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Editorial



Talofa lava, Bula!

We have reached the end of another year and it is time to celebrate and reflect on the journey. We did well despite the many challenges faced while migrating to a new Integrated Library System (ILS). For the PIMRIS network, some planned activities had to be deferred so we as the Lower Campus Library in Laucala make necessary adjustments and changes for an improved library user experience.

There have been twists and turns in world politics, some historic firsts in extreme weather events and also deadly natural disasters. The longest United Nations COP25 climate talks on record ended without much progress in Madrid this month, and all are hoping that next year's meeting hosted by the United Kingdom in Glasgow, will produce desired outcomes.

Climate change has been debated and discussed for many years now and we know of its impact to our small islands and economies. The tuna fishery that rakes in significant revenue is under threat as tuna stocks are reported to be declining due to environmental changes and overfishing.

Nevertheless, we can rise above the challenges and we must do more, together. As the famous Sir David Attenborough said, "we have made a tragic, desperate mess of our world, but there are signs of positive changes....Nations are coming together and recognising we all live on the same planet ... and we are dependent on it for every mouthful of food we eat and every breath of air we take" (www.theguardian.com).

'Vinaka' for your partnership this year and we look forward to a great year ahead. Enjoy your holidays!

Susana Macanawai, *PIMRIS Coordinator*

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---Opinions expressed in articles included in the PIMRIS Newsletter do not necessarily represent those of any participants. --

Directory

PIMRIS is a cooperative network of fisheries and marine resources libraries and information centres in the Pacific. Participants include national ministerial libraries and regional agencies listed below.

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New Faces, New Places

Welcome!

Liviana Tabalala, who resigned from USP library in 2017 to take up a management position at the USP's Pacific TAFE, has returned as the new Deputy University Librarian (DUL).



Liviana Tabalala

'Livi' as she is known, started in her new role in August. She first joined the USP Library (Laucala) in 1993. Congratulations Livi!

Merean Ririennang, is the new library staff at the Kiribati Ministry of Fisheries & Marine Resource Development.



Merean Ririennang

Merean replaces Mwaba Raurenti who resigned after many years on the role. Welcome aboard!

Farewell & Thank You!

Reysa Alenzuela, Senior Librarian USP–Emalus Campus, Vanuatu has resigned and left Port Vila in November. Reysa's contributions to USP libraries and Vanuatu were acknowledged by the University Librarian.



Reysa Alenzuela



Jillian Serevi

Jillian Serevi joined PIMRIS in July replacing Una Domona who took up a full-time role at the Lautoka Public Library. Jillian graduated with a Diploma in Library/Info. Studies earlier this year and has been with the USP Laucala main library since 2017.

Healthy mangroves help coral reef fisheries under climate stress



Mangroves around Dakuniba Bay, Vanua Levu, Fiji. (Image: <https://twoatsea.com>).

A recent study by researchers from the University of Queensland (UQ), the Australian Research Council (ARC) Centre of Excellence for Coral Reef Studies and Victoria University of Wellington found that mangrove nurseries provide a calm, safe environment with plenty of food and allow fish to grow larger before heading out to the reef as adults.

The team also reported these resources could support fisheries productivity that is equal to that in complex reefs that lack nurseries.

According to Professor Peter Mumby, healthy mangroves can help fight the consequences of climate change on coral reef fisheries as corals have been bleached and reefs have lost their structural complexity as a major consequence of warming seas.

“Many people are worried that – due to climate change – reef fishery yields could halve if coral reefs flatten, losing the hiding places that support thousands of fish,” he said.

“When a young fish arrives at a degraded reef it has nowhere to hide and is easily targeted by predators.”

“Of course, predators experience the same problem when they’re young, so the entire food web becomes unproductive and few fish survive.”

The team however found that mangroves provided a partial solution despite the alarming trend.

Dr Alice Rogers from Victoria University said that result from their research should inform reef fisheries management strategies to protect areas now and into the future.

“Mangrove nurseries essentially allow some fish to sidestep the challenges of early life on a degraded reef,” she said.

