



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM



6-9 AUGUST 2024
NATADOLA, FIJI

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INFORMATION PAPER

SUBJECT: 2024 Indo-Pacific Environmental Security Forum (IPESF), Fiji

1. Purpose: To provide stakeholders with the concept, background, description and objectives of the 2024 IPESF to be held in Fiji August 6-9 2024.
2. Environmental Security and U.S. Indo-Pacific Command (USINDOPACOM): Environmental Security encompasses building capacity of partner nations (PNs) in disaster risk reduction, mitigation, and disaster preparedness; reducing endemic conditions; and increasing PN resilience to prevent serious harm to the environment and reduce human suffering.

The annual IPESF is the cornerstone of USINDOPACOM's Environmental Security Program which is focused on engaging with regional militaries and civilian agencies to address priority threats to the environment as well as risks to essential human services.

The IPESF is a unique security cooperation tool, focused on identifying the greatest environmental and humanitarian needs and utilized to develop relationships within the Indo-Pacific. IPESF Objectives include 1) providing resilience training to strengthen underdeveloped PNs ability to provide essential services to vulnerable populations and 2) address priority humanitarian and environmental challenges. During the 2023 IPESF, the Pacific Disaster Center (PDC), provided training on the DisasterAWARE platform showing participants how to access climate models to support climate risk management efforts, explore real-world case studies, and analyze several datasets to determine climate risks and adaptation needs.

An IPESF component is discussing with PNs their greatest environmental, humanitarian, and resiliency needs and identifying projects. Projects funded by USINDOPACOM, to address the greatest needs identified by PNs, have included oil spill preparedness and response training, wildfire suppression, combatting illegal fishing, solid waste management, water resource management, invasive species management training, and a coastal resilience workshop.

3. 2024 IPESF – Fiji: The Host Nation of Fiji and United States Indo-Pacific Command (USINDOPACOM) will host the 2024 IPESF in Natadola, Fiji in August 6-9 2024. The 2024 IPESF will focus on national resilience and humanitarian assistance through environmental security. The 2024 IPESF general themes can be inclusive of, but not limited to, the following topics:

- Water Security and Public Health (i.e. safe drinking water, water resource protection and management, water supply and storage management, wastewater management)
- Natural Resource Conservation, Protection, Restoration, and Management (i.e. Biodiversity conservation, addressing wildlife trafficking and crimes, integration of ridge to reef and traditional methodology practices)
- Disaster Risk Reduction, Preparedness, and Response (i.e. disaster preparedness education, people-centered early warning systems and services, disaster policy, disaster response training, and hydro-meteorological services)
- Boosting National Resilience and Adaptation to end Poverty (i.e. resilient basic infrastructure, nature-based solutions and the blue economy, key industry business continuity planning)

USINDOPACOM collaborates with the host nation representatives to develop the IPESF agenda through an iterative process over several months. The Final IPESF agenda isn't established until a few weeks before the event itself.

The 2024 IPESF will include presentations, panel sessions, and group activities to share lessons learned and best practices among stakeholders, as well as develop actionable plans to address priority risks to factors impacting

vulnerable civilian populations and priority threats to the environment. USINDOPACOM worked with PNs to identify the most pressing environmental security topics to include on past IPESF agendas, see Table 1.

1. **Event Organization:** The host nation and USINDOPACOM work collaboratively to organize the IPESF, develop the agenda, and facilitate the workshops. The USINDOPACOM team travels to the host nation two times for planning and hosts monthly conference calls.

2. **Points of Contact:**

Mr. Christopher Sholes, Environmental Program Manager, U.S. Indo-Pacific Command, christopher.l.sholes@us.navy.mil, +1 (808) 477-9420

Ms. Hannah Thompson, Project Manager, Tellus Civic Science, hannah.thompson@telluscivicscience.com, +1 (415) 216-3018

Table 1: Past IPESF Events

Year	Country Host	Environmental Security Topics Covered
2011	USA	1) Climate Change Adaptation, 2) Environmental Sustainability, 3) Water Resource Management, and 4) Disaster Preparedness.
2012	Indonesia	1) Regional Disaster Response 2) Pollution, 3) Deforestation, 4) Overfishing and 5) Water Supply Management in the ASEAN context (Association of Southeast Asian Nations).
2013	Australia	1) Sustainable Environmental Management in Military Operations, 2) Military Support to Disaster Relief Operations, 3) Managing Bio-Security Risks in the Military Context, and 4) Adapting to Climate Change Impacts.
2014	Maldives	1) Water, 2) Waste Management, 3) Resource Protection, and 4) Energy.
2015	Thailand	1) Climate Change, 2) Protection of the Commons, 3) Military Environmental Programs, and 4) Project Concept Development.
2016	Fiji	1) Sustainable Ocean Resources, 2) Protecting the Coastal Zone, 3) Resiliency to Weather Events, and 4) Regional Project Collaboration.
2017	USA	1) Environmental Security Best Practices in the Indo-Pacific Region, 2) Climate Change, 3) Water Security, 4) Waste, 5) Energy, 6) State Partnership Program, and 7) Biodiversity on Military Lands.
2018	Mongolia	1) Establishing an Environmental Security Habit of Dialogue, 2) Food-Water-Energy Nexus, and 3) Environmental Security in Contingency Operations.
2019	New Zealand	1) Climate Change, 2) Environmental Security Transformation, 3) Multilateral approaches to Environmental Security, 4) Coastal Planning, 5) Marine Pollution, 6) Biosecurity, and 7) Resource Protection.
2021	Virtual	Indo-Pacific Environmental Security Working Group Focus: 1) Education, 2) Policy, 3) Networking, 4) Mitigation
2022	Maldives	1) Climate Security and Role of Defense Forces 2) Addressing Small Island Nation Environmental Security Concerns 3) Ocean and Water Security 4) Women, Peace, and Security and 5) Climate Change Challenges and Solutions
2023	Sri Lanka	1) Climate Change and Security, 2) Maritime, Ocean, and Water Security, 3) Impacts of Urbanization and Land Security 4) Building National and Regional Resilience

For additional information on IPESP events and activities, please visit: www.ipesp.org.



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

OPENING SESSION

Tuesday, 6 August 2024

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji



Tuesday, 6 August 2024 - Opening Session

Master of Ceremonies: Major Venina Vakadewabuk

0730 – 0820	Participant Registration Participants complete registration by 0815 and seating by 0820
0750 – 0820	Arrival of Invitees and Opening Session Speakers
0820 – 0825	Introduction to IPESF 2024 Master of Ceremonies, Major Venina Vakadewabuk, Republic of Fiji Military Forces
0825 – 0905	Traditional Dance and Welcoming Ceremony
0905 – 0915	Welcome Remarks Permanent Secretary Mason Smith, Fiji's Ministry of Home Affairs & Immigration
0915 – 0925	Remarks The Honorable Marie C. Damour, U.S. Ambassador to the Republic of Fiji, Kiribati, Nauru, and Tuvalu
0925 – 0930	Group Photo
0930 – 1000	Break and Refreshments



Opening Session Presenters

Introduction to IPESF 2024 and Master of Ceremonies

Master of Ceremonies: Major Venina Vakadewabuka

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Welcome Remarks

Permanent Secretary Mason Smith, Fiji's Ministry of Home Affairs & Immigration



Biography: Mason Smith is currently the Permanent Secretary for Home Affairs and Immigration and took up his position in July 2023. In his current role, he is responsible for the effective and efficient leadership and management of the Ministry in terms of policy advice and support to the Republic of Fiji Military Forces, the Fiji Police Force, the private security industry, and the Fiji Immigration Department

Prior to this, Mr. Smith was Regional Director for the International Union for Conservation of Nature (IUCN) in Oceania and is based at IUCN's regional office in Suva Fiji. In this capacity, Mason was responsible for the overall leadership and management of IUCN's Programme and projects in Oceania including Australia and New Zealand.

He is a graduate of the University of Canberra and currently holds a Master's in Management – Defence Studies (MMDS) and a postgraduate certificate in Diplomacy from the University of Fiji. He is also a fellow of the Asia Pacific Centre for Security Studies. Mason has served in various capacities in the Republic of Fiji Military Forces, the private sector, the Government of Fiji, including a stint as Fiji's acting head of Mission at the United Nations in New York, and as Permanent Secretary for Agriculture in Fiji. He has also served in various Boards and is currently engaged in a number of community and charitable projects. Mason is also heavily involved with raising awareness and funds to treat prostate cancer in men.

His hobbies include keeping fit, playing sports, gardening, fishing, and reading.



The Honorable Marie C. Damour, U.S. Ambassador to the Republic of Fiji, Kiribati, Tonga, Nauru, and Tuvalu



Biography: Marie Damour is a career member of the Senior Foreign Service, class of Minister-Counselor. She is the Ambassador to the Republic of Fiji, Kiribati, Nauru and Tuvalu. Previously, Ms. Damour was Consul General of the U.S. Consulate General in Ho Chi Minh City, Vietnam; the Director of the Office of Maritime Southeast Asian Affairs in the State Department's Bureau of East Asia and Pacific Affairs; Director of the Office of Policy Coordination and Public Affairs in the State Department's Bureau of Consular Affairs; and the Deputy Chief of Mission, as well as Chargé d'Affaires, a.i, at the U.S. Embassy in Wellington, New Zealand. With over three decades of service, Ms. Damour has worked in five different regions of the world and served successfully in a variety of leadership and policy-making roles.

Among her other assignments, Ms. Damour was Minister Counselor for Consular Affairs at the U.S. Embassy in Brasilia, Brazil; the Chief of Non-Immigrant Visa Services and then Chief of Visa Services at the U.S. Embassy in London, England; and the Consular Chief at the U.S. Embassy in Baghdad, Iraq. She was also Desk Officer for Cambodia and Laos in the State Department and a Special Assistant in the Office of the Secretary of State in Washington, D.C., and had posts at the Embassies in Paris, France, and Nouakchott, Mauritania.

Ms. Damour earned her B.A. from the College of William and Mary. She speaks French, Vietnamese, and Portuguese and is the recipient of multiple State Department performance awards as well as the Peacemaker Medal from the Government of Brazil.



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

DAY ONE SESSION

Tuesday, 6 August 2024

Climate Policy, Action, and Resilience

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji



Tuesday, 6 August 2024 - Day 1

Climate Policy, Action, and Resilience

Moderator: Dr. Lee Bint

- | | |
|--------------------|--|
| 1000 - 1005 | Overview of the IPESF Agenda
Christopher Sholes, Environmental Security Program Manager, U.S. Indo-Pacific Command (USINDOPACOM) |
| 1005 - 1015 | Day 1 Session Introduction
Dr. Lee Bint, Director of Sustainability, New Zealand Defence Force (NZDF) |
| 1015 - 1030 | Australian Defence Force Future Energy Strategy
Brigadier Gabrielle Follett, Director General, Fuel Services Branch Joint Logistic Command, Australian Defence Force |
| 1030 - 1045 | Mangrove Ecosystems: Why They Matter for Combating Climate Change
Dr. Rupesh Bhomia, Senior Scientist, CIFOR-ICRAF |
| 1045 - 1100 | Climate Policy, Action, and Implementation: Lessons Learned by the Indonesian Military
Colonel Romson Sianturi, Head of Data and Information Department, Directorate General of Defence Potential, Indonesia Ministry of Defence (MoD) |
| 1100 - 1115 | Blue Economy and Ocean-based Tourism
Amelia Fa'otusia, Fellow/Economics Advisor, Tonga Ministry of Finance and National Planning |
| 1115 - 1200 | Day 1 Panel Session |
| 1200 - 1300 | Lunch Break |
| 1300 - 1430 | Workshops: Session 1
Participants attend two workshops, consecutively. 1A) Climate Change, Development, and Human Impacts (USGS); 1B) Adaptation and Resilience to Climate Change through Localized Data: Fiji as a Case Study (CFE-DM and MoHA&I) |
| 1430 - 1500 | Break |
| 1500 - 1630 | Workshops: Session 2 |
| 1630 - 1640 | Administrative Notes by Master of Ceremonies - End of Day 1 |
| 1800 - 2000 | Ice Breaker
Hosted by Fiji MoHA&I and MECC at the Shangri-La |



Day 1 Presenters

Overview of the IPESF Agenda

Christopher Sholes, Environmental Security Program Manager, U.S. Indo-Pacific Command (USINDOPACOM)



Biography: Chris Sholes is the Environmental Security Program Manager within the USINDOPACOM Engineering Division. His duties include overseeing environmental compliance for bilateral exercises (e.g. Talisman Saber) and planning the Indo-Pacific Environmental Security Conferences and international environmental workshops. He also monitors environmental impact assessments developed by the U.S. service components and coordinates projects with State of Hawaii offices and others on environmental matters. His previous experience includes project management of various environmental remediation projects throughout Hawaii and the Pacific including soil and water remediation and UXO clearance in Saipan, Guam, Japan, Korea, Palmyra, and other remote islands.

