the entire system is more resilient. "We are working on upgrading and climate proofing our roads and bridges so our country can withstand the impacts of climate change," she says.

Titi hopes to encourage more women to work in infrastructure and has seen the impact that having more women working in land transport has had during community consultations. "Having women as part of our team, we understand that engagement of women and mothers in the community is crucial as they are heavily involved in caring for our children, leading the organising of events within families, villages and churches etc. Therefore, the women will have valuable input on how we can improve our land transport infrastructure. Also, women are typically thorough in carrying out whatever task they are given."

"It starts from having a woman leading," she says, talking about how she has worked hard in creating an enabling and effective working environment for her staff including females in the workforce. "We encourage students who are on scholarships overseas for university. We give them the opportunity to come and work for us during their holidays. We believe that once these female engineering students work part-time, when they graduate there is a higher probability that they will want to come and work for us because they are familiar with the work and they are comfortable in the work environment."

Titi says the important thing is to create an inclusive environment that recognises people's potential and will unlock the inputs and ideas of all members of society. "Everyone has their own talents, their own strengths and is able to work together to form a solution to the current issues. I take on a mentoring role with all our young engineers and staff, especially the women working with the challenges of being a woman in a male-dominated field like engineering."

Learn more

Principles for resilient infrastructure





Viola has been instrumental in communicating disaster risk across Tonga for three decades, in her capacity as a journalist, radio & television broadcaster and news Manager for Tonga's AM Radio 1017 and FM Radio 90. She is the Chief Executive Officer of Tonga **Broadcasting Commission, the only AM radio station that covers** all of Tonga and its outer islands.

"My goal in life is to serve my very own people not only in the good times but also in the bad times," says Viola. "To sacrifice my life in times of disaster is part of my commitment to my obligations as a Broadcaster at the Tonga Broadcasting Commission (TBC). No matter how hard it is, I have to make sure that by the end of the day the vision and mission of TBC, that is to inform, educate and comfort the public is accomplished."

Viola's passion is to convey warnings, participate in the taskforce that supports early warning systems for the country, and engage different people from emergency authorities to communicate directly with the public during disasters.

Her advocacy has made a difference in Tongan households having working radios, and knowing to listen to the radio for warnings and information. She uses her platforms to educate the public, encourage them to stay alert, and share information on when it is necessary to move to higher grounds and evacuation centres.



"I realized I can add value and help as a woman"

Moana Kioa is the Principal Assistant Secretary for Disaster Risk Management at the National Emergency Management Office (NEMO) in Tonga.

"What interests me most in the field of Disaster Risk Management is the intrinsic feeling of being able to help someone, and make a difference in their life," says Moana. "Particularly in our communities in the outer islands."

Moana and her colleagues at the National Emergency Management Office (NEMO) in Tonga have established 160 village emergency management committees to help communities develop their emergency management plans including their response if there was a tsunami, an earthquake or a tropical cyclone.

With NGO partners, her team delivers a range of integrated programs every time they visit remote communities, with a focus on better preparation for future disasters. "They are in the coastal areas in the small outer islands," she says. "We deliver awareness programs for schools and communities in general but we also prepare them for all kinds of disasters. Every visit is a chance to review the community's emergency management plans."

When she started, she was only the second female working for NEMO. "I realized I can add value and help as a woman," Moana says.

"My dream was to do something to make a difference for women who suffer the impacts of disasters here in Tonga. Every day of my life in my job, I want to produce results and I want to help reduce suffering due to disaster impacts."

Moana continues to advocate for more women in disaster work, and her team has helped Tonga take the lead in prepositioning emergency relief supplies in disaster-proof warehousing, a job that had previously been handled by international relief organizations.

"We're looking forward to having more women because they get things done. They can advocate for women's issues."

Moana Kioa

When she started working on this issue, Moana noticed that hygiene kits to support women's menstrual hygiene did not contain anything specific to or adapted for Tongan communities. She and her team consulted advocates for women's issues and customized the kits with items suitable for women and girls within their culture and the local context.

Moana says she is having on-going discussions with partners on how systems can support the needs of women if they are hit by a disaster. "Women are disadvantaged because they have to walk far to get water," she says. "How can we support by installing water at the shelter or closer to their houses? How can we make it easy for women to access clean water for drinking in their normal lives? They should not have to put themselves or their children at risk just because they need water."

