



Green, Clean,, & Blue

Dealing with littering and pollution on Betio City to produce a **green** land environment
for a cleaner **blue** thriving marine ecosystem

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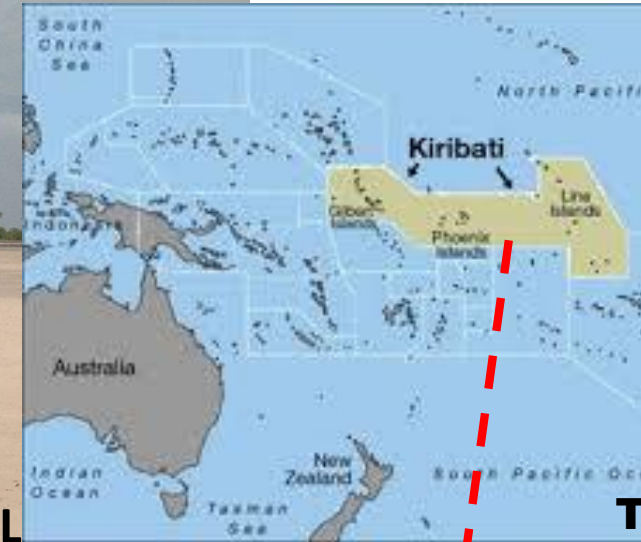
August 2021

Presentation Outline

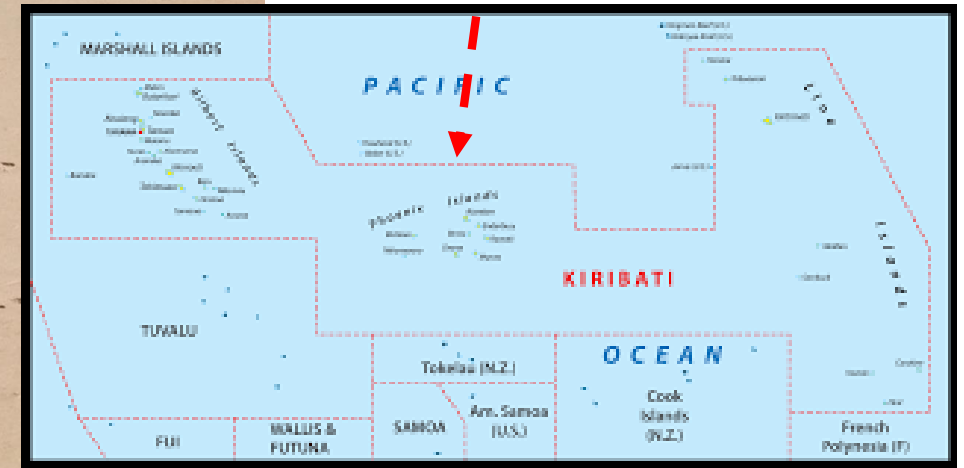
- Background information – What and where is Kiribati, KiLGA and the Betio Town Council?
- Importance of the Marine Environment for Kiribati
- Government Laws and Plans on Marine Environment
- Pacific Networks on Promoting a Clean and Sustainable Marine Environment
- Betio Town Council's Green, Clean and Blue Programme
- The Phoenix Islands Protected Area
- Challenges & Opportunities
- Conclusions and Recommendations

Background: About Kiribati

- 33 tiny coral atolls – 21 inhabited; land area 811 sq.km)
- Location: NE of Australia, in the Pacific Ocean, where the **IDL** crosses the **Equator**;
- Huge ocean of 3.5 million square km;
- Population: 120,000; of Micronesian race; Language: Austronesian;
- Government: Elected House of Parliament; Current President – HE Taaneti Maamau (see photo);
- Former British Colony; independent from UK on 12 July, 1979;
- Main economy: Copra oil industry; Remittance from workers on merchant ships in Germany, seasonal employment in NZ and Australia; tourism; fish & marine resources exports .



**President
Taaneti Maamau**



Background—Local Government

- 23 Councils, established in the 1970s, 1980s, with the last one, Christmas Urban Council in 2006;
- Deals with government affairs at the island/ town level;
- Councils are headed by elected Mayor and elected Councillors; supported by the Clerk and officials;
- 3 urban Councils – Teinainano Urban, Kiritimati Urban and Betio Town, Councils;
- Councils look after and make bye-laws on the use and management of marine resources in their areas;
- KiLGA is the LGA for all 23 Councils, established in 2012; a member of UCLG ASPAC from 2016; also a member of the **Commonwealth Local Government Forum** and **ICLEI**;
- KiLGA runs Mayors Forum every two years; Photo shows all 23 Mayors during the Mayors Forum on Maiana in Dec. 2020.