He has five degrees including two from the London School of Economics in International Relations and Economics and an MS in Systems Engineering from the Naval Postgraduate School. He is a certified contracts manager (CPCM) and certified project manager (PMP) from the respective US national certifying organizations.

Since its inception in 2010 he has developed the Environmental Security Program as a means for various U.S. government agencies and international partners to engage innovatively, furthering the USPACOM engagement strategy to enhance partner nation resilience, build capacity, facilitate interoperability, and build trust and access for occasions of mutual benefit.

The goal of the USINDOPACOM Environmental Security Program, incorporating the Commander USINDOPACOM's Lines of Operations, is to strengthen relationships and partner-nation capacity development. This program is an effective and cost-efficient way to also support the SECDEF's Security Cooperation Guidance goals of: (i) Build defense relationships that promote specific U.S. security interests; (ii) Develop allied and friendly military capabilities and willingness for coalition operations with the U.S. military; and (iii) Improve force interoperability.



From the Pacific Environmental Security Conference series, USPACOM has spun-off oil spill response workshops in Oceania, South and Southeast Asia, and has engaged partner nations on invasive species spread prevention, counter IUU fishing and counter wildlife trafficking, coastal zone management, waste and water best practices, HADR training, and engineering solutions to environmental security challenges.

Day 1 Moderator

Dr. Lee Bint, Director of Sustainability, New Zealand Defence Force (NZDF)



Biography: After dropping out of school at the age of fifteen, then undertaking seasonal jobs and travelling before returning to study, Lee graduated with a PhD in 2012. Her doctorate included the development of a water efficiency software and start-up enterprise that was awarded runner-up at the Grow Wellington Bright Ideas Challenge.

Lee has worked in building research, sustainability, Defence, and advisory board roles. Her primary objective is to create enduring strategic impact across the system and develop and empower others to see their potential and contribute to sustainable development.

Recently, Lee was a Sustainable Building Scientist at the Building Research Association of NZ, while also completing the Sustainable Business Council Future Leaders' Programme, being elected to the Sustainable Business Council Advisory Board, supporting UnionAID with their Myanmar Young Leaders Programme in NZ, and teaching and mentoring students at universities across NZ.

Since then, Lee has been leading the Defence sustainability journey, establishing and implementing their first sustainability framework, and leading a team of technical experts across energy, sustainable buildings, resilience, climate change, waste, and broader sustainability management. During this time, she has also founded the all-of-government sustainability group for NZ, supported numerous government agencies to commence their sustainability journey, held the position of Vice Chair of the Carbon & Energy Professionals Board, and welcomed her daughter into the world.

Australian Defence Force Future Energy Strategy

Brigadier Gabrielle Follett, Director General Fuel Services, Joint Logistics Command, Joint Capabilities Group, Australian Department of Defence



Biography: Brigadier Gabrielle Follett assumed her current role as Director General Fuel Services in January 2023. She has served in a variety of regimental and staff appointments and commanded the 3rd Combat Service Support Battalion. She has deployed on operations to Afghanistan, Syria, East Timor, and Indonesia, as well as border protection operations and domestic disaster relief.

Abstract: An overview of the Australian Department of Defence's Future Energy Strategy, which will govern and cohere the transition of military operational capabilities to a future energy mix that is sustainable and interoperable with partners and allies. The presentation will also outline some of the current initiatives underway within the Australian Defence Force to adopt drop-in fuels, and the lessons learned along the way.

Mangrove Ecosystems: Why They Matter for Combating Climate Change

Dr. Rupesh K. Bhomia, Senior Scientist, CIFOR-ICRAF



Biography: Dr Rupesh Bhomia is a trained wetland biogeochemist, and his research has focused on studying tropical wetlands, freshwater swamps, peatlands, and coastal mangrove ecosystems across several countries. He attended Oxford University for a Master's in Biodiversity, Conservation and Management. He holds a PhD in Wetlands Sciences from the University of Florida. During his diverse career he has worked in research institutes, academic institutions, and international organizations.

At present, Dr. Bhomia is a scientist at Centre for International Forestry Research and International Centre for Research in Agroforestry (CIFOR-ICRAF), based in Colombo, Sri Lanka. He is working as a Blue Carbon and Climate Change expert in the Climate Change, Energy and Low Carbon Development group. His current work focuses on peatlands and coastal mangrove ecosystems as potential options for designing nature-based solutions for climate change. During his decade long research career, he studied freshwater wetlands of Florida Everglades and Peruvian Amazonia and coastal mangroves in India, Honduras, Liberia, Gabon, Ghana, Madagascar, Vietnam, and Senegal. His research has been



published in various peer-reviewed international journals and he has coordinated special issues as a guest editor.

Abstract: Mangroves are unique ecotone ecosystems found in the intertidal regions of the tropical and subtropical coastlines. Plants and animals in these ecosystems are adapted for a combination of conditions like high salinity, fluctuating tidal, muddy anaerobic soils. Mangroves provide refuge to unique biodiversity, reduce damage caused by storm surges, and provide livelihood opportunities to millions of people worldwide. Mangroves have been gaining significant attention as nature-based solutions (NbS) to climate change due to their ability to store large quantities of carbon.

Sri Lanka falls in the Indo-West Pacific (IWP) region with total mangrove forest cover ~ 19,5000 located around the entire island spanning three-climate zones. Sri Lanka has lost between 50 to 76% of its initial mangrove forest cover. Pollution and clearance of vegetation are the primary drivers for mangrove habitats decline including conversion to shrimp ponds, industrial development, wood harvesting are main causes. Though mangroves are adaptable, they require a balance of hydrological conditions like optimum salinity and tidal range, and sediment accretion to thrive and adapt to impacts of climate change. Long-term monitoring is important to understand ecological processes that underpin nutrient cycling, carbon sequestration, and habitat connectivity in a dynamic coastal environment. Healthy mangroves are efficient carbon sinks, sequestering large quantities of carbon (both in their biomass and in the sediments) but the changing baselines and greater extremes disrupts this balance.

Sri Lanka contains diverse communities of mangroves across its coastal areas which are witnessing unique challenges therefore it is imperative to study these mangrove patches intensively and develop targeted restoration and conservation strategies across different zones. Our efforts are aimed to understand carbon dynamics and ecological succession considering natural and anthropogenic perturbations. We are conducting activities to build a database of scientific information and practical knowledge within the country. Sri Lanka is the first nation to legally protect all its mangrove forests and therefore such site-specific datasets on vegetation characteristics and carbon stocks of mangroves can provide necessary information to make these policies more effective.

Climate Policy, Action, and Implementation: Lessons Learned by the Indonesian Military

Colonel Romson Sianturi, Head of Data and Information Department, Directorate General of Defence Potential, Indonesia Ministry of Defence (MoD)



Biography: Colonel Romson Sianturi is currently the Head of the Data and Information Department, Directorate General of Defence Potential, MoD. His service spans two and a half decades. Notable roles include Chief of Section, Personnel Administration Service, Jayapura AFB; Chief of Affairs, Personnel Administration Service, Halim AFB; Protocol Officer of the C-in-C of the Indonesian Defence Forces; Chief Section, Defence Doctrine Evaluation, Directorate of Defence Strategic Policy, MoD; Chief Section of Rank & Position, Personnel Bureau of TNI and Police – Presidential Military Secretary, Ministry of State Secretary; Chief Section of Welfare & Moral of Veteran Administration – Directorate of Veteran, MoD; Senior Analyst on Promotion & Cooperation, Directorate of Technology & Defence Industry, MoD; and Head of Policy Material Department, Executive Team for Defence Industry Policy Committee. His academic education includes an undergraduate degree in Business Management and a master's in strategic HRM (Australia), and his military education includes the Indonesian Air Force Academy, Junior Staff College, and Command & Staff College.

Abstract: Indonesia actively commits to responding to the impacts of climate change. The country's commitment is imposed considering the implications of climate change extending beyond environmental concerns to encompass national security. For example, food and water supply chain disruptions could heighten vulnerabilities, necessitating a comprehensive approach to ensure resilience and mitigate risks to national security. Legally, Indonesia ratified the Paris Agreement to the United Nations Framework Convention on Climate Change through Law No. 16 of 2016. Indonesia's commitment to climate change is justified in the First NDC document submitted to the UNFCCC in 2016. The NDC was updated in 2021 (i.e., Updated NDC document) by adding direction regarding key programs, strategies, and actions. The country strengthened directions for operationalizing the implementation of climate change actions by issuing Presidential Regulation No. 98 of 2021, encouraging implementation of climate change action followed up by ministries and institutions in 2022 as explained in the Enhanced NDC (2022). These commitments are reinforced by sectoral security strategies prioritizing resilience in key sectors such as food, water, and energy resources, environmental health, ecosystems, and infrastructure in areas



prone to climate-related disasters. Indonesia's efforts include promoting sustainable agricultural practices, endorsing water-saving and efficient allocation strategies, enhancing coastal protection, and investing in climate-based energy sources to mitigate climate risks and foster long-term environmental sustainability. The climate change responses are kindly directed to ensure national security by enhancing the country's resilience in the economy, social livelihoods, and ecosystems. Currently, Indonesia is measuring the achievements of the first NDC as a modality to define the new commitment to addressing the impacts of climate change that will be formulated into the Second NDC, which will be submitted by the end of this year at the latest to UNFCCC. Indonesia's efforts to mitigate climate change risks (i.e., adaptation) thus intertwine with its broader development and security agenda, emphasizing the importance of integrated strategies to confront the challenges posed by climate change while safeguarding the well-being and security of its citizens and ecosystems.

The Indonesian Military (D) under coordination of the Ministry of Defence plays a crucial role in the technical implementation of Indonesia's Nationally Determined Contributions (NDC), particularly in disaster relief efforts, renewable energy adoption, food estate development, and river-cleaning initiatives. In disaster-prone regions, TNI units are strategically positioned to provide swift response and aid distribution during emergencies, leveraging their logistical capabilities and personnel expertise to minimize the impact of climate-related disasters on vulnerable communities. Furthermore, TNI actively collaborates with relevant stakeholders to integrate renewable energy solutions into its operations, transitioning towards cleaner and more sustainable energy sources to reduce carbon emissions and mitigate climate risks. In support of Indonesia's food security objectives, TNI in accordance with national interest, participates in the establishment and management of food estates, employing modern agricultural practices and technologies to optimize land use and increase agricultural productivity. Additionally, TNI undertakes river-cleaning campaigns, deploying specialized teams equipped with advanced equipment to restore and maintain the ecological balance of river ecosystems, thereby enhancing water quality and safeguarding against flooding events exacerbated by climate change. Through these concerted efforts, TNI contributes significantly to the technical realization of Indonesia's NDC goals, demonstrating a multifaceted approach towards climate resilience and sustainable development.