She added that these fish then benefit by finding it relatively easy to find food because it has few places to hide.

Furthermore, Dr Rogers said that “mangrove restoration can be important but in places where that is impossible, future research might examine adapting structures to offer mangrove-like nursery functions”.

“This would be in environments that either do not support natural mangrove forests or have too large a tidal range to provide stable nursery functions in coastal fringes,” she said.

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Professor Mumby said the protection and restoration of mangrove habitats should remain a priority, a view supported by many including those in the Pacific Islands region whose coastal and rural communities depend on coral reefs and mangrove swamps for food and income.

“While we need to take every effort to prevent reef degradation, our study reveals that healthy mangrove forests can help buffer the effects of habitat loss on reef fisheries”.

“It’s critical that they need to remain a priority as part of the battle to mitigate



Community participation during mangrove reforestation at Nasau village in Ra, Fiji. (Image: USP-IAS)

climate change impacts on coral reefs and their functioning.

In the Pacific Islands region, many mangrove areas have been affected by rising sea levels, coastal developments, pollution, and natural disasters to name a few. Lack of supportive policies and mangrove management plans also fuel the problem.

However, recent developments at regional, national and village level can assist protect, conserve, restore and sustainably manage these ecosystems.

In 2009, the Pacific Mangroves Initiative (PMI) was implemented to raise awareness on the value of coastal ecosystems and services and to build capacity at all levels to assist local governments make informed mangrove management decisions.

This initiative is a joint-effort by the Secretariat of the Pacific Regional Environment Programme (SPREP), International Union for the Conservation of Nature (IUCN) Oceania, World Wide Fund-South Pacific Programme Office (WWF-SPPO), the United Nations Development Programme, Fiji, Vanuatu, Papua New Guinea, Samoa, Solomon Islands and Tonga.



It is hoped that these efforts will continue and smaller local mangrove replanting initiatives will assist in sustaining both mangrove ecosystems and coral reefs for the future.

This Australian research has been published in the PLOS Biology Journal.

Left: Natutu (Fiji) men planting mangrove seedlings. (Image: WWF-Pacific, Ravai-Vafo'ou).

(Source: The University of Queensland News)

Science delivers more Aussie-grown prawns for Christmas

Australians will be enjoying more Aussie-grown prawns this Christmas thanks to a new prawn health check developed by Australia's national science agency, CSIRO.

The new test uses CSIRO's 'Shrimp MultiPath' technology, commercialised by Brisbane start-up company [Genics](#), which spun-out of CSIRO to tackle the global challenge of food security and quality.



A black tiger prawn. (Image: Genics).

It comes as the domestic prawn farming industry recovers from losses from pathogens over the last three years.

The technology can detect 13 commercially significant prawn diseases, including white spot syndrome, which wiped out many prawn populations in 2016, and Infectious Hypodermal and Haematopoietic Necrosis Virus (IHHNV).

Improved management of IHHNV using Shrimp MultiPath technology increased production by 3.7 tonnes per hectare, or \$67,000 farm gate value. Consequently, a 50-hectare Australian prawn farm could see their revenues increase by more than \$3 million per season.

Prawn farms are located across northern NSW and in QLD, with around 750 hectares of prawn ponds. An increase of 3.7 tonnes per hectare could boost the yield of farmed prawns by around 50 per cent.

CSIRO Chief Executive Dr Larry Marshall congratulated Genics on translating breakthrough research into marketplace benefit.

"It's great to see CSIRO science being accelerated out of the lab and into a start-up that could tackle our global food security challenge, a very clear public benefit – while also giving Aussies more prawns to enjoy with family and friends," Dr Marshall said.

"Australian seafood is globally prized, so innovation that protects our biosecurity and boosts our domestic economy is a great example of science creating new opportunities."

Genics CEO and former CSIRO scientist Dr Melony Sellars said the technology comes at an opportune time for the domestic prawn farming industry after losses from pathogens over the last three years.

"Australia already has some of the best prawns you can buy. However, the good news for Australian consumers ahead of Christmas is that we're helping to grow more prawns, and make them even better," Dr Sellars said.