She says disaster risk reduction action needs to engage with and learn from communities' experience of disasters. "We host focus discussions with women's groups in the communities and just listen to them telling their stories. Understanding the specific needs of women and children as well as the other vulnerable groups help us improve what we do."

Learn more

Implementation guide for local disaster risk reduction and resilience strategies





Flora Vano is a Ni-Vanuatu woman leading ActionAid's women-led localised response to COVID-19 and other disasters in Vanuatu. Through the Women I TokTok Tugeta (WITTT) forums, ActionAid Vanuatu were able to organise women to undertake women-led Community Based Protection Assessments, and set their priorities and action plans.

"We started working with women in three islands of Erromango, Eton and Tanna," says Flora. "We met these women when they had been heavily impacted by tropical cyclone Pam and they lost their livelihoods, they were struggling to be food secure, and they were traumatised."

"Food security, lack of safe cyclone houses, access to safe and clean water, violence against women and trauma, and loss of livelihoods emerged as the key issues."

Flora works to strengthen the collective agency of women with disabilities, indigenous women, widows, single mothers, and fisher women who are already marginalised in their communities and face pre-existing inequalities even before a hazard strikes. "They are on the frontlines of disasters and it is important to bring them to the decision-making table in order to ensure the whole community is covered."

Food security

Climate change





Kiribati

"We discuss risk-informed planning everywhere we go"

Takena Redfern recently left Kiribati's National Disaster Management Office to join UN Women as the National Programme Coordinator for the Women's Resilience to Disasters programme.

Takena was involved in drafting Kiribati's joint implementation plan for climate change and disaster risk management as part of a group of experts brought together by the President of Kiribati. She says this process highlighted the importance of a cross-cutting, interdisciplinary perspective to reducing and managing risks. "It was here that I started to learn about disaster risk reduction and how it relates to my field as an agriculturist," she says. "My passion was to work across silos because agriculture is just one sector."

Takena used her background in agriculture to inform solutions that address food security, nutrition and income generation from selling fresh produce. "When women are growing local food products for their family, it leads to better nutrition," she says.

Takena joined the Office of Te Beretitenti - National Disaster Management Office to build safety and resilience in communities. "I started to support disaster risk reduction initiatives on remote outer islands, through partnerships with NGOs that have a lot of community-based programs," she recalls.

The community consultations and training on remote islands taught Takena invaluable lessons. "It is important to always be inclusive during the planning and the risk assessment," she says. "It's absolutely critical to have inputs from women in the analysis of risk and vulnerability, and then the planning of actions to address them."

Takena says it is important to work with a broad range of women's groups. "We work closely with women's associations, the Women's Ministry and women's church or community groups in our disaster training and planning. Engaging women benefits everyone, because our plans are more responsive to the diverse needs of different social groups, especially marginalized groups of people."

Takena says that even recently, projects and plans at the national level did not always involve or consult women's groups. "We can improve national plans with a review of legislation to make engagement of women a core part of the process."

We are experiencing climate change impacts that we cannot wait to address."

Takena Redfern

Climate change will only intensify the needs of women and girls in Kiribati. "We are experiencing climate change impacts that we cannot wait to address: water security, food security, health and coastal protection are all urgent priorities," she says.

Access to safe water is severely threatened by weak public infrastructure that is battered by coastal erosion. "We need to deter the impacts of climate change on local food production," she says. "It will have a significant impact on the supply of basic food needs, and because Kiribati relies on imported rice, those systems are vulnerable to other climate induced disruptions."

Takena says comprehensive solutions need to be accelerated to cope with the speed of climate impacts.

Despite the daunting scale of the challenges, she is inspired by the generation of youth and students gaining interest in disaster work. "We were never taught in schools about disaster risk reduction," she says. "But you can pick it up and learn about this field."

She says there is a need for more training and disaster risk awareness in remote communities and that the wording of the Sendai framework has given them a helpful tool. "We discuss risk-informed planning everywhere we go. It's the only way to understand risks so that we can work together to find solutions and to adapt to the changes we see, feel and hear about."