Blue Economy and Ocean-based Tourism

Amelia Fa'otusia, Fellow/Economics Advisor, Tonga Ministry of Finance and National Planning



Biography: Amelia is a PhD candidate with the Department of Pacific Affairs. Prior to her candidacy year, she undertook postgraduate studies with ANU's Crawford School of Public Policy, which entailed her completion of a master's thesis on the socio-economic implications of the blue economy concept on coastal tourism in Tonga. Amelia's current research for her PhD now expands on that topic by delving deeper into what the blue economy entails for policy and practice in coastal and cultural tourism, with a specific focus on ecotourism in Tonga and New

Zealand. Amelia was an economist in the Tongan Government for several years and has undertaken two fellowships, amongst others. The first, entitled the Tonga Fellowship on Environment and Oceans 2018, entailed Amelia's engagement as an economic advisor to the Permanent Mission of Tonga to the United Nations. Her participation in the fellowship entailed co-authoring an academic article on enabling factors for marine spatial planning in Tonga. The second fellowship, the Pacific Ocean Finance Fellowship Programme 2019 – 2020, entailed Amelia's engagement as an ocean finance fellow representing Tonga amongst twelve fellows, selected from across the Pacific region. In 2021, Amelia was the graduate recipient of the Tiri Prize for Academic Excellence in the ANU's Masters of Environmental Management and Development Programme under the Crawford School.

Abstract: As ocean-based economies, Pacific nations advanced the blue economy concept in their engagements at the 2012 United Nations Sustainable Development Conference. Advanced in recognition of an urgent need to sustainably manage and conserve the region's marine resources, the concept was especially considered in light of ocean-based economic sectors such as ocean-based tourism.

Amelia Fa'otusia's doctoral research focuses on the implications of the blue economy concept on ocean-based whale tourism in New Zealand, Tonga, and Fiji. The blue economy concept is analysed in these countries through which the same sperm whale population migrates annually. Amelia's project reflects on key questions about the role of culture and local knowledge in defining the blue economy in practice; ocean-based tourism advancing community-based marine conservation outcomes inclusively; and what opportunities and challenges the blue economy presents for tourism in the Pacific region.



Day 1 Workshops

1A) Climate Change and Human Impacts (Led by USGS)

This workshop focuses on encouraging discussion of human impacts from development and climate change and how these impacts are assessed.

Matthew E. Andersen, Senior Scientist for Biology in Office of International Programs, United States Geological Survey



Biography: Since April 2015 Andersen has been the Senior Scientist for Biology in the United States Geological Survey (USGS) Director's Office of International Programs (OIP). He is an ichthyologist and aquatic ecologist, with biology degrees from California State University Sonoma (With Distinction) and the University of Nevada, Las Vegas. He is certified as a

Fisheries Professional by the American Fisheries Society. He is the first or second author on a dozen peer-reviewed journal articles and book chapters.

Since joining USGS in 2005, he has served as the Biology Program Manager at the Grand Canyon Monitoring and Research Center in Arizona and as the Deputy Director of the National Wetlands Research Center in Louisiana. He has administered increasingly larger science programs for USGS, including the \$10-million Hurricane Sandy Ecosystems supplemental appropriation research program and the \$65-million USGS Environments program.

From 2019 to 2023, Andersen developed and led a multidisciplinary decision support program for natural and socioeconomic resource management in the Lower Mekong River region of Cambodia, Lao PDR, Thailand, and Viet Nam funded by the US Department of State. In 2021 he was an Embassy Science Fellow for climate change with the US Embassy Manila.

Andersen is developing multidisciplinary natural resource and socioeconomic technical assistance for the Asian Development Bank for the Hindu Kush Himalaya region and for Pacific Island nations. He is a technical expert for the US Department of State engagement with the Asia Pacific Economic Cooperation Policy Partnership for Science, Technology, and Innovation (APEC PPSTI).

Dr. Apisom Intralawan, Assistant Professor, Mae Fah Luang University



Biography: Dr. Apisom Intralawan is an interdisciplinary researcher and a lecturer of Ecological Economics, School of Management, Mae Fah Luang University, Chiang Rai, Thailand. His work focuses on ecosystem service valuation, economic assessment, water-energy-food nexus tradeoffs in the Lower Mekong Basin, and capacity building for riparian communities to increase resilience and adaptation to development impacts and climate change. He received his PhD in Natural Resources from University of Vermont, USA. He holds a M.Eng. (Industrial and Management) and a M.Sc. (Ecological Economics) from Rensselaer Polytechnic Institute, USA. He received his B. Eng. in industrial engineering from Kasetsart University.

VAN, Pham Dang Tri, Director of Research Institute for Climate Change, DRAGON-Mekong, Can Tho University



Biography: Van Pham Dang Tri currently serves as the Director of the Research Institute for Climate Change (DRAGON-Mekong) at Can Tho University, Vietnam. His primary focus is on conducting comprehensive research on delta management, particularly examining the impacts of climate change on global delta systems, with a specific emphasis on the Mekong Delta. Dr. Tri is dedicated to enhancing the capacity of local stakeholders, including government entities, businesses, and local communities. To achieve this goal, he has established networks aimed at fostering understanding between stakeholders and the scientific community, ultimately facilitating science-based decision-making at various levels. Additionally, Dr. Tri is actively involved in numerous national and international projects, where he serves as a project manager or technical advisor.

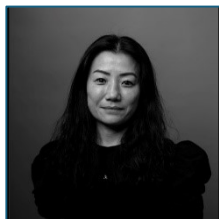
Phouthamath Sayyabounsou, Socio-Economic Specialist, Mekong River Commission Secretariat (MRCS)



Biography: Ms. Sayyabounsou is a Socio-Economic Specialist for the Mekong River Commission Secretariat (MRCS), Vientiane Capital, Lao PDR, where she is responsible for the MRC's Social and Economic-related activities, including gender and vulnerability approach in Lower Mekong River Basin (Cambodia, Lao PDR, Thailand and Viet Nam). She holds a Master's Degree in Development Studies (Advanced), specializing in Social Planning and Impacts Assessment from the University of Queensland (UQ) in Australia, a Diploma of Public Policy Analysis from the University of Minnesota (UoM) in USA, and a Bachelor's Degree in Economics from University of Laos. She has more than 15 years of experience working with various organisations, including government agency, UNs, Development Partner, INGO, private sector and recently inter-governmental organisation. Her expertise and her passion as a dedicated women leader in social and economic development areas with a concentration in sustainable and inclusive development, gender equity and social inclusion mainstreaming in the environmental and water resource management sectors, and water resource governance spaces has led to some significant achievements and contributions to several projects, studies, surveys, assessments, reviews, reports, and various key events and forums at community, national, regional, and international levels. Her expertise includes designing, managing, implementing, M&E and ensuring the quality of works related to public policy and socio-economic data collection and analysis, analytical tools and interdisciplinary research to produce evidence-based advocacy and policy recommendations at national and regional levels, and importantly to support a more equitable relationship between humans and the ecosystems that support us. She is currently focusing on the works related to the transboundary socio-economic impacts assessment, gender and vulnerability assessments to improve equity for vulnerable groups and capacity building for riparian communities to increase resilience and adaptation to development impacts and climate change, and the overall sustainable and inclusive water resource development landscapes in Lower Mekong River Basin.



Thinley Choden, Executive Director, Centre for Sustainability Studies



Biography: Thinley Choden is a social entrepreneur and consultant. She founded and leads a portfolio of initiatives at the nexus of gender, climate, youth and entrepreneurship. Her interdisciplinary work spans across private and public sectors at local and international levels.

She is an Echidna scholar with the Brookings Institute conducting research on gender-transformative climate literacy. She also leads the Centre for Sustainability Studies, a consultancy knowledge firm based in Thimphu. She is a founding board member of the Association of Bhutanese Cottage and Small Industries (ABCSI). She is the Founding Curator of Global Shapers Thimphu Hub. She is Bhutan Country Advisor for Give2Asia, a philanthropic giving platform. In 2008, she founded a successful non-profit, READ Bhutan, and currently sits on the Board.

Ms. Choden is part of professional networks like GREEN (Global Response to Education and the Environment Network, GEP (Greening Education Partnership), East-West Center, Vital Voices, Draper Hills at Stanford University, Acumen, World Economic Forum (WEF), Climate Reality, SOCAP (Social Capital Market), and OC (Opportunity Collaboration).

She holds an Executive Certificate in Strategic Decision Making from Wharton Business School, an MPA from University of Hawaii, Manoa, and a BA in Economics from Beloit College, Wisconsin.

1B) Adaptation and Resilience to Climate Change through Localized Data: Fiji as a Case Study (Led by CFE-DM and MoHA&I)

This workshop will provide an understanding of climate change data, models, and projections to support adaptation and resilience decision-making.



Taryn Ino, Climate Policy and Diplomacy Analyst, Center for Excellence in Disaster Management (CFE-DM)



Biography: Taryn Ino is a Climate Policy and Diplomacy Analyst at the Climate Change Impacts (CCI) Program within the Adaptation and Resilience Office (ARO) at the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). In this role, Taryn collaborates with international allies and partners to enhance adaptation and resilience initiatives. She supports the advancement and dissemination of critical information that promotes climate-informed decision-making, ensuring strategies are data-driven and inclusive. Before joining CFE-DM, Taryn gained experience in local government, non-profit organizations, and think tanks tackling critical issues such as disaster risk reduction, climate resilience, foreign policy, women, peace, and security, as well as civil rights. Taryn holds a Master's Degree in Political Science and a Bachelor's Degree in History and Political Science from the University of Hawaii at Manoa.

Tyler Belko, Climate Change Impacts Planner, CFE-DM



Biography: Tyler Belko is an employee with Valiant Integrated Services and works in the Adaptation and Resilience Office (ARO) at the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). CFE-DM administers the Climate Change Impacts (CCI) Program at U.S. INDOPACOM. He serves as the Climate Change Impacts Planner at CFE-DM.

As a planner, Tyler's work focuses on how the impacts of climate change may affect infrastructure and assets. By advancing and sharing information that supports climate-informed decision making, his work aims at enhancing resilience against a more complex and changing operating environment.

Prior to joining the Center in 2023, Tyler has worked on sustainability projects for GreenWaste Recovery, the U.S. Army Reserve (USAR), and Underwriters Laboratories. Highlighted project experience includes implementing waste reduction, recycling, and composting strategies for businesses in California, administering USAR's first ever micro grid in American Samoa, and successfully earning businesses their LEED, WELL, Fitwel, and Green Globes certifications nationally.



Tyler earned a Bachelor's Degree in Environmental Studies from California State University Monterey Bay. Tyler also holds a LEED AP in New Construction from GBCI and the Certified Energy Manager designation from the AEE.

Leslie Regan, Climate Change Impacts Specialist, CFE-DM



Biography: Leslie Regan is an employee with Valiant Integrated Services and works in the Climate Change Impacts (CCI) Branch at the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). She serves as the climate change impacts specialist on the CCI team.

Prior to joining the Center in 2021, Leslie worked on a diverse set of issues for a diverse set of clients including such topics as: climate change, environmental science and management, water law, water resources, impact investing, grants and funding, groundwater management solutions, community building, environmental education in higher institutions, etc. Most recently she managed, planned, and implemented climate adaptation projects for municipalities and communities in California.

Leslie earned a Master of Science in Environmental Science & Management with an emphasis in Water Resources Management from the Bren School of Environmental Science & Management, and she holds a Bachelor of Science in Environmental Science with an emphasis in Hydrology from UC Santa Barbara.