"Our tests quickly help prawn farmers make informed management decisions, and for consumers this means more, high quality, locally grown Australian prawns."

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Dr Melony Sellars, Genics CEO and former CSIRO scientist. (Image: Genics)



A black tiger prawn in a tank. (Image: Genics)

Australia consumes all of its domestically produced prawns, and foreign imports are required to meet the shortfall in consumer demand.

Dr Sellars said the tests will allow farmers to better manage their prawn stocks as they grow, helping them to minimise stock losses and significantly boost their production levels, which could reduce Australia's reliance on imported prawns.

Three years ago the southeast Queensland prawn industry – responsible for around 40 per cent of Australia's farmed prawns – was shut down by the foreign incursion of white spot syndrome virus, a pathogen that is harmless to humans but lethal to prawns.

"Shrimp MultiPath tests against white spot, as well as other international pathogens that we don't currently have in Australia," Dr Sellars said.

"This technology can also be used as a detection system by biosecurity agencies to prevent the spread of any potential future incursions that could harm our industry."

CSIRO aquaculture program Research Director Dr Mat Cook said Genics will benefit prawn farmers and consumers alike.

"CSIRO works with industries to secure their long-term sustainability, and commercialising this technology is a significant step towards protecting Australia's farmed prawn industry and putting even more Australian farmed prawns on family plates," Dr Cook said.

"The launch of Genics is a terrific example of delivering on CSIRO's strategy to create positive outcomes for Australia across the spectrum of consumers, industry, biosecurity and environment."



Genics is now delivering Shrimp MultiPath to prawn farmers in Australia and overseas, together with other prawn health diagnostic services.

(Reprinted from: <https://www.csiro.au/en/News>)

US Army report confirms Marshall Islands atoll reef fish as toxic

A latest United States (US) Army report has confirmed that fish in many locations on Kwajalein Island and nearby islands on the west side of the atoll contain dangerous levels of arsenic and polychlorinated biphenyls (PCBs), all seriously toxic chemicals.

The contamination is the result mainly of waste from industrial vessel operations in the Army's port and leaching from the Kwajalein landfill that has contaminated reef fish in the area with toxic materials.

The US Army report stated that one of the goals of the study was

to come up with an "advisory" about safe levels of fish consumption. But "based on the subsistence fishermen's exposure assumptions, there is no level or type of fish consumption from the subject study areas that is without risk for Marshallese people".

The report concluded that, reef fish consumption poses potentially unacceptable cancer risks to Marshallese adults and children who draw most of their reef fish from industrial (Kwajalein Harbor and Kwajalein landfill) and recreational areas (North Point, Ski Platform, American/Japanese pools) on Kwajalein Islet.

Furthermore, the consumption of reef fish from E nubuj and Ennylabegan (islands) poses similar health concerns, and that non-cancer hazard is also unacceptable for Marshallese adults at all these areas.

However, the report cautioned that the risk identified did not mean people eating fish from the contaminated areas will get cancer, "rather its calculations reflect an increased likelihood of cancer over baseline estimates".

The same warning didn't apply to American adults because they do not consume all parts of reef fish as Marshallese fish eaters do.

About 900 Marshallese work at Kwajalein and commute daily from Ebeye Island, about three miles away but a significant number of Marshallese base workers now reside at Kwajalein Island.

Historically, many Marshallese base workers have fished on Kwajalein Island where fish are seriously contaminated with PCBs, arsenic and other hazardous materials.

The latest study also confirmed the results of earlier Army fish contamination studies and is sending out a warning that reef fish from the industrial and recreational areas of Kwajalein Islet should not be consumed.

(Adapted from: The Marshall Islands Journal & RNZI)



An aerial view of Kwajalein Island, headquarters of the US Army Garrison — Kwajalein Atoll. Reef fish in various areas of this island have been heavily contaminated by arsenic and PCBs from the Army's landfill and harbor industrial vessel operations (*Image: Giff Johnson- Source: Marshall Islands Journal*).