Background—About the Betio Town Council (BTC)

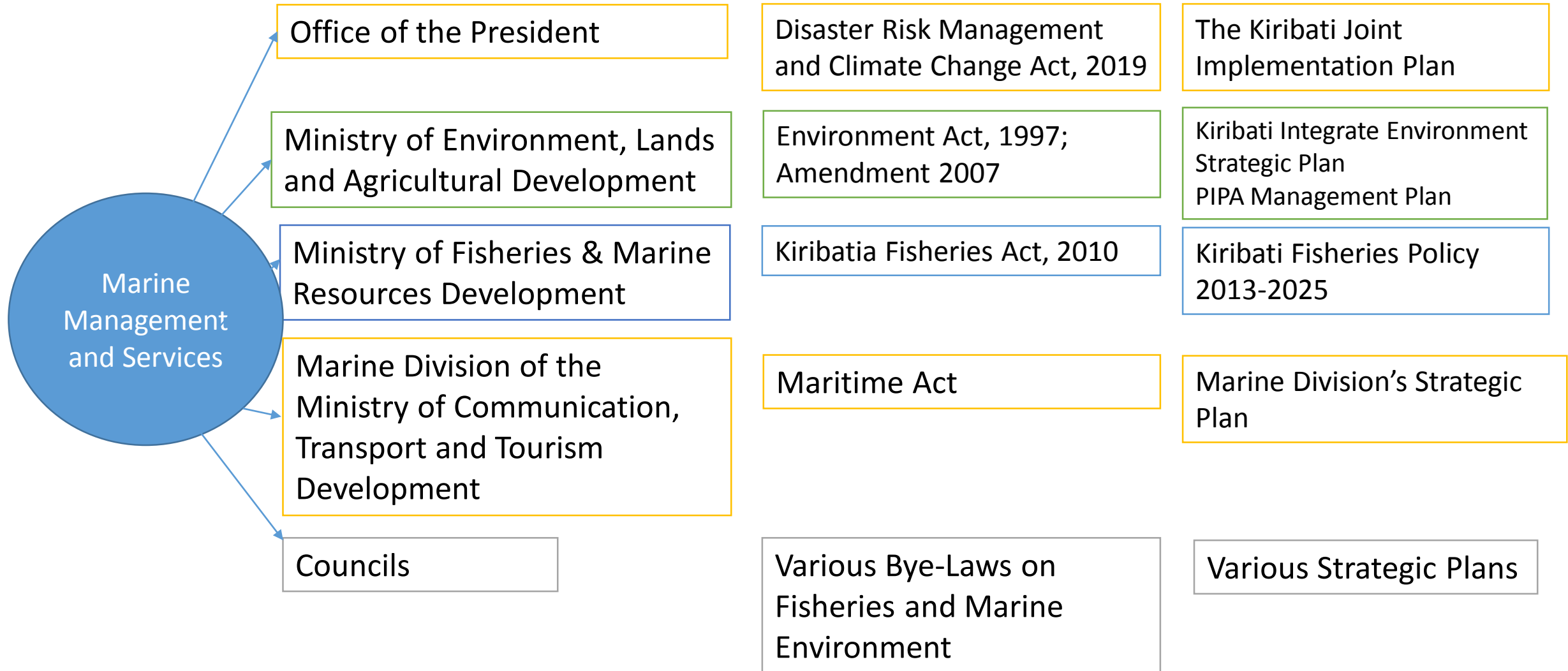
- BTC [Profile](#)

Importance of the Marine Environment for Kiribati

- Kiribati as a Marine country
- Marine as the connection and an essential barrier (against COVID 19)
- Sea Food Basket for the People
- Fisheries industries
- Fishing, Surfing and other tourism in the Line and Gilbert Islands
- Inter-island transport
- About the Phoenix Islands Protected Islands (PIPA), a World Heritage Marine Protected Area (see photo)