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

DAY TWO SESSION

Wednesday, 7 August 2024

Natural Resource Security Through Conservation, Protection, Restoration, and Management

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji

Wednesday, 7 August 2024 - Day 2



Natural Resource Security Through Conservation, Protection, Restoration, and Management

Moderator: Ms. Susana Waqainabete-Tuisese

- | | |
|--------------------|---|
| 0830 – 0835 | Administrative Remarks by Master of Ceremonies |
| 0835 – 0845 | Day 2 Session Introduction
Susana Waqainabete-Tuisese, Vice President-Pacific Program, Conservation International |
| 0845 – 0905 | Crimes that Affect the Environment: Amplifying the Triple Planetary Crisis
Jenna Dawson-Faber, Asia-Pacific Regional Coordinator, United Nations Office of Drugs and Crime
Global Programme on Crimes that Affect the Environment |
| 0905 – 0925 | Alun Balun: Women’s Leadership in Promoting Sustainable Consumption in the Maldives
Khadeeja Hamid, Reduce Manager, Soneva Namoonaa |
| 0925 – 0930 | 5-minute Table Challenge |
| 0930 – 0950 | Integrating Women-Led Community-Based Monitoring, Control, and Surveillance into Civil-Military Partnerships to Combat IUU Fishing
Pedro Rodrigues, Timor L’Este Marine Resources Management, Fisheries and Pisciculture;
Maryruth Belsey Priebe, Pacific Forum Consultant, aXXelerate (Co-Founder) |
| 0950 – 1030 | Day 2 Panel Session |
| 1030 – 1100 | Break |
| 1100 – 1215 | Invasive Species-Focused Panel Session
Moderator: Phil Andreozzi, Invasive Species Coordinator, USDA
Panelists: 1) Military – Captain Kate Miller, Logistics Officer, Royal Australian Navy; 2) Marine BioSecurity – Joape Ginigini, Scientific Officer, University of South Pacific; 3) Invasive Ants – Karen Mapusua, Director, SPC Land and Resources Division; 4) Coconut Rhinoceros Beetle – Natasha Tomokane, Commonwealth Northern Mariana Islands Invasive Species Coordinator |
| 1215 – 1315 | Lunch Break |
| 1315 – 1445 | Workshops: Session 1
Participants attend two workshops, consecutively. 2A) No More Monkey Business: Think Like a Criminal to Defeat the Criminals (UNODC); 2B) The Power of eDNA to Assess Invasive and Imperiled Species and Communities (USGS) |
| 1445 – 1515 | Break; Move to Next Workshop Session |
| 1515 – 1645 | Workshops: Session 2 |
| 1645 – 1700 | Administrative Notes by Master of Ceremonies – End of Day 2 |

Day 2 Presenters

Day 2 Moderator

Susana Waqainabete-Tuisese, Vice President, Conservation International



Biography: Susana Tuisese is Vice President for Conservation International's Pacific Islands and Oceans Program. She has a Bachelor of Science from the University of the South Pacific and a Master's Degree in forestry and natural resource economics from the Australia National University and University of Queensland. She served as the Conservator of Forests in the Fiji Ministry of Forest, followed by a short stint in the private sector in the pine industry prior to becoming the Country Director of Conservation International Fiji in 2012. In 2020, she took the role of Senior Director for CI's Pacific Islands and Oceans Program and became Vice President for the Pacific in 2023. In this role, she leads CI's work, strategic partnership, and community engagements across the Pacific region.

Crimes that Affect the Environment: Amplifying the Triple Planetary Crisis

Jenna Dawson-Faber, Asia-Pacific Regional Coordinator, United Nations Office of Drugs and Crime (UNODC) Global Programme on Crimes that Affect the Environment



Biography: Jenna Dawson-Faber is the Asia-Pacific coordinator for the UNODC Global Programme on Crimes that Affect the Environment. The Global Programme supports UN Member States to strengthen their criminal justice response to prevent and address wildlife and forest crime, crimes in the fisheries sector, illegal mining, and trafficking in precious metals and waste. She is based in Hanoi, Viet Nam. Previously, Jenna was the Senior Programme Officer of the Global Programme, based in Vienna, Austria, where she coordinated the implementation of the Global Programme, and developed and supported new initiatives on education, gender, and anti-corruption.

Abstract: UNODC's Global Programme on Crimes that Affect the Environment is the global leader in supporting UN Member States to address one of the least-talked-about threats to sustainable development: the role of transnational organized crime and corruption.

Organized criminal groups are lining their pockets with the proceeds of wildlife and forest crime, crimes in the fisheries sector, illegal mining and trafficking in precious metals, and waste. This exploitation affects not only the environment, but global public health, national security, and the livelihoods of millions of people who depend on natural resources in the Indo-Pacific region.

No country can address these threats alone; the trafficking is by nature cross-border, exploits gaps in legislation between countries, thrives on under-resourced enforcement agencies, and despite considerable evidence of the impact of these crimes, is not prioritized by policy makers.

It takes a network to defeat a network. This oral presentation will provide an overview of some of the major efforts being undertaken by UNODC and its partners in Member States, other Inter-Governmental Organizations, and civil society (academia, private sector, non-governmental organizations) to make inroads against these crimes. It will share highlights from recent and forthcoming flagship research publications, specialized projects like Unwaste and SAFE, and achievements made through networks like the Informal Law Enforcement Network on trafficking in precious metals, the International Consortium on Combating Wildlife Crime, and the Wildlife Inter-Regional Enforcement (WIRE) network.

Alun Balun: Women's Leadership in Promoting Sustainable Consumption in the Maldives

Khadeeja Hamid, Reduce Manager, Soneva Namoonaa



Biography: Khadeeja “Khady” Hamid is the Manager for the Reduce component at Maldivian NGO, Soneva Namoonaa, where she spearheads initiatives to promote sustainable alternatives to single-use plastics. She collaborates with various stakeholders to oversee water bottling operations, design and implement programs with Zero Waste Maldives and UNFPA Maldives for the introduction of sustainable menstrual products, and partner with Women's Development Committees to advocate for thrifting and resource conservation. Additionally, Khady works with local communities to adopt water filtration systems and reusable nappies.

As a development practitioner, Khady specializes in environmental, gender, and human rights issues and has extensive experience in program design, community engagement, co-



creation, and project implementation. She holds a Master's Degree in Development Practice from the Humphrey School of Public Affairs. Prior to her current role, she served as the Head of Solutions Mapping for the UNDP Maldives Accelerator Lab, where she led innovative approaches to address complex development challenges.

Abstract: Over the past two years, Soneva Namoon has collaborated with Women's Development Committees (WDCs) across Baa and Noonu Atoll of the Maldives to establish a resale market known as Alun Balun. Rooted in principles of environmental stewardship and socio-economic empowerment, Alun Balun seeks to foster a culture of re-use and resource conservation while promoting women's leadership roles. Operational procedures involve WDCs intercepting re-usable items from households, cleaning, repairing them as necessary, and then distributing them to the WDC of neighboring islands participating in the program. These items are subsequently sold at below-market rates, addressing the challenge of reselling used items in small communities by maintaining market demand and circulation across islands.

Primary data from Alun Balun operations demonstrate significant impact, with six successful markets in Baa Atoll and two in Noonu Atoll extending the useful life of over 1000 and 500 secondhand items, respectively. These outcomes highlight the initiative's effectiveness in diverting goods from landfills, promoting sustainable consumption patterns, and mitigating environmental degradation. The market also serves as a testing ground for new ownership models, granting full control to WDCs over operations and income generated.

Aligned with Sustainable Development Goals (SDGs), Alun Balun contributes to targets such as SDG 12 (Responsible Consumption and Production), SDG 5 (Gender Equality), and SDG 8 (Decent Work and Economic Growth). Alun Balun represents an innovative model for sustainable development at the nexus of environmental conservation and community empowerment, which holds promise for informing policy, practice, and research in environmental security, innovation, and community-driven initiatives.

Integrating Women-Led, Community-Based Monitoring, Control, and Surveillance into Civil-Military Partnerships to Combat IUU Fishing

Pedro Rodriguês, Timor L'Este Marine Resources Management, Fisheries and Pisciculture



Biography: Pedro Antero Maria Rodriguês has a background of Fishing Technique from Sekolah Tinggi Perikanan Jakarta, Indonesia. He joined the Japan International Tuna Longline Fishing Vessel from 1992-1999, which operated in the Pacific, North Atlantic, and Indian Oceans. From 2000-2002 he worked as project manager for a boat building project.

He was a Head of Fishing Port and also National Project Coordinator for the RFLP-FAO. He has co-authored several publications such as *Policy and Practice: Recommendations for Sustainable Fisheries Development in Timor-Leste*; *Community-based Data Gathering and Co-Management of Marine Resources in Timor-Leste*; *Evaluating the Fit of Co-Management for Small-Scale Fisheries Governance in Timor-Leste*; *Tara Bandu as a coastal and marine resources management mechanism: A Case Study of Beacou, Timor-Leste*; *Safety At Sea Assessment in the Timor-Leste Small-Scale Fisheries Sector: Technical Report*; and *Working Together. A Collaborative Approach to counter Illegal, Unreported and Unregulated Fishing (IUU-F) is Under Way in Timor-Leste*.

In 2014, He received the STOP IUU-FISHING AWARD as first place winner for the implementation of a Community-Based IUU Reporting System

Last year he received award of Capstone Project on the Community-Based IUU Reporting System from the DKI-APCCSS (Daniel K. Innouye-Asia Pacific Centre for Security Studies). In 2023, he was invited by International MCS Network to be a speaker for the Community-Based IUU Reporting System in Halifax, Canada. Now, he is a focal point for several organizations.

Currently, he is leading the investigation team for the document forgery and also appointed to take part in the Pre-Lay Grapnel Run in preparation for the fiber optic installation in Timor Sea.

Maryruth Belsey Priebe, Pacific Forum Consultant, aXXelerate (Co-Founder)



Biography: Maryruth Belsey Priebe brings extensive expertise in Women, Peace, and Security (WPS), international security, climate security, and gender perspectives. With over a decade of experience, Maryruth has successfully led numerous initiatives that integrate WPS principles into security planning. As the Co-founder of aXXelerate LLC and Director for WPS Programs at Pacific Forum, she has developed innovative strategies that address traditional and non-traditional security challenges. Maryruth's work connects local women experts with policymakers, ensuring that solutions are contextually relevant and impactful. Her policy-relevant roles, including as a “WPS and Disaster Risk Reduction” delegate for the Sasakawa Peace Foundation USA and teaching fellow at Harvard University, underscore her commitment to advancing a gender lens in security and environmental policy.

Maryruth’s many writings offer critical insights and policy recommendations in the field of international security. Her research includes an in-depth analysis of gendered climate-security risks using a feminist political economy lens which has been used in defense and security HA/DR strategies. Her publications, which include *How Feminist is Canada’s Indo-Pacific Strategy?*, *Women Parliamentarians’ Impact in Indo-Pacific Gender-Responsive and Climate-Compatible Security Policy Making*, and *Global cities will be epicentres of gendered climate insecurity*, provide empirical evidence and strategic frameworks for incorporating women's voices and experiences into environmental and security policymaking. Her work highlights the importance of gender-responsive approaches in achieving sustainable and inclusive security outcomes, making her contributions invaluable to the field of environmental security and peacebuilding.

Abstract: Women serve important roles in the monitoring, control, and surveillance (MCS) of maritime environmental crimes in the Arafura-Timor Seas (ATS), an epicenter of global marine biodiversity. As a hotspot for Illegal, Unreported, and Unregulated (IUU) fishing, the ATS, shared by Australia, Indonesia, Papua New Guinea (PNG), and Timor-Leste, is under threat. IUU fishing damages marine biodiversity and resources, undermines the rule of law, and threatens the food and economic security of coastal communities. Some illicit fishing operations in the ATS are connected to transnational organized criminal groups that also engage in drugs, arms, and migrant smuggling; wildlife trafficking; and trafficking in persons. The countries bordering the ATS are hampered by challenging geographies and limited coast guard and navy resources and capacity to conduct adequate counter-IUU fishing MCS and enforcement.



Some ATS coastal communities have been acting as ‘eyes on the water’ and ‘eyes on the market,’ sharing intelligence of IUU fishing and co-illegalities with enforcement authorities, thereby filling in MCS gaps. Women are closely involved in marine resource management, including marketing seafood and setting closed seasons. Thus, women often possess specialized and unique intelligence of IUU fishing operations. In Spring 2024, Pacific Forum and the U.S. Indo-Pacific Command convened a workshop to advance gender-inclusive civil-military cooperation to counter ATS maritime crimes. The workshops were attended by civil society and security personnel of Indonesia, PNG, and Timor-Leste. This talk will present the workshop’s best practice findings for integrating gender-inclusive community-based MCS into national and regional counter-IUU fishing programming.