Pacific Islands' 'Operation Kurukuru' a success



One of the teams involved in Operation Kurukuru 2019. (Image: FFA)



Staff at the operation centre at the FFA Secretariat in Honiara. (Image: FFA)

The annual regional and multi-million dollar fisheries surveillance operation which was conducted between 7-18 October and led by the Pacific Islands Forum Fisheries Agency (FFA) based in Honiara, Solomon Islands completed successfully.

'Operation Kurukuru', one of the largest maritime surveillance operations globally covering around 21.3 million square kilometres of the Pacific Islands region, recorded around 131 boardings both at sea and dockside and found only 4 infringements this year.

According to Commander Robert Lewis, the FFA Surveillance and Operations officer who was seconded from the Royal Australian Navy, 'the fact that there were no unknown fishing vessels found during such thorough air surveillance coverage and only four infringements imposed from a high level of boardings is evidence that current regulations and law enforcement practices are working well'.

A total of 132 sea days of active patrolling and 540 flight hours of maritime air surveillance were completed within the 12 day operation.

The FFA Director-General Dr Manu Tupou-Roosen highlighted that the Operation Kurukuru is the largest of the four major operations coordinated and supported by the FFA each year and they empower members to take collective and national actions against Illegal, Unreported and Unregulated (IUU) fishing.

Furthermore Dr Tupou-Roosen added, "the success of these operations is due to the commitment and partnerships with our members along with assets provided by Australia, France, New Zealand and the United States'.

"The twelve-day operation consumes considerable resources, but we continue to undertake them to ensure our members have the highest levels of social and economic benefits through the protection and sustainable use of our offshore fisheries resources."

RFNS Kikau from the Fiji Navy also participated though joined in later and managed to sight and board six offshore vessels within Fiji's waters in six days.

(Adapted from: FFA news & FBC news online)

News from around the region

Fiji's Muanaira Women's Group sees promise in pilot mangrove oyster farm



Muanaira Women's Group members at their project site (Image:SPC).

It's hard work walking over sharp shells in the mud, reaching in amongst dense mangrove roots and chipping off oysters.

But members of Muanaira Womens Group have been doing this work for years, harvesting the oysters that cling to the roots of mangroves in the Rewa delta and dragging them back in buckets to be sorted and prepared.

Oysters here are a key part of life, used for consumption, for traditional purposes, and as a source of income when sold in Suva market as shelled oyster meat.

Scientists of Fisheries Research at Fiji Ministry of Fisheries have teamed up with SPC FAME aquaculture staff and the Vutia community to find out if there's an easier way to ensure a steady supply of edible oysters.

Observation of aquaculture techniques used overseas, and at Mago Island in Fiji, guided a spat-catching trial that started within the Vutia fishing grounds late last year when plastic sticks were set on wooden racks in shallow water.

The baby oysters that settled onto the sticks were collected in February this year as roughly ten-cent-sized shells, then counted and transferred to plastic-mesh baskets hanging on stakes.

After three months in culture, these oysters were checked and found to have grown rapidly.

The Muanaira Women's Group members are impressed by the size of oysters after only 3 months. Already many are about 3 ½ inches long and 2 inches wide. The fine-mesh nursery bags were starting to look very full, and the oysters needed thinning out.

New bags of wider mesh-size were made on-shore and the oysters size-graded and counted into the new baskets.

These were then re-attached to the poles that make up the Pilot Project farm, where the baskets hang in the sea with a rocking motion to produce nicely-shaped oysters with a deep cup.

It normally takes one and a half years to produce a good-sized edible oyster, but it looks like these ones could be ready for harvest in about one year.

With these promising results, the members of the Muanaira Women's Group are hopeful that their oysters will be more plentiful, easier to harvest, and provide more income to their community for generations to come.

More from: <https://www.spc.int/updates/blog/2019/08/fijis-muanaira-womens-group-sees-promise-in-pilot-mangrove-oyster-farm>

Low supply of albacore tuna forces 4 day week operations at Fiji's PAFCO

Fiji's Pacific Fishing Company (PAFCO) has reduced its operations to 4-day work week due to the shortage in supply of albacore tuna.