Kiribati's Laws and Policies on Marine Environment Management



The Kiribati Environment Amendment Act of 2007 on Littering

- Defines 'Litter' as – 'includes waste, refuse, debris and rubbish, but does not include vegetation'
- Sect. 12.(1): 'Litter must be placed – a. in a contained manner; b. separate from vegetation matter; and, c. in a place where it will be collected for disposal';
- (2) – Littering is an offence – fine \$500 or imprisonment for 1 month;
- (3) - Areas included a. South Tarawa; c. Kiribati waters; d. Kiribati's EEZ;
- Sect. 15. Pollution of Waters (including the lagoon and ocean) – an offence. Fine – Max of \$100,000 or 5 years' imprisonment;
- Sect. 16 – Dumping in the sea or lagoon – An offence. Fine - max of \$10,000 or 2 years' imprisonment;
- Sect. 23 – Harming coral reefs, mangroves and sea grass beds – offence with a fine of max of \$10,000; 2 years' imprisonment;
- Sect. 24 – Harming a protected species or its nest or dwelling place - offence with a fine of max of \$10,000; 2 years' imprisonment;
- Sect. 55 – Removal of litter – Person will be asked to remove litter by the Environment Inspector or face a fine of \$500, or 1 month imprisonment;
- Sect. 58 – Clean up Notices – The Environment Inspector may issue notice to persons to clean up their mess

Ministry of Fisheries Legislations & Policies

- Fisheries Act
- Kiribati National Fisheries Policy, 2013-2025
- 1. Support **economic growth** and **employment** opportunities through **sustainable** fisheries, aquaculture and marine resources development.
- 2. Protect and secure **food security** and **sustainable livelihoods** for I-Kiribati.
- 3. Ensure **long-term conservation** of fisheries and marine ecosystems.
- 4. Strengthen **good governance** with a particular focus on building the capacity of MFMRD to implement and support fisheries management, development, and monitoring, control and surveillance.
- 5. Build **climate change resilience** for fisheries and marines resources in Kiribati.
- **Contains 34 Strategic Actions**



Strategic Action 3:
Implement Community-
Based Fisheries
Management (CBFM).

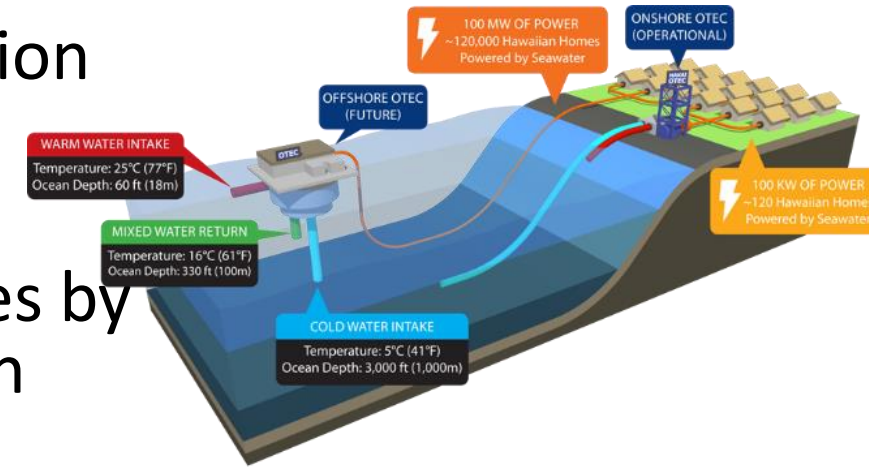
Strategic Action 26: Develop and implement marine pollution standards that address ballast water, ship and land-based pollution, and introduced/invasive species in relation to both national and regional obligations.

Pacific Networks on Promoting a Clean and Sustainable Marine Environment

- Pacific Island Forum's Policy and Framework - Pacific Islands
- VISION - A healthy ocean that sustains the livelihoods and aspirations of Pacific Island communities.
- GOAL - The goal of this Policy is to ensure the future sustainable use of our ocean and its resources by Pacific Islands communities and external partners.
- GUIDING PRINCIPLES
 - Improving our Understanding of the Ocean
 - Sustainably Developing and Managing the use of Ocean Resources
 - Maintaining the Health Of the Ocean
 - Promoting the Peaceful Use of the Ocean
 - Creating Partnerships and Promoting Cooperation

International Collaboration to conserve, develop sustainably and preserve marine resources

- Collaboration by PIPA stakeholders – Conservation International, Waite Foundation, New England Aquarium, National Geographic,
- Support to the Waste Management Programmes by the Governments of Australia, NZ, the European Commission, GIZ of Germany,
- Collaboration with UCLG Members on Waste-to-Energy Technologies
- Collaboration with the Korean Government on the establishment of OTEC power using the ocean of Tarawa, (see Diagramme)