Invasive Species-Focused Panel Session

This panel session will inform participants of the massive, multidisciplinary impacts of invasive species to the Indo-Pacific region and discuss future opportunities to collaboratively address these impacts while building relationships and removing mobility constraints.

Panel Moderator

Phil Andreozzi, Invasive Species Coordinator, U.S. Department of Agriculture (USDA)



Biography: Phil Andreozzi is the USDA Invasive Species Coordinator. In this roll he facilitates collaboration on invasive species issues among nine USDA agencies, serves as USDA Senior Advisor to the National Invasive Species Council (NISC), and represents the Department at various other invasive species efforts. In 2016, he joined USDA as the APHIS Pacific Biosecurity Coordinator after having previously served as a member of the NISC staff as their Assistant Director for International Affairs.

Phil did his undergraduate studies at the University of Buffalo, served in the Peace Corps in Mali, West Africa, and received a joint MPA/MSES from the Indiana University School of Public and Environmental Affairs. Currently, he lives in Northern Virginia with his wife, two kids, one dog, and two guinea pigs. In his free time, Phil enjoys cooking, hiking, foraging for mushrooms, and suffers the trials and tribulations of being a Buffalo Bills fan.

Military Panelist



Captain Kate Miller, Logistics Officer, Royal Australian Navy

Biography: Captain Kate Miller joined the Royal Australian Navy in 1994 and graduated from the Australian Defence Force Academy in 1996. From 1997 - 2002 she served at sea in HMA Ships Torrens, Brisbane and Newcastle, participating in border protection duties and active service in the North Arabian Gulf in 2002 conducting maritime interception operations. Captain Miller served in a variety of logistic and personnel shore postings in Navy Headquarters, returning to HMAS Newcastle as

the Maritime Logistics Officer in 2005. Duties included Task Group Logistic Commander for multi-national and bi-lateral exercises, further border protection duties. Captain Miller returned to sea as Commander Logistics, embarked in HMAS Adelaide participating in Exercise Talisman Sabre 2019, Operation Render Safe 2019, Operation Bushfire Assist and Operation COVID Assist in 2020. Captain Miller served in Maritime Operations as the Logistics Officer (N4) supporting Fleet units throughout the COVID pandemic in 2021, Op Fiji Assist 2021 and multiple regional presence deployments.

Captain Miller's breadth of shore postings include Fleet Headquarters staff and policy positions, specialist logistic information systems positions and Navy Headquarters logistics, capability and infrastructure positions. Further career highlights include participating in Talisman Sabre and RIMPAC coalition exercises. Captain Miller's current position is within Headquarters Joint Operations Command as Director Logistics Plans.

Captain Miller is a graduate of Australian Command and Staff College (pscj 2014) and holds a master's degree in Defence and Strategic Studies.

Marine BioSecurity Panelist

Joape Ginigini, Senior Scientific Officer, University of South Pacific/IAS



Biography: Joape Ginigini is the Senior Scientific Officer at the University of South Pacific/IAS. He has a BSc in Bio/Chem and an MSc, both through the University of South Pacific.

His awards include a gold medal for the best Master of Science by thesis in 2013, and the 'He for She,' and 'She Champions' by the SPC's Maritime Technology Cooperation Centre (MTCCs) under the Test Biofouling project for IMO.

He is a member of numerous scientific and academic bodies and networks including the Indigenous Science Network, Natural Resource Food Science (USP Thematic Group), Association of Commonwealth Universities, Oceans Expert (UNESCO-IOC, IODE), and the Deep Ocean Science Initiative (DOSI).

His research experience represents a number of interests including microbiology, molecular biology, natural products research, ABS regime, deep sea research, ocean acidification monitoring, blue carbon, and invasive species detection.

Invasive Ants Panelist

Karen Mapusua, Director, South Pacific Community Land and Resources Division



Karen began her career as a high school teacher of history and social studies in Tonga and Australia. Now she is the Director of the Land Resources Division (LRD) of the Pacific Community, based in Suva. The Land Resources Division provides technical and scientific support to 22 Pacific countries and territories on all aspects of agriculture and forestry, from genetic resources to markets. Prior to this role she was Operations Manager for the Division.

She is passionate about organic farming and food and co-founded the Pacific Organic & Ethical Trade Community (POETCom), serving as coordinator for 5 years, and was extensively involved in developing the Pacific Organic Standard and Guarantee Scheme and developing alternative forms of certification that empower farmers.



She has experience in NGO capacity building and management, has worked in rural development in the Pacific Region for close to 20 years with a focus on organic agriculture as a path to social and economic development.

Currently she is President of the IFOAM Organics International World Board and has previously served on the Board of Directors of Fairtrade Australia New Zealand. She is a national of Samoa and Australia.

Coconut Rhinoceros Beetle Panelist

Natashia Tomokane, Invasive Species Coordinator, Commonwealth Northern Mariana Islands

Day 2 Workshops

2A) No More Monkey Business: Think Like a Criminal to Defeat the Criminals

The Indo-Pacific is a critical region for biodiversity, which is threatened by criminal activities. South and Southeast Asia and the Pacific are source, transit and destination markets for illegal wildlife trade. The United Nations Office on Drugs and Crime (UNODC) works with partners from inter-governmental organizations as well as civil society – including the private sector and non-governmental organizations – to detect, disrupt, dismantle and deter transnational organized criminal groups exploiting natural resources and trafficking in wildlife, including timber and marine species.

In order to prevent and address wildlife trafficking, it is critical that the broader global community working to strengthen environmental security is aware of the modus operandi of the criminal syndicates involved in the trade. And it is also critical that they are aware of what the key considerations are in preventing and addressing these threats.

This workshop will provide introductory ‘case studies’ about wildlife trafficking to set the scene, and then participants will be asked, in groups, to “think like criminals” and then also to think about how to prevent and counter the trafficking.



Jenna Dawson-Faber, Asia-Pacific Regional Coordinator, United Nations Office of Drugs and Crime Global Programme on Crimes that Affect the Environment

[Follow this link to read about Jenna Dawson-Faber](#)

Dr. Robert Fisher, Supervisory Research Biologist, U.S. Geological Survey



Biography: Robert has been at the Western Ecological Research Center at the U.S. Geological Survey for 26 years following a postdoc funded also by USGS at UC San Diego, which followed his PhD at UC Davis, and his BS at UC Irvine. He is a landscape ecologist working on understanding the drivers of change within the South Coast Ecoregion of California with a filter on biodiversity conservation and ecological integrity. Much of his and his team's work is focused on critically endangered species in this landscape and trying to avert their extinction. Additionally, he has been studying the reptile fauna of the Pacific Basin for over 35 years, including describing new species of lizards and their parasites. His research on critically endangered Fijian iguanas has helped with their conservation planning. These species are highly valued and targeted for the international wildlife trafficking trade, creating a conflict because publishing scientific can directly lead traffickers to the source of animals for their trade.

2B) The Power of eDNA to Assess Invasive and Imperiled Species and Communities

Abstract: The Indo-Pacific region and associated military installations face a growing need to quantify impacts to biodiversity and threats from invasive species (both marine and terrestrial). Environmental DNA (eDNA) is a powerful tool that can provide accurate, efficient, and scalable biodiversity detection methods to rapidly increase capacity to better inform management and action decisions. Invasive species represent a large threat to military installations across the globe both ecologically and on infrastructure, such as harbors, communication systems, and facilities, by disrupting their functionality or causing structural damage. The primary goal of this workshop is to provide an understanding of eDNA applications and prioritize vulnerable environmental assets that could benefit from rapid and cost-effective biodiversity monitoring through technology transfer or application.

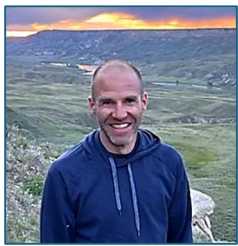


Margaret E. Hunter, PhD, Research Geneticist, USGS, Wetland & Aquatic Research



Biography: Dr. Maggie Hunter is a Research Geneticist with the U.S. Geological Survey. She is the director of the Wetland and Aquatic Research Center Conservation Genetics laboratory which uses genetic and genomic tools to inform management of invasive and imperiled species. She specializes in the development and assessment of environmental DNA (eDNA) methodologies and standards, population genetics, genetic biocontrol of invasives, health and disease and global biodiversity policy. She is a co-lead for the International Union for Conservation of Nature (IUCN) Conservation Genetics Specialist Group and is one of the founding members of the Coalition for Conservation Genetics.

Adam Sepulveda, Research Zoologist, U.S. Geological Survey



Biography: Adam Sepulveda, Ph.D., is a research scientist with the United States Geological Survey. His research focuses on aquatic invasive species risk assessment and early detection. He develops and applies environmental DNA techniques in combination with biostatistical modeling and decision support tools to bolster aquatic invasive species management.



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

DAY THREE SESSION

Thursday, 8 August 2024

Disaster Preparedness, Risk Reduction, and Response

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji



Thursday, 8 August 2024 - Day 3

Disaster Preparedness, Risk Reduction, and Response

Moderator: David E. Hurley, Jr.

0830 – 0835	Administrative Remarks by Master of Ceremonies
0835 – 0845	Day 3 Session Introduction David E. Hurley, Jr., USACE Pacific Ocean Division Liaison to INDOPACOM
0845 – 0905	Curated Disaster Preparedness: The Pacific Humanitarian Warehousing Program Exsley Taloiburi, Deputy Director, Disaster & Community Resilience Programme (DCRP), Geoscience, Energy, and Maritime (GEM) Division, Pacific Community (SPC)
0905 – 0925	Empowering YouthMappers for Disaster Resilience: Mapping Exposure Elements through OSM and Gamification in YouthMappers Initiatives Feye Andal, Project Manager/Geospatial Analyst, YouthMappers
0925 – 0945	Framework for Disaster Risk Reduction and Response – Lessons Learned from Japan International Cooperation Agency (JICA) Satoru NISHIKAWA, PhD, Senior Advisor in Disaster Risk Reduction, JICA
0945 – 1015	Break
1015 – 1035	Development of Maritime Disaster Risk Reduction and Response System: Places of Refuge for Distressed Ships, IMO Guidelines, and More Commander Prashan Perera, Senior Staff Officer Operations, Sri Lanka Coast Guard
1035 – 1125	Day 3 Panel Session
1125 – 1130	Site Visit and Administrative Brief
1130 – 1250	Lunch Break; Clothing Change; Depart at 1250
1250 – 1630	Site Visits Participants choose one site: Naidiri Village, Malomalo Village, or BlackRock



Day 3 Presenters

Day 3 Moderator

David E. Hurley, Jr., USACE Pacific Ocean Division Liaison to INDOPACOM



Biography: Mr. David Hurley has a broad range of experience at the tactical, operational, and strategic levels. A New Jersey native, David began his military career in 1990 commissioning into the Corps of Engineers from the United States Military Academy. As a junior officer, he had assignments in combat engineer battalions at Fort Ord, California, and Fort Lewis, Washington, and later served as a Company Commander in 25th Infantry Division (Light) at Schofield Barracks, Hawaii.

In broadening assignments, David served as Assistant Professor of Military Science, ROTC, at the University of California, Berkley. Trained in Arabic at the Defense Language Institute, he received a follow-on assignment to the Defense Attaché in the US Embassy, Amman, Jordan. Later he served as Area Commander and Deputy District Commander for the US Army Corps of Engineers, Los Angeles, California. During this period, he deployed to Operation IRAQI FREEDOM on a Forward Engineer Support Team, which was selected by the Chief of Engineers as the 2003 Project Delivery Team of the year.

He was then assigned as the Battalion Executive Officer for the newly formed 4th Brigade Troops Battalion, 3rd Infantry Division, Fort Stewart, Georgia, and was the Brigade Engineer and Deputy Brigade Commander for the unit's deployment to Baghdad, Iraq.