As reported by the Fiji Broadcasting Corporation news last month, the Chairman of PAFCO has confirmed that their albacore supplies were reduced to 16,500 metric tons from 23,000 metric tons this year and this has affected their normal business operations.

The Levuka based factory with around six hundred (600) full-time and four hundred (400) part-time workers has over the last two months been earning only eighty percent of what they would normally take because of the reduced working week.

Although confirmation is received that Bumble Bee Foods Company has filed for bankruptcy, the PAFCO chairman Mr Iqbal Jannif reiterated that PAFCO will not close as Bumble Bee does not own nor is a shareholder of the company.

To supplement this shortage, PAFCO has instead bought around 220 metric tons of skipjack tuna which arrived in early December and according to Mr Jannif, this shipment of skipjack tuna will be processed for Bumble Bee Foods on a trial basis.

There are plans that if the trial of skipjack tuna is successful in terms of quality and pricing then more skipjack tuna will be taken in for processing for Bumble Bee Foods, thus increasing the value of fish PAFCO gets.

However, the PAFCO chairman has highlighted the need for the company to diversify and explore other options with the hope of increasing production well ahead of current targets for Bumble Bee.

The Minister for Fisheries in Fiji, Mr Koroilavesau who recently returned from the 16th Western and Central Pacific Fisheries Commission (WCPFC) meeting in Papua New Guinea said that discussions have been held with Pacific Island neighbours in the north for access to tuna resources in their Exclusive Economic Zones (EEZ) at a lower fishing-day fee.

This is to enable PAFCO to fish in the waters of some members of the Parties to the Nauru



The PAFCO factory in Levuka, Ovalau, Fiji.
(Image: FBC news)

Agreement (PNA) specifically the Solomon Islands, Vanuatu and Kiribati and keep the Levuka cannery in operation.

Meanwhile Bumble Bee Foods remains a food supplier in the US market and will continue its business partnership with PAFCO although ownership has changed.

Reports online stated that the company is one of North America's largest branded shelf-stable seafood companies and was purchased by affiliates of the Taiwan based Fong Chun Formosa (FCF) Fishery Company.

(Adapted from: fijivillage.com, tunapacific.org, FBC news)

Locals to benefit from seaweed processing workshop in Honiara

A four-day value added seaweed processing training conducted by Indonesian experts and facilitated by the Solomon Islands Ministry of Fisheries & Marine Resources (MFMR) in partnership with the Indonesian Ministry of Foreign Affairs was closed by the Acting Director of the Solomon Islands Fisheries Ministry on November 7.



Workshop participants and trainers. (Image: MFMR, Solomon Islands)

The seaweed training, the first of its kind to be carried out in the Solomon Islands according to the MFMR report, was attended by more than twenty locals.

Mr Bernie Buga, the Acting Director of the MFMR during his closing speech thanked the trainers from Indonesia for sharing their expertise and skills as well as the government of Indonesia through their Ministry of Foreign Affairs for making this training possible.

He also acknowledged the important role of the Solomon Islands Ministry of Foreign Affairs in enabling this training and new partnership with the MFMR.

Mr Buga highlighted the importance of this training to locals and stated, “when we think about seaweed, we only think about harvesting it from the wild and eating it fresh or even left to waste on the shores, polluting our beaches, without realising that it can be preserved or processed into lotion, candy or noodle, juice or soap and turn it into an income generating commodity”.

The Acting Director also encouraged all participants to share the knowledge and skills gained from this training with others in the community.

“I expect you (participants) to pass on the knowledge gained because it was not meant for yourselves only but the skills gained from the workshop should be shared with the communities”, Mr Buga stressed.

Noting that one of the participants was a representative from the Solomon Islands National University’s (SINU) School of Fisheries, the Acting Director added that it would be good if the school includes seaweed processing in their training programme.

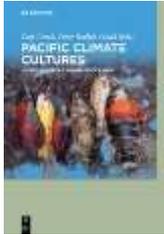
Representing the participants and facilitators, Mr Really Wibowo shared how encouraging the workshop was and acknowledged the learning experiences and commitment shown by all during the training.

