

# SPREP's role in supporting EIA in the Pacific



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- Who is SPREP?
- SPREP's work in in EIA; a brief history
- The Pacific Context
- Issues with EIA in the Pacific
- How SPREP is attempting to address gaps



### Who is SPREP?

The Secretariat of the Pacific Regional Environment Programme – SPREP

An intergovernmental agency officially established in 1993 by the Governments and Administrators of Pacific countries 's

- Recognised as the lead on biodiversity, climate change, waste management and environmental monitoring and governance in the Pacific Region
- Focus on strengthening partnerships and cooperation among Pacific Island countries & territories.
- To provide assistance in protecting and improving the environment and to ensure sustainable development for present and future generations

## Pacific Ocean 21 Pacific Island Countries and Territories Land Area: ~553,000 km2 (~30,000 islands) EEZ + Territorial seas area : 30,000,000 km2 (~10% of the World's Oceans)





### **Developing capacity**

Providing Environmental Impact Assessment (EIA) support through in-county training and producing regionally focused EIA guidelines

#### 1989

 How to assess environmental impacts on tropical islands and coastal areas SPREP training manual Richard A. Carpenter and James E. Maragos Editors (sponsored by ADB) Including inputs from USP, University of Hawaii, University of Papua New Guinea

#### 1993

 SPREP: A guide to environmental impact assessment (EIA) in the South Pacific Produced by Dr Richard Morgan (who also helped with the latest Regional Guidelines published in 2016)

#### 1994

Environmental guidelines for coral harvesting operations

#### 1996

• Environmental Impact Assessment Guidelines for Mine Development and Tailings Disposal at Tropical Coastal Mines

#### 2016

- Strengthening Environmental Impact Assessment: Guidelines for Pacific Island countries and territories (English and French)
  2018
- Environmental impact assessment: guidelines for coastal tourism development in Pacific island countries and territories (English and French)



#### So why are we still training?



Some 30 million sq km;
An area larger than the moon.
98% water; 2% land

Pacific Oceanscape

SPREP

PROE





 To understand why training and guidelines are still be delivered and developed – lets take a step back and see the bigger picture

- The Pacific Islands region hosts some of the world's most threatened species... our waters are home to some of the world's most endangered marine animals, many of which, such as whales and sharks, were heavily over-exploited by commercial hunting by countries from outside the region. Others, such as turtles and dugong are now directly threatened by climate change and habitat loss.
- The world's largest remaining stocks of tuna, providing approximately a third of the world's catches of tuna and related species, and now is being viewed a rich source of rare earths and deep sea mining .

Our region is the most diverse oceanic island region in the world – 30,000+ islands, over 1,000 languages and with the exception of Papua New Guinea, small land areas BUT enormous areas of ocean within their EEZs. Our Pacific islands are Large Ocean States.



- Environment is under enormous pressures
- Key drivers for EIAs are primarily the same human activities seen else but...
- Exacerbated by Climate Change impacts
- Waste
- Minimal land options (in many cases)
- Small or inexperienced Environmental Agencies



## Key threats to the environment

- Population increase and modernisation
- Urban and agricultural expansion, poor land-use practices, impacting downstream coastal and reef ecosystems.
- Increased demand on marine resources estimated 115,000 tonnes of fish of additional fish will be needed within 15 years to meet the demands for good nutrition in the region.
- Land based pollution and waste plastics impacts on corals, marine mammals, sea turtles and fish, and ultimately through the food chain to humans.
- Increasing shipping and industrial pressures marine pollution, vessel strikes injuring and killing whales and turtles; introduced and invasive marine species.



## Threats by human impacts to the environment







There are multiple human impacts resulting from a range of human activities including waste, marine pollution (plastics), logging and mining, illegal and over-fishing. There are now emerging risks associated with exploration of the seabed for deep sea mining.





### Key threats from the Environment

- **Due to Climate impacts** (sea level rise, sea temperature rise, droughts, Ocean acidification, and more frequent and extreme storms)
- Climate change has already seen severe impacts in the region, some places may become uninhabitable – repeated super-high tides, saline drinking water, dead crops
- Relocation is considered a last resort
- But it has happened in the Pacific (Cateret islands- PNG; Lateu in Torba province, Vanuatu)
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### Climate Impacts Natural Disasters







#### Notes

- One of the consequences of global warming is that cyclones, which have always been a natural hazard in the Pacific, are now more powerful, with more devastating impacts on island communities.
- Climate change is a concern of today, and the Pacific Islands acutely recognise this. Some Pacific island countries experience up to four times greater sea-level rise than the global average of 3.2 millimetres (mm) sea-level rise per year.
- In the Solomon Islands, communities have already been displaced and islands lost due to sea level rise.
- In 2016, elevated sea surface temperatures caused fish-kills in Fiji and Vanuatu and led to a global coral bleaching event that has resulted in wide-spread coral mortality. Warmer and more acidic oceans in the near future will be even more susceptible.
- Climate change is also driving more severe storms, and in the past few years, the Pacific islands region has experienced two devastating cyclones.



#### Atolls at risk



Pacific island communities are vulnerable to climate change and natural disasters. The EIA process should give consideration to climate change and disaster risk management, to promote resilient development. Photo: Melanie Bradley



Notes

- Sea level rise is one of the greatest threats to Pacific Islands, especially low lying atolls.
- 4 out of the 6 lowest countries in the world are from the Pacific
- Republic of the Marshall Islands, Tuvalu, Kiribati, and Tokelau
- Maximum elevation no more than 2 metres above sea level.
- Rates of sea-level rise are increasing; some islands are four times greater than the global average.
- At least eight low-lying islands in the Pacific Ocean have disappeared under rising seas.
- Sea levels are currently climbing by an average of 3 millimetres per year around the world due to climate change.





### Displacement in the Pacific

• World Bank report (March 2018) predicts 180,000 people living in the low lying countries of Kiribati, Tuvalu, Republic of the Marshall Islands, Tokelau and atolls in some larger Pacific Island countries – will be most significantly affected by climate related internal and cross border migration







- Low-lying atoll islands, such as those in the Marshall Islands, Kiribati and Tuvalu are now under sustained threat. Even without the impacts of cyclones, sea-level rise is impacting the inhabited parts of many islands, and 'king tides' now wash through many homes every year even in calm weather.
- All of these events create enormous socio-economic impacts and costs to Pacific island countries.
- SLR is leading to migration from vulnerable areas to higher ground but this is placing pressure on the limited resources in those areas. Migration is also leading to the loss of skilled people as they move out of the Pacific seeking opportunities.





Changing role of Impact Assessments

- A robust EIA need to include an assessment of the impacts arising from environmental hazards and environmental change, such as impacts from storms and cyclones, climate change and coastal erosion.
- Within the Pacific, due to expanding and resettlement of populations due to decreasing land effective public consultation is key
- Impact Assessments need effective Mitigation Plans





The garbage disposal area of Majuro Atoll Waste Company. The mountain of garbage reaches around 10 meters tall in some places. (Photo: The Embassy of Japan in Marshall)





- There are multiple human impacts resulting from a range of human activities including waste, marine pollution (plastics), logging and mining, illegal and over-fishing.
- In some cases the options to deal with one challenge exacerbate the effects of the others.





- PICTs have and are updating their environmental legislation
- SPREP is working with Environmental Agencies to upskill personnel
- Information sharing between PICTs
- Raising awareness on benefits of EIA for promoting sustainable development across the community (inclusion of wider stakeholders).
- Emphasis on stakeholder engagement and mitigation hierarchy
- Assisting countries access funding