LTC Hurley then served as the J44 Engineer Master Planner in Pacific Command, Camp Smith, Hawaii. In 2008 he was selected as Battalion Commander to re-activate the 15th Engineer Battalion, Schweinfurt, Germany. During this tour he additionally was selected by the Commanding General of V Corps to serve as the Commander of Joint Task Force East in Bulgaria. Following command, he served as the Division Engineer and Chief of Protection for 25th Infantry Division, Schofield Barracks, Hawaii, and in Baghdad, Iraq, for the base closure and redeployment of all U.S. forces. In 2012 he served as the Deputy Brigade Commander, 130th Engineer Brigade, Schofield Barracks, Hawaii, and in Bagram, Afghanistan, as the Theater Engineer Brigade. His final military assignment was from 2014-17 as the Command Engineer, Joint Special Operations Command, Fort Bragg, North Carolina.



Just prior to his current position with USACE, Mr. Hurley served as a strategic planner in USARPAC, and as a construction contract and program manager in the private sector.

Mr. Hurley has an MS in Project Management and is PMP-certified. He is a competitive triathlete and active in the barbershop chorus, Sounds of Aloha. His military awards and decorations include the Legion of Merit, Bronze Star (3OLC), Airborne, Air Assault, Ranger Tab, and the Engineer Bronze de Fleury Medal.

Curated Disaster Preparedness: The Pacific Humanitarian Warehousing Program

Exsley Taloiburi, Deputy Director, Disaster & Community Resilience Programme (DCRP), Geoscience, Energy and Maritime (GEM) Division, Pacific Community (SPC)



Biography: Exsley Taloiburi is Deputy Director for the Disaster and Community Resilience Programme within the Geoscience, Energy and Maritime Division at the SPC. Prior to joining SPC, Exsley worked as Expert for Climate Change and Resilience with the Organisation of African, Caribbean and Pacific States based in Brussels, serving 79 member states. From 2012 to 2022, Exsley held various roles with the Pacific Islands Forum Secretariat in Suva, including his last position as Team Leader for Climate Change and Resilience.

Abstract: The Pacific Humanitarian Warehousing Program (PHWP) is an 8-year initiative managed by SPC GEM's Disaster and Community Resilience Programme (DCRP) from 2023-2031. The aim is to enhance the disaster preparedness capability of the 14 Pacific Island Countries and Timor-Leste by constructing warehouses (or retrofitting existing warehouses, or leasing warehouses) and stocking of non-food items for humanitarian and disaster response. SPC will oversee the management of the program team, build capacity, and set up necessary warehousing systems in the 15 countries, while the infrastructure component will be managed by Tetra Tech. Key donors include Australia, New Zealand, France, Germany, Japan, United Kingdom, and the United States. This investment aligns to Regional Collective Actions 3 and 4 of the 2050 Strategy Implementation Plan and Actions 2(iv) and 2(viii) of the Boe Declaration Action Plan.

Empowering YouthMappers for Disaster Resilience: Mapping Exposure Elements through OSM and Gamification in YouthMappers Initiatives

Feye Andal, Regional Ambassador for Asia Pacific, YouthMappers



Biography: Feye Andal has been an active volunteer with OpenStreetMap-Philippines since 2013, where she has cultivated her expertise in open mapping tools. Recognized for her leadership, she established a local YouthMappers chapter and has served as a Regional Ambassador for Asia Pacific in YouthMappers since 2020, fostering collaboration within the community.

In addition to her contributions to OpenStreetMap, Feye leads the WebGIS team at UP Resilience Institute-NOAH Center, overseeing the development of WebGIS applications for disaster risk reduction. Furthermore, she brings her proficiency in data science and GIS to her role as a GIS consultant at the Asian Development Bank, further advancing her impact in geographic information accessibility and disaster resilience.

Recently, Feye was named by Geospatial World as one of the 50 Rising Stars in the geospatial industry, highlighting her significant contributions and potential for future impact.

Abstract: YouthMappers plays a crucial role in improving disaster risk reduction by involving young people in mapping exposure elements and critical facilities. Through the involvement of student volunteers, we develop detailed, community-driven maps that aid in local disaster preparedness and response plans. Our main focus is on locating and mapping critical infrastructures like hospitals, schools, and evacuation centers, which in turn strengthens community resilience through OpenStreetMap's crowd-sourced mapping. Additionally, we emphasize climate education through gamification, as seen in our BATAAlert project, which educates children on disaster concepts in an interactive and stimulating way, leading to a better grasp of disaster risks and management. By combining gamified learning with practical and crowd-sourced mapping activities, we empower youth to actively contribute to disaster risk reduction endeavors. We aim to support and enable young people by equipping them with the resources to combine creative educational methods with practical mapping activities, therefore strengthening the ability of local communities to withstand disasters and promoting a mindset of readiness and engaged participation among the younger generation.

Framework for Disaster Risk Reduction (DRR) and Response: Lessons Learned from Japan International Cooperation Agency (JICA)

Satoru NISHIKAWA, PhD, Senior Advisor in Disaster Risk Reduction, JICA



Biography: Satoru joined Japanese Government service in 1982 and has held various positions in the Japanese Government, UN, Tokyo Metropolitan Government, and International Organizations. In 1992, he took the position of Senior Disaster Relief Coordination Officer at UN-DHA where he coordinated international assistance to numerous disaster-stricken countries. In 2001, he was appointed the Executive Director of Asian Disaster Reduction Center. After resuming Japanese government service in 2004, he held senior positions in the Cabinet Office and the Ministry of Land, Infrastructure, Transport, and Tourism of Japan. At the wake of the Indian Ocean Tsunami in 2004, he coordinated the Japanese Government technical assistance to the affected countries. He was also the on-site coordinator for the Niigata-Chuetsu Earthquake in 2004. He hosted and coordinated the 2005 UN World Conference on Disaster Reduction where HFA was adopted. He proposed the Japanese BCP guideline in 2005. He was a member of the Advisory Group to the UN SRSG for DRR on the Post-2015 Framework for Disaster Risk Reduction and the Global Platform. From 2013 to 2015, he served as Vice-president, Japan Water Agency. From 2018 to 2023, he was the professor at Disaster Mitigation Research Center of Nagoya University where he was the principal investigator of several research programs. He is the lead author of International Science Council (ISC) Policy Brief “Closing the Gap between Science and Practice at Local Levels to Accelerate Disaster Risk Reduction,” published in 2022. He is currently Specially Appointed Professor, IRiDeS Tohoku University; Visiting Professor, Nagoya University; Board member, Institute of Social Safety Science; Vice-President, Business Continuity Advancement Organization; and Advisor, International Consortium on Landslides.

Abstract: Japan, due to geographical and geological conditions, has been menaced by numerous disasters in its history. Through these bitter experiences, Japan has forged scientific knowledge, practical technologies, and organizational arrangements to substantially reduce disasters. Japan has been successful in controlling the damage by constant improvement and constant enlargement of the scope of disaster reduction. Nevertheless, the harsh mother nature still poses new challenges, including the 2011 Great East Japan Earthquake & Tsunami and the most recent Noto Peninsula Earthquake on 1 January 2024.

JICA, as the international cooperation arm of Japan, has been long devoted to sharing these experiences with other countries. The 2004 Indian Ocean Tsunami was an epoch-making disaster which gave impetus to many countries in Asia to enforce their undertaking for disaster reduction. JICA launched a series of cooperative projects to enhance the disaster reduction capacities of the countries affected by the Tsunami based on the Hyogo Framework for Action (HFA) adopted by the UN member states at the Second World Conference in 2005. JICA, together with Hyogo Prefecture, created the DRLC (Disaster Reduction Learning Center) in 2007, which focuses on capacity building for DRR.

JICA was heavily involved in the formulation of the Sendai Framework for Disaster Risk Reduction (SFDRR), which was adopted at the 3rd World Conference on Disaster Risk Reduction in 2015. One of the main pillars of SFDRR is “Investing in Disaster Risk Reduction for Resilience.” JICA is presently promoting various programs in many developing countries to encourage pre-disaster investment for DRR.

Development of Maritime Disaster Risk Reduction and Response System: Places of Refuge for Distressed Ships, IMO Guidelines, and More

Commander Prashan Perera, Senior Staff Officer Operations, Sri Lanka Coast Guard



Biography: Commander Prashan Perera serves as the senior staff officer of operations at the Sri Lanka Coast Guard headquarters, playing a crucial role in maritime security. He embarked on his naval journey as an officer cadet in the 21st intake of KDU, graduating in 2006 with a Bachelor of Science degree in Management and Technical Sciences (second-class upper division). Noteworthy is his commission ceremony where he received three academic excellence awards, including the prestigious sword of honours as the best midshipman of his intake.

Throughout his career, Commander Perera has held key positions both at sea and onshore, such as flag lieutenant to director general personnel & training, troop commander at KDU, navigating officer on SLNS Samudura, and officer in command of fast attack craft and the merchant marine training school. His dedication is evident in his pursuit of various naval courses both locally and internationally, achieving top ranks and recognition, notably the



defence service command and staff course where he received commandant honours for academic excellence in 2020.

Adding to his academic achievements, Commander Perera holds four Master's Degrees in Business Management, Conflicts and Peace Studies, Defence and Strategic Studies, and Maritime Safety and Security Policy, showcasing his multidisciplinary expertise. He is also a member of the Institute of Management in Sri Lanka and serves as a Council Member for 2024-2025.

In addition to his professional roles, Commander Perera is actively involved in research, presenting papers at prestigious forums like the Indo Pacific Environmental Security Forum, Indian Ocean Rim Association, UNODC Maritime Security Dialogues, and the National Graduate Institute for Policy Studies in Japan. His contributions reflect a deep commitment to enhancing maritime safety and security in the region.

Abstract: Sri Lanka's strategic position as a central shipping hub in the Indian Ocean demonstrates the importance of having an excellent Maritime Disaster Risk Reduction & Response (MDRRR) system. Maritime distress situations can pose severe risks to life, property, and the environment. Recent Sri Lankan maritime accidents involving New Diamond and X Press Pearl have reiterated the importance of establishing an effective MDRRR system capable of promptly and effectively responding to such situations, providing aid and refuge to distressed ships. Places of refuge are an integral part of a maritime response system, ensuring the safety of crew members, protecting valuable cargo, and preventing potential environmental disasters. However, establishing an MDRRR system, including places of refuge, requires significant planning, resources, and international cooperation. This study will use the literature survey method to comprehensively understand the research area by exploring and synthesizing qualitative studies, scholarly works, and research discussing the requirements, difficulties, and challenges faced in developing such systems. Furthermore, the study will discuss the pros and cons of the existing Sri Lankan maritime disaster risk reduction and response systems and factors that could be considered in enhancing the current system.



Site Visit:

Participants will choose one of three site visits for the Day 3 afternoon session

1. **BlackRock:** The site visit to the Blackrock Peacekeeping and Humanitarian Assistance & Disaster Relief Camp (Blackrock Camp) will showcase the newly completed facilities such as the headquarters building, logistic precinct, and medical facility for Humanitarian Aid and Disaster Relief (HADR) Preparedness. The visit to Blackrock Camp showcases tangible achievements in infrastructure development, strengthening regional security partnerships, and advancing goals related to disaster response readiness and humanitarian assistance across the Indo-Pacific region.
2. **Naidiri Village:** During this site visit the Ministry of Environment and Climate Change, alongside the community and youth of Naidiri Village, will showcase the Naidiri Biodiversity Park. There will be a coral restoration and planting demonstration on the ground, coral sea planting in the water, and a village tour showcasing additional environmental security challenges, such as access to clean drinking water.
3. **Malomalo Village:** During this site visit the Ministry of Environment and Climate Change, alongside the community and youth of Malomalo village, will showcase a mangrove restoration site, a water dam site, seawall site, and cooperative farm site.