The equipment and resources used during this training will be kept by the Aquaculture Division of the MFMR for similar trainings in the future.

[End]

(Adapted from: Solomon Islands MFMR News)

New Additions to PIMRIS (Lower Campus) Library



Pacific cultures: Living climate change in Oceania / edited by T. Crook & P. Rudiak-Gould. Warsaw, Berlin: De-Gruyter, ©2018. ISBN: 9783110591415.

Pacific Climate Cultures aims to bring Oceanic philosophies to the frontline of social science theorization. It explores the home-grown ways that 'climate change' becomes absorbed into the combined effects of globalization and into a living nexus of relations amongst human and non-humans, spirits and elements.

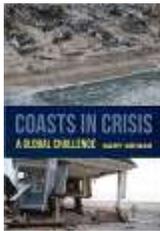
<https://www.degruyter.com/view/product/502004#>



Climate change and ocean governance: Politics and policy for threatened seas / edited by P.G. Harris. Cambridge, UK: Cambridge Uni. Press, ©2019. ISBN: 978 1108502238.

This book brings together authors from political science and cognate disciplines to examine the political and policy dimensions of climate change for our oceans.

<https://www.cambridge.org/core/books/climate-change-and-ocean-governance/DEFCEBADE5A6BEE13EED457B8C54F108D#fndtn-information>



Coasts in crisis: a global challenge / Griggs, G. Oakland, Calif.: Univ. of California Press, © 2017. ISBN: 978-0520293625.

Coasts in Crisis is a comprehensive assessment of the impacts that the human population is having on the coastal zone globally and the diverse ways in which coastal hazards impact human settlement and development.

<https://www.amazon.com/Coasts-Crisis-Challenge-Gary-Griggs/dp/0520293622>



Invasive species: Risk assessment and management / edited by A. Robinson et al., Cambridge, UK: Cambridge Uni. Press, ©2017. ISBN: 978 0521765961.

This book presents a comprehensive review of risk-based techniques that help policy makers and regulators protect national interests from invasive pests and pathogens before, at, and inside national borders.

<https://www.amazon.com/Invasive-Species-Risk-Assessment-Management/dp/052176596X>



Vast expanses: A history of the oceans / Rozwadowski, H. M. London, UK: Reaktion Books, ©2018. ISBN: 9781780239972..

Vast Expanses is a cultural, environmental and geopolitical history that examines the relationship between humans and oceans, reaching back across geological and evolutionary time and exploring different cultures around the globe.

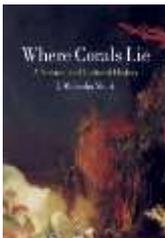
<http://www.reaktionbooks.co.uk/display.asp?ISBN=9781780239972>



At home on the waves: human habitation of the sea from Mesolithic to today / edited by TJ King & G. Robinson. 1st ed. New York: Berghahn Books, c2019. ISBN: 9781789201420.

This collection explores the variety of ways in which people have long made themselves at home at sea, and continue to live intimately with it. In doing so, it brings together both ethnographic and archaeological research – much of it with an explicit Ingoldian approach – on a wide range of geographical areas and historical periods.

<https://www.berghahnbooks.com/title/KingAt>



Where corals lie: a natural and cultural history / by JM Schick. London, UK: Reaktion Books, c2018. ISBN: 9781780239347.

This book uniquely treats the many manifestations of corals in biology and geology; how diverse corals came to figure in art, expeditionary accounts, medicine, folklore, geopolitics, and international trade; and corals as builders of islands and protectors of coastlines, and as building materials themselves.

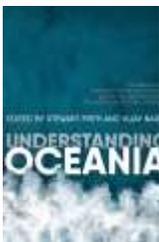
<http://www.reaktionbooks.co.uk/display.asp?ISB=9781780239347>



The tectonic plates are moving / by Livermore, R. Oxford: Oxford University Press, c2018. ISBN: 9780198717867.

This book explains modern plate tectonics in a non-technical manner, showing not only how it accounts for phenomena such as great earthquakes, tsunamis, and volcanic eruptions, but also how it controls conditions at the Earth's surface, including global geography and climate.