Betio Town Council's 'Green, Clean and Blue' Programme

- Part of BTC's Strategic Plan 2021-2025;
- Initiative of the PIPA Trust Fund's 'Bringing PIPA Home' Scheme;
- Based on the following objectives – 1. Clean the land, 2. Plant trees; make gardens; 3. Blue ocean when 1 and 2 are in place;



Ms. Botika Maitinnara, Mayor of Betio, with volunteers who cleaned up the Betio Roundabout (arrowed)

Betio Town Council's Green, Clean and Blue Programme (cont.)

- Managing its existing land fill on Famous Red Beach, to minimise risk of leaching to marine environment (see photo at top)
- Training of Waste Management Team consisting of a dozen workers (see bottom photo)
- Manage littering and pollution by daily clean up;
- Public-Private-People partnership to tackle waste
- Collaboration with New Zealand Government and Local Government Association for training of staff;
- Encouraging home gardening with JICA's Assistance;
- Procurement of basic waste management equipment



The Phoenix Islands Protected Area

- PIPA was declared in 2006, by 4th President, H.E. Anote Tong.
- Atoll and reef island archipelago with unique values still unspoiled, including pristine coral reefs, abundance of fish, marine wildlife, and important seabird populations.
- PIPA has 8 islands with Kanton Island - 24 people – mostly government officials and families
- Total area - 407,112 sq.km (157,187 sq. miles) – largest MPA in the world;
- The Management Plan 2015-2020 has 4 strategic priorities viz. 1. Conservation of the Environment and Key Species; 2. Protection of historical and cultural sites; 3. Managing multiple use sustainable activities and 4. Facilitate research, education and training.

PIPA location and undersea topography

Location of the Phoenix Islands Protected Area



PIPA boundary
submerged reef
EEZ boundary
©2008 K.Koenig, CI Maps

scale: 1/23,000,000
projection: Sinusoidal
central meridian: 180°
datum: WGS84
acknowledgements:
New England Aquarium

data:
Conservation International -
Pacific Islands
EEZs of the World, Flanders
Marine Institute
VMap0, National Geospatial
Intelligence Agency



Depth of Seafloor
0 -4500 -6100 m

Data Sources:
National Geospatial Data Center
Earthdail.org

©2008 K.Koenig, CI Maps
Conservation International - Pacific Islands
EEZs of the World, Flanders Marine Institute
VMap0, National Geospatial Intelligence Agency

Challenges

- Ineffective enforcement of legislations;
- Insufficient financial and technical resources by BTC
- Lack of capacity by the BTC;
- Rising overcrowding and informal settlements;
- Lack of access roads to many communities
- Climate Change – Rising sea temperatures are causing widespread coral bleaching, esp. in the PIPA area (see photos);
- Political interference to programmes



Opportunities

- Small land size
- Technologies
- Good plans
- Increasing training

Conclusions

- A healthy marine environment has always been essential to subsistence, commercial and other uses for Kiribati and needs to be protected;
- Kiribati's marine resources contribute to the nation's local development and international engagements and agreements, so existing laws and plans need to be effectively implemented;
- Poor financial and technical capacity of Betio Town Council to deal with pollution need to be developed through partnerships, locally, regionally and internationally;

Recommendations

- Betio Town Council (BTC) revises its Strategic Plan to focus on the Clean, Green and Blue Programme, and seek resources for its implementation;
- BTC, with the assistance of KiLGA, seek best practices from UCLG ASPAC Secretariat and members to provide technical assistance;
- BTC, with the assistance of KiLGA, seeks financial and technical resources from development partners, including NZ, Australia, China, Japan and others;
- There are benefits to the protection and conservation of Kiribati's marine environment that can be effective when all stakeholders give a hand.

Closing Remarks

- The ocean is a source of wealth for Kiribati, providing vast resources for family living and commercial development;
- It is an important barrier that has allowed Kiribati to remain COVID-19 free
- But it can be the end of Kiribati, as its waters are rising, slowly but surely, to eventually inundate the flat and tiny islands and perish the Kiribati race from the face of the Earth.
- Let us collaborate to save our country and our planet from Climate Change.
- [Video](#) on PIPA by Yasmeen Smalley New England Aquarium May 2014