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

DAY FOUR SESSION

Friday, 9 August 2024

Partnerships, Regionalism, and Security

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji



Friday, 9 August 2024 - Day 4

Partnerships, Regionalism, and Security *Master of Ceremonies: Major Venina Vakadewabuk*

0830 – 0835	Administrative Remarks
0835 – 0840	Day 4 Session Overview by Master of Ceremonies
0840 – 0940	Regionalism and Security Panel Session Moderator: Michael Crowe, Regional Security Advisor, Pacific Islands Forum Panelists: 1) Environment – Sefanaia Nawadra, Director General, Pacific Regional Environment Programme (SPREP); 2) Pacific Regional Security – Maara Tetava Tiatava Ariki, National Security Director, Cook Islands; 3) Asia Regional Security – Elizabeth Tan, Director, Singapore Ministry of Defence; 4) Global Partnerships – Shiloh Fetzek, Associate Fellow, International Institute for Strategic Studies
0940 – 0945	5-minute Table Challenge
0945 – 1025	Indo-Pacific Environmental Security Partnership Working Group (WG) 3-Year Plan Updates 1) Policy – Sophia Seo; 2) Education – Amanda Ellis; 3) Networking – Lieutenant Colonel Andrew McPhee; 4) Mitigation - Christopher Sholes
1025 – 1045	Break
1045 – 1110	USINDOPACOM Project Highlights 1) Anawilundawa Mangrove Restoration Project – Dr. Sevvandi Jayakody; 2) K. Huraa Island Mangrove and Blue Economy Project – Dr. Sahadev Sharma and Rayya Hussain; 3) Fiji Plastic Reduction Feasibility Study – Viliame Kasanawaqa
1110 – 1245	Country Project Development
1245 – 1345	Lunch Break
1345 – 1445	Redesigning the Partnership Workshop Led by NZDF and NZ MoD
1445 – 1450	5-minute Stretch
1450 – 1550	Redesigning the Partnership Workshop (Continued) Led by NZDF and NZ MoD
1550 – 1620	Break

Day 4 Presenters

Regionalism and Security Panel Session

Panel Moderator

Michael Crowe, Regional Security Advisor, Pacific Islands Forum (PIF)



Biography: Mr. Michael Crowe is the Regional Security Advisor at the Pacific Islands Forum Secretariat. In this role, Michael advises the Secretariat's leadership and Pacific Islands Forum Members on security policy issues that affect peace, stability and prosperity across the Blue Pacific continent. Prior to joining PIFS, Michael served as a development specialist, diplomat and senior defence policy advisor for the Australian Government. This included lead roles managing Australia's defence relationships with Iraq, Syria and Turkey, and bilateral relationships with partner countries across the Pacific. Michael has served Australia overseas in Solomon Islands, Zimbabwe, and Afghanistan, and speaks fluent Solomon Islands Pidjin, Spanish and English, and terrible French. Michael is a keen surfer and sailor, and has two young children, Otto and Elia.

Environment Panelist

Sefanaia Nawadra, Director General (SPREP)



Biography: Mr. Sefanaia Nawadra, Director General of SPREP since 2022, is a Fijian national with more than 30 years' experience in the regional and global environment sector. Previously Head of UNEP in the Pacific, he has worked as Conservation International's Fiji Country Director; Environment Director (Pacific) of Sinclair Knight Merz Engineering Consultants; Health Safety and Environment Manager for Shell Pacific Islands Limited; and held senior technical positions within Environment and Agriculture Departments of the Fiji Government. Mr. Nawadra has an Environmental Engineering degree from the University of Canberra and a Master of Environmental Management from the Imperial College, University of London.

Pacific Regional Security Panelist

Maara Tetava Tiatava Ariki, National Security Director, Cook Islands



Biography: Maara Tetava Tiatava Ariki served as a Police officer in the Cook Islands Police Service (CIPS) from 1985 to 2020. He rose through the ranks and served as Commissioner of Police for eleven years. As Police Commissioner he served as Chairman of the Pacific Islands Chiefs of Police (PICP); chaired the Board of Management of the Pacific Transnational Crime Network (PTCN); Police Training Advisory Group (PPTAG); PICP's Executive Leadership Team (ELT); Pacific Crime Prevention Advisory Crew (PCPAC); and was actively involved in the establishment of the Pacific Centre for Law Enforcement Co-operation (PCLEC).

Maara Tetava Tiatava Ariki implemented the recommendations of the Robinson Review Report on the CIPS. He took Intelligence-Led Policing to a new level with the establishment of the CIPS National Command & Coordination Centre, which became a model for other Pacific Police Services; establishment of a Mobile Command & Coordination Centre for Special Operations including Disaster Response-related operations; establishment of the Special Tactics Unit; establishment of the Crime Prevention Division; establishment of Police Community Centres; establishment of the Youth Development and Youth Leadership courses for youth at risk; establishment of the Police Search and Rescue Team for land and sea rescue operations; and the development and implementation of the Prevention Operating Model with the support of the New Zealand Police.

Maara Tetava Tiatava Ariki instigated and implemented changes to the Police Act, Transport Act, Family Law Bill, and the Crimes Bill currently before Parliament and offered advice on other Parliamentary bills. He introduced the first Police Special Operations Medal and was actively involved in securing overseas service medals for Cook Islands Police officers who served overseas.

Maara Tetava Tiatava Ariki is a graduate of the University of Monash – Associate's Diploma of Arts in Police Studies; University of the South Pacific – Certificate in Law, Post-Graduate Diploma in Legislative Drafting and master's in business administration (MBA); University of Waikato – Bachelor of Laws Degree (LLB) and Master of Laws Degree (LLM). He is a Barrister and Solicitor of the High Court of New Zealand and the Cook Islands.

Maara Tetava Tiatava Ariki was invested to the Paramount Chief title of Tetava Tiatava Ariki of Mitiaro in 2019 and is a member of the Cook Islands House of Chiefs. Maara Tetava

Tiatava Ariki was appointed as the National Security Director for the Cook Islands in 2020. He instigated and led the development of the first Cook Islands National Security Policy 2023-26, which was launched in June 2023; the Performance Assessment Framework for the National Security Policy, which was launched in late 2023; and the Cook Islands Protective Security Policy Framework, which was launched in March 2024. He is currently involved in the development of the Cook Islands Cyber Security Strategy and working towards developing the Cook Islands Transnational Organised Crime Strategy.

Asia Regional Security Panelist

Elizabeth Tan, Director, Singapore Ministry of Defence



Biography: In September 2022, Ms Tan assumed her current appointment which oversees the Ministry of Defence's (MINDEF) engagement in regional and international defence issues, including the ASEAN defence sectoral and other defence and disarmament-related issues at the United Nations.

Prior to her present appointment, she served in the Cyber Security Agency of Singapore (CSA) for three years since August 2019. While in CSA, she advanced Singapore's interests in cybersecurity on the international stage, taking part in the UN Group of Governmental Experts and Open-Ended Working Groups for ICTs which further developed the cyber normative and stability framework for responsible State behaviour in cyberspace. She also drove international partnerships and collaboration in strategy and policy cyber issues such as cyber capacity-building and other bilateral and regional cyber collaborations.

Ms Tan also served in various portfolios in Defence Policy Office, where she managed Singapore's bilateral defence relationship with important partners like the US, Northeast Asia, and the Middle East, as well as Singapore's interests in the ASEAN Defence Ministers' Meeting (ADMM) and ADMM-Plus.

She had also served in other departments in MINDEF. She had handled policies on building a stronger and more cohesive Defence Technology Community (DTC), working closely with the Defence Science and Technology Agency (DSTA) and DSO National Laboratories. She also had the opportunity to formulate National Service (NS) policies to manage talents in Singapore's NS system, as well as dealt with public queries and feedback on wide-ranging issues related to MINDEF/SAF.



Ms. Tan graduated with a Bachelor of Applied Science in Chemical and Biological Engineering (and Minor in Commerce) from the University of British Columbia, Vancouver in 2006, and a Master of Public Administration from the Lee Kuan Yew School of Public Policy, National University of Singapore in 2013. She also obtained a Global Information Assurance Certification (GIAC) Security Essentials qualification in 2020.

Global Partnerships Panelist

Shiloh Fetzek, Associate Fellow, International Institute for Strategic Studies



Biography: Shiloh Fetzek is an Associate Fellow at the International Institute for Strategic Studies (IISS) and a Nonresident Senior Research Fellow at the Center for Climate and Security. Her expertise is on climate change and security interactions and their broader strategic impacts, including for defence.

She contributes research and analysis to a range of government and non-government institutions, including the UN Climate Security Mechanism. She previously led the Center for Climate and Security's international work and was Head of the Climate Change and Security Programme at the Royal United Services Institute (RUSI) in London. Her research focuses on better-understanding and operationalizing climate security risk management.

She has published on a variety of climate security topics, including in the IISS journal *Survival: International Politics and Strategy* and the RUSI Journal, and has written for a number of security and international affairs think tanks, as well as for media outlets including The Cipher Brief, The Diplomat, and the World Economic Forum's Geostrategy Platform, among others.



Indo-Pacific Environmental Security Partnership Working Group 3-Year Plan Updates

Policy Working Group

Sophia Seo, Senior Analyst, New Zealand Ministry of Defence, International Branch



Biography: Sophia is a Senior Analyst (Pacific Regional desk) in the International Branch of the New Zealand Ministry of Defence. The International Branch leads policy advice and analysis on New Zealand's deployments, Defence relations, and offshore security issues to Ministers, Defence principals, and partner agencies.

Sophia's current responsibilities include multilateral engagements with the Pacific and climate change. Sophia is also the New Zealand Indo-Pacific Environmental Security Partnership (IPES) Policy Working Group lead. Since joining the Ministry in 2019, Sophia has held a variety of portfolios including: multilateral and bilateral Defence engagements with Southeast Asia (notably the Association of Southeast Asian Nations) and China.

Before joining the Ministry of Defence, Sophia was a Policy Analyst for the New Zealand Customs Service.

Sophia holds a Bachelor of Arts in International Relations (First Class Honours) and a Bachelor of Science in Biology from Victoria University of Wellington.

Education Working Group

Amanda Ellis, Senior Director, Global Partnerships, Arizona State University



Biography: Former World Bank economist, UN Ambassador, and Prime Minister's Special Envoy for NZ, Amanda Ellis leads global partnerships for philanthropist Julie Ann Wrigley's Global Futures Laboratory at the largest public university in the U.S., Arizona State University, with a focus on sustainability and innovation (ASU ranks top in the U.S. for both, ahead of Stanford and MIT). She serves as Professor of Practice at Thunderbird Global School of Management and Barrett, The Honors College.

Former roles include Deputy Secretary in the NZ Foreign Ministry, Head of NZ's Development Agency NZAID, Lead Specialist Poverty Reduction and Economic



Management for the World Bank Group, Head of the Global Gender Group at the International Finance Corporation, National Manager Women in Business at Westpac Banking Corporation, and economist at the OECD.

Author of two best-selling Random House business books, five research titles in the World Bank Directions in Development series, and co-author of the Global Gender Equality and Governance Index, Ms. Ellis is a founder of the Financial Alliance for Women and the recipient of the TIAW Lifetime Achievement Award for services to women's economic empowerment. She is a Fellow and Trustee of the World Academy of Arts and Sciences and serves on the advisory boards of the Global Governance Forum, Blue Planet Alliance, Generate Zero, Open Planet, and the Institute for Climate and Peace. The first woman to lead NZ's development agency, Amanda serves as co-chair of the WE (Women Entrepreneurs) Empower UN Sustainable Development Goal Challenge launched by the UN Secretary General in 2018 and the New Carbon Economy Consortium.

Networking Working Group

Lieutenant Colonel Andrew McPhee, Environmental Advisor, HQ Joint Operations Command



Biography: Lieutenant Colonel Andrew McPhee joined the Australian Army in 1992, graduating from OCTU in Tasmania as a Reserve Infantry Officer. He studied Marine Biology at the University of Tasmania, graduating with an enduring interest in wild fisheries research and Antarctica.

In his military career, Lieutenant Colonel McPhee has been posted to a variety of organisations and Units including command of a light infantry Battalion; Staff Officer postings as a Battalion S3, various Brigade Headquarters and to Army Headquarters; as Directing Staff at the Australian War College in Canberra, and to Headquarters Joint Operations Command. He commanded ADF elements during domestic operations including OP VIC FIRE ASSIST 2009, OP Bushfire Assist 2019-20 and OP COVID-19 Assist in 2020 and has supported multiple ADF environmental compliance programs for Joint Combined Exercise 'Talisman Saber'.