<https://global.oup.com/academic/product/the-tectonic-plates-are-moving-9780198717867?cc=fj&lang=en&#>



Understanding Oceania: celebrating the University of the South Pacific and its collaboration with The Australian National University / edited by S. Firth & V. Naidu. Acton, A.C.T.: ANU Press, c2019. ISBN: 9781760462888.

This book is inspired by the University of the South Pacific, the leading institution of higher education in the Pacific Islands region. It celebrates the collaboration of USP with The Australian National University in research, doctoral training, teaching and joint activities.

<https://press.anu.edu.au/publications/series/pacific/understanding-oceania>



Kusima mada: Fiji's first sustainable seafood cookbook / Mangubhai, S. & Allport, J. Suva, Fiji: Wildlife Conservation Society, c2019. ISBN: 9780990385240.

The cookbook has over 80 original, healthy, mouthwatering recipes and beautiful pictures celebrating the role of women in fisheries sector. The cookbook uses delicious, easy-to-make seafood recipes and vibrant photographs to recognise and celebrate fisherwomen and the vital role they play in terms of food security and livelihoods to support their families.

<https://fiji.wcs.org/News-Room/ID/12903/Kusima-mada-is-now-available-for-purchase.aspx>

Conferences, Workshops & Events Jan – Jun 2020

- | | |
|----------------|---|
| 22 – 24 Jan | <p>Transformed and Transformative Ocean Governance Conference 2020. Nelson Mandela University, Port Elizabeth, South Africa.
Web: https://cmr.mandela.ac.za/Events,-Initiatives-and-News/Transformed-and-Transformative-Ocean-Governance-Co</p> |
| 9 – 12 Feb | <p>Aquaculture America 2 – Hawaii Aquaculture: A Tradition of Navigating with Innovation. Hawaii Convention Center, Honolulu, Hawaii. Web: https://www.was.org/Meeting/pdf/AA2020RegBro.pdf</p> |
| 30 Mar – 3 Apr | <p>Climate Change in the Asia-Pacific Region: From Environmental Aspects to Socio-Economic Impacts. The conference will focus on inter-disciplinary studies, and will regroup specialists from all disciplines involved in the study of climate change impacts..
XVI Rencontres du Vietnam, Quy Nhon.
Web: https://www.icisequynhon.com/conferences/2020/climate-change/</p> |
| 20 – 24 Apr | <p>10th Pacific Island Conference on Nature Conservation and Protected Areas. <i>International Coral Reef Initiative.</i> Noumea, New Caledonia. Aim: 'to review progress on the achievement of global conservation targets (Aichi targets) and to influence the global vision for conservation beyond 2020. Web: https://www.icriforum.org/meeting/10th-pacific-islands-conference-nature-conservation-and-protected-areas</p> |
| 21 – 23 Apr | <p>International Symposium on Plastics in the Arctic and Sub-Arctic region. Reykjavik, Iceland. The Symposium is expected to build a foundation of science and deliver information and advice to decision makers. Web: https://www.arcticplastics2020.is/index.php/en/</p> |
| 2 – 6 Jun | <p>2020 UN Ocean Conference, The General Assembly through resolution 73/292 decided to convene the 2020 United Nations Conference to Support the Implementation of Sustainable Development Goal 14. Lisbon, Portugal. Web: https://oceanconference.un.org/#home</p> |
| 11 – 19 Jun | <p>IUCN World Conservation Congress – ‘One Nature, One future’. Marseille, France. Web: https://www.iucncongress2020.org/</p> |
| 14 – 17 Jun | <p>Sustainability Research & Innovation 2020. Brisbane, Australia. SRI2020 will be a unique gathering to connect those at the forefront of sustainability science, innovation, funding, communication and implementation across sectors and disciplines. Web: https://sri2020.org/</p> |
| 21 – 25 Jun | <p>EcoSummit 2020. <i>Building a sustainable and desirable future: Adapting to a changing land and sea-scape.</i> Gold Coast, Queensland, Australia.
Web: http://ecosummitcongress.com/</p> |