Lieutenant Colonel McPhee's current position is within Headquarters Joint Operations Command as an Environmental Advisor. He is a 2012 graduate of the Australian Command and Staff College.



In his civilian life, Lieutenant Colonel McPhee has worked across a number of sectors, and has operations, emergency management, management consultancy, expeditionary logistics, environmental compliance and project management experience in public and private sector organisations across Australia and the Pacific, the Middle East; North Africa; and Antarctica.

As a snapshot, he has worked as an Electricity Market spot trader; worked in Egypt in 2008 to provide expeditionary logistics support to UNAMID, (the African Union/United Nations Hybrid operation in Darfur (Sudan)); completed three Antarctic research trips as a field research team leader with the Australian Antarctic Division, and another season as an Aviation Ground Support Officer at Davis Station in East Antarctica. He later worked as a management consultant for KPMG in Melbourne and Brisbane, and as a senior emergency management officer during the major flooding event caused by ex-Tropical Cyclone Debbie in northern NSW in 2017.

He currently works for a small renewable energy start-up company from his small farm near Byron Bay in northern NSW. When opportunities arise, he provides support to Aviation Sector projects across several Pacific Island Countries.

Mitigation Working Group

Christopher Sholes, Environmental Security Program Manager, U.S. Indo-Pacific Command (USINDOPACOM)

[Follow this link to read about Christopher Sholes](#)

USINDOPACOM Project Highlights

1) Anawilundawa Mangrove Restoration Project

Dr. Sevvandi Jayakody, Wayamba University of Sri Lanka



Biography: Professor Sevvandi Jayakody completed a BSc (Hons.) in Zoology from University of Kelaniya, a Post-Graduate Diploma in Wildlife Management and Conservation from Wildlife Institute of India, and a PhD in Zoology from University of Aberdeen, UK. She conducted post-doctoral research at SCIRO, Australia, James Hutton Institute, Scotland and IDRC, Canada.

Professor Jayakody joined the Department of Wildlife Conservation as an Assistant Director in 1997 and currently serves as a Senior Lecturer at the Wayamba University of Sri Lanka. She also served as the Coordinator for CITES CoP18 and currently serves as chairperson of National Mangrove Expert Committee, a member of Commonwealth Blue Carbon Initiative, a member of National Environmental Council, and a Director of Environmental Foundation Limited. Her research interests include coastal ecosystem management and policy and impacts of human disturbance on ecosystem processes and functions.

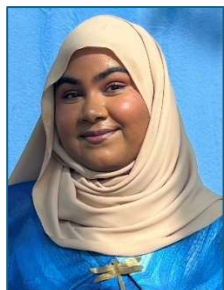
2) K. Huraa Island Mangrove and Blue Economy Project

Dr. Sahadev Sharma, Scientific Consultant, U.S. Forest Service



Biography: Sahadev Sharma is currently a scientific consultant to International Programs, United States Forest Service, based in India. Currently, he is leading blue carbon ecosystems monitoring projects in India, Maldives, and Palau. He obtained a Doctor of Science in Plant Ecology and Physiology from the University of the Ryukyus, Okinawa, Japan in 2012. By training, he is a forest ecologist with research interests in mangrove forest ecology, physiology, and blue carbon dynamics from local site to the landscape level, using a wide spectrum of methods and technologies such as remote sensing and field-based monitoring and sampling, and integrating ecological, chemical and hydrological data. He is currently focusing on the Asia-Pacific and Indian Ocean regions' blue carbon ecosystems. Formerly, he was a senior lecturer at the Institute of Ocean and Earth Sciences, University of Malaya, Malaysia; research faculty at the Department of Natural Resources and Environmental Management, the University of Hawaii at Manoa, a JSPS Postdoctoral Fellow at Tokyo Institute of Technology, Japan, and Research Fellow at Space Application Centre, Indian Space Research Organization, India.

Rayya Hussain, Environmental Analyst, Maldives Ministry of Environment, Climate Change, and Technology



Biography: Ms. Rayya Hussain works as an Environmental Analyst at the Environmental Management and Conservation Department of the Ministry of Climate Change, Environment and Energy, Maldives, where she is designated to report on the State of the Environment of the country. She obtained her BSc (Hons) in Environmental Science at University of Nottingham Malaysia in 2022, and is driven by the importance of effectively communicating the sciences to policy makers and the public.

Her work involves assisting the department in data collection and analytical works relating to Biodiversity Conservation and Management, and Chemical and Air Pollution Management. Additionally, she is also focused on developing programs for strengthening environmental monitoring and knowledge management within the country through bottom-up and top-down approaches. Presently, she is working on updating the country level emission inventory of Greenhouse Gases, Short-lived Climate Pollutants and Air Pollutants, including integrated assessment modelling for energy policy and climate change mitigation. She has also initiated and is working on a nationwide survey titled “Preliminary assessment of mercury exposure level for citizens in Maldives due to high-level fish consumption in daily diet”. Most recently, she is assisting the project for mapping and assessing Blue Carbon stocks in Mangrove and Seagrass ecosystems in the country.

3) Fiji Plastic Reduction Feasibility Study

Mr. Viliame Kasanawaqa, Sustainability Expert on Islands and Small States



Biography: Viliame is excited about sharing expertise of Small Islands and Developing States (SIDs) produced solutions and leveraging scientifically verified traditional wisdom to build resilience in the Pacific region. With 20 years of experience working on development-related initiatives in the Pacific States of Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Solomon Islands, Timor Leste, Tuvalu, and

Vanuatu, he is a highly qualified professional headquartered in Christchurch, NZ. Viliame is a strong consulting expert with an MA (Research) in Islands and Small States from University of Malta, an MSc in Project Management-Built Environment from University of Newcastle, Australia, and a Bachelor of Engineering from Deakin University, Australia. He is completing



his PhD with a focus on Governance of Seabed Planning at the Macmillan Brown Centre for Pacific Studies | University of Canterbury.

The consulting firm, Shipwrecked Lab, and the not-for-profit, Beyond the Bilibili, that he established, work with Partners to address transboundary challenges unique to Islands.

Redesigning the Partnership Workshop, led by NZDF and NZ MoD

Abstract: Dr Lee Bint and Sophia Seo will be stepping you through a workshop to unpick the region's biggest environmental priorities and challenges, giving attendees the opportunity to re-design the Partnership to enhance collective action and to plan for and manage these environmental security priorities and challenges, through working groups.

Dr. Lee Bint, Director of Sustainability, New Zealand Defence Force (NZDF)

[Follow this link to read about Dr. Lee Bint](#)

Sophia Seo, Senior Analyst, New Zealand Ministry of Defence, International Branch

[Follow this link to read about Sophia Seo](#)



INDO-PACIFIC ENVIRONMENTAL SECURITY FORUM

CLOSING SESSION

Friday, 9 August 2024

Partnerships, Regionalism, and Security

Indo-Pacific Environmental Security Forum Natadola, Republic of Fiji

Friday, 9 August 2024 - Closing Session



Partnerships, Regionalism, and Security

Master of Ceremonies: Major Venina Vakadewabuk

1620 – 1625	Video / Photo Loop of the 2024 IPESF
1625 – 1630	Closing Remarks USINDOPACOM J4, Brigadier General Martine S. Kidd
1630 – 1635	Closing Remarks Dr. Sivendra Michael, Permanent Secretary, Fiji's Ministry of Environment and Climate Change
1635 – 1700	Traditional Dance and Closing Ceremony
1830 – 2100	Farewell Dinner hosted by Fiji MoHA&I at Cuvu Village



Closing Session Presenters

Closing Remarks

USINDOPACOM J4, Brigadier General Martine S. Kidd



Biography: Brigadier General Kidd originally enlisted in the Army Reserve in 1989 and was commissioned through the Reserve Officer Training Corps in 1994.

As a Lieutenant in Germany, she worked as a Platoon Leader and Battalion S1, including a deployment for Operation Joint Endeavor. Next, she was assigned to the 10th Mountain Division, and served as a Battalion S3, Company Commander, and Division Support Command S4. She then served as an Aide-de-Camp to the Commander of the Army and Air Force Exchange Service (AAFES), deploying in support of Operation Iraqi Freedom (OIF). In April 2007, she deployed as the Logistics Planner for the 3rd Infantry Division and Multi-National Division (Center) during the OIF “Surge” in Iraq. Afterwards, BG Kidd served as a Logistics Instructor at the Army’s Command and General Staff College (CGSC) and was the Executive Officer to the Deputy Commandant of the Combined Arms Center. In 2010, she deployed again as the Executive Officer to the Deputy Commanding General for Support, United States Forces-Iraq. Next, she commanded a Battalion for the Defense Logistics Agency-Energy. Before attending the Senior Service College, she worked as the Executive Officer to the Commander of U.S. Army Cyber Command. From 2015-2017, she served as the 34th Commander of the Anniston Army Depot in Anniston, Alabama. Following command, BG Kidd was assigned as the Chief of Plans, CENTCOM J4. In 2019, she became the Executive Officer to the Executive Deputy to the Commander of Army Materiel Command. Next, BG Kidd assumed duties as the Director of Sustainment and Force Management at the Army’s CGSC. In 2021, she took Command of the 593d Expeditionary Sustainment Command, Joint Base Lewis McChord. Subsequently, BG Kidd was assigned to Korea and served as the United Nations Command U4, Combined Forces Command, Deputy C4 and the US Forces Korea J4 from June of 2023 to June of 2024.

BG Kidd holds a Bachelor of Arts in Communications/Mass Media, a Master of Science in Logistics Management, a Master of Military Arts and Science from the School of Advanced Military Studies (SAMS), and a Master of Science in National Resource Strategy from the Eisenhower School at the National Defense University. BG Kidd is a Distinguished Graduate



from Methodist College, the Logistics Executive Development Course, and the Master Logistician from her 2006 CGSC class. She was also the Distinguished Honor Graduate from her Senior Service College class at the Eisenhower School.

Among her awards and decorations are two Defense Superior Service Medals, four Legions of Merit, two Bronze Star Medals, the Defense Meritorious Service Medal, the Joint Service Commendation Medal, and the NATO Medal. She has been awarded the Somervell Medal of Excellence in multifunctional logistics and is a Distinguished Member of the Quartermaster Regiment.

Brigadier General Kidd is married to Dr. Justin Kidd, a former U.S. Marine who is also a retired U.S. Army Officer who continues to serve as an Associate Professor for the U.S Army's CGSC.

Dr. Sivendra Michael, Permanent Secretary for Fiji's Ministry of Environment and Climate Change



Biography: Dr. Michael has spent more than a decade working in the climate change adaptation (CCA) and disaster risk management (DRM) field across the Asia-Pacific and Eastern African region. He is part of UN's Global Expert Roster, through which he has been deployed to support the Governments of Ethiopia, Indonesia, Jordan, Malawi and most recently Tonga. In 2016 and 2021 respectively, Dr. Michael was deployed to Fiji's Ministry of Rural and Maritime

Development to support the national recovery efforts and the post-disaster needs assessment processes. Prior to joining UNDP Pacific Office, Dr. Michael worked for various agencies, including British Council, UN International Labor Organization, WFP, University of Auckland, and University of the South Pacific to name a few. His early career days were dedicated to the Strategic Policy and Planning Division of the Pacific Islands Forum. Dr. Michael has developed a sound understanding of the Climate Change and Environment portfolio. His strong record of leadership is attested by the multiple regional and international awards in recognition of his work. He has served in various executive boards and was appointed the G20's Ambassador for the Oceania region in 2021, which is a testament to his leadership principles.

In terms of Dr. Michael's educational background. He holds a PhD and master's degree from the University of Auckland, as well as a master's and bachelor's degree from the University of the South Pacific. He is well known in the region, particularly by development partners and has been a key member of the Fiji Delegation at UNFCCC COP meetings.