

## Atoll Adaptation Dialogue, 30 April 2019: Summary Note

### Background

Officials from the world’s four atoll nations gathered on 30 April 2019 for a dialogue on climate change science, security, and adaptation, along with representatives of regional organizations, academic institutions, and development partner organizations. The objectives of dialogue were to discuss the latest climate science, trends, and projections; consider the future impacts and implications of accelerating climate change on atoll nations; share experiences and knowledge; and identify ways to work more closely to address the exceptional challenge faced by atoll nations.

While leaders of the four atoll nations, plus Tokelau, have met on several occasions since 2014 through their Coalition of Atoll Nations Against Climate Change (CAN-CC), there had not been any previous meetings of working-level officials from the countries. The event was co-organized by Secretariat of the Pacific Community (SPC) and the Government of the Marshall Islands. Marshall Islands President Hilda C. Heine welcomed the participants by video link, remarking that:

*“We face extraordinary and exceptional circumstances. As a block of atoll nations we need to highlight the urgent need for support for atoll adaptation. We should find ways to sustain our dialog and identify concrete ways to work together as atoll nations.”*

### Topics Presented and Key Takeaways

The dialogue was structured around six presentations followed by open discussion. Three presentations focused on global, sectoral, and atoll level climate trends and impacts, and three highlighted country responses and approaches to adaptation. The presentation titles, presenters, and key takeaways are summarized below.

<b><i>Global Climate Change in a Pacific Context</i></b> Kathleen McInnes, CSIRO, Climate Science Centre, Oceans and Atmosphere	<b><i>Climate Change Impacts on Atolls and Coastal Adaptation</i></b> Arthur Webb, UNDP Tuvalu Coastal Adaptation Project	<b><i>A Sectoral Focus on Atoll Adaptation</i></b> Andrew Jones, SPC Geoscience, Energy, and Maritime Division
<ul style="list-style-type: none"> <li>- Atolls very vulnerable to sea level rise (SLR) and SLR extremes, including from distant-source wave events</li> <li>- Limited baseline data and in-situ observations (including bathymetry) on which to build and test models</li> <li>- A range of factors contribute to extreme sea levels</li> <li>- SLR will reduce wave and wind setup but increase wave energy reaching shore</li> <li>- Extreme rainfall projected to increase and tropical cyclone translation speeds may decline</li> <li>- Chance of multiple hazards coinciding is increasing</li> </ul>	<ul style="list-style-type: none"> <li>- Everything on atolls is part of coastal system</li> <li>- True long-term coastal adaptation has not yet begun, but time running out</li> <li>- More frequent flooding reflects gradually increasing baseline of sea level</li> <li>- No berm = no island</li> <li>- Urbanization interacts with CC to raise vulnerability</li> <li>- True adaptation will require large-scale works, brave thinking, and large budgets</li> <li>- Staged reclamation should be considered</li> <li>- Misunderstanding of shoreline dynamics and SLR can result in mal-adaptation</li> </ul>	<ul style="list-style-type: none"> <li>- Atolls are fundamentally different than volcanic islands in many respects, such as energy, agricultural, and water resources</li> <li>- CC is having compounding impacts on atoll sectors</li> <li>- With adaptation, timing is everything</li> <li>- Island building can be rapid, although not currently in the Pacific</li> <li>- Science can do more than identify the problem</li> <li>- Future scenario or probabilistic modelling allows us to make risk informed decisions</li> </ul>

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<b>Maldives: Climate Change Impacts, Vulnerabilities, and Adaptation</b> Amjad Abdulla, Ministry of Environment	<b>Kiribati: Key Vulnerabilities, Priorities, Initiatives, and Way Forward</b> Choy Yeeting, Climate Change Office	<b>Marshall Islands: Ensuring Survival, Approach to Adaptation</b> Ben Graham, Government of the Marshall Islands
<ul style="list-style-type: none"> <li>- Current and future climate trends a key concern</li> <li>- SLR increasing risk exposure</li> <li>- Efforts to address impacts divert funds away from government functions</li> <li>- Government zoning archipelago; can't protect all sites</li> <li>- Vulnerabilities to CC: land loss, beaches, communities, reefs, economy, water, fisheries, health, food security, and tourism sector</li> <li>- Coastal protection is costly</li> <li>- Do nature based solutions work given the urgency, frequency, and magnitude of problem?</li> <li>- Multiple adaptation actions in key areas: food security, health, tourism, etc.</li> <li>- Adaptation approaches different in urban centers, lightly populated islands, remote islands</li> <li>- Atoll nations should be cautious in working in isolation from the larger SIDs grouping</li> </ul>	<ul style="list-style-type: none"> <li>- Key vulnerabilities for atolls include low-elevation, isolation, small land areas, highly concentrated populations, etc.</li> <li>- National CC priorities include: water and sanitation, coastal protection, renewables</li> <li>- Adaptation priorities set out in a range of national and local level plans; and through a range of projects</li> <li>- Temaiku plan aims to raise \$400 million to reclaim and develop wetlands for resettlement</li> <li>- Kiribati National Experts Group (KNEG) is a key body on CC and DRM</li> <li>- Going forward, priorities include integrated vulnerability assessments, island strategic plans, and reviewing strategies based on latest science</li> <li>- Priority projects under preparation with ADB/WB/GCF (water and sanitation), GCF (coastal projection), and CIF (renewable energy)</li> </ul>	<ul style="list-style-type: none"> <li>- Still developing approach to adaptation, forming National Adaptation Plan (NAP)</li> <li>- Climate trends tell of increasingly inconvenient truths</li> <li>- Accelerated adaptation is now needed</li> <li>- Early principles are important: the natural right for people to remain, a fundamental focus on resilience, a knowledge-first approach, etc.</li> <li>- Adaptation is needed for security, identify, well-being, self-determination, and ultimately survival</li> <li>- Adaptation horizons: currently focused on conventional actions, but more radical efforts (2<sup>nd</sup> horizon) will be needed</li> <li>- Migration an option but problematic</li> <li>- Elevation is costly but possibly the best option</li> <li>- Need to identify gaps, plausible scenarios, and accelerated support</li> <li>- What if conditions rapidly deteriorate?</li> </ul>

## Adaptation Principles

The Marshall Islands delegation presented a set of key principles that underpin that country's approach to adaptation, which have broader relevance to all the atoll nations, as follows:

1. **Right to remain:** citizens of atoll nations have a natural right to remain in their homelands and this right should be protected
2. **Resilience imperative:** from here forward resilience must be a fundamental focus across all sectors and areas of atoll development; building resilience to climate and disaster risks is an imperative given the high and unique vulnerability of atolls
3. **Integrated adaption:** climate change is complex and multidimensional, therefore efforts to adapt must be multidimensional and integrated, considering both the physical and non-physical dimensions

4. **Knowledge first:** atolls should follow a knowledge first principle, identifying key knowledge gaps, and using science and evidence-based decision making
5. **Adaptive capacity:** adaptive capacity needs to be strengthened to improve the ability to respond to changing circumstances; as conditions are likely to deteriorate, atoll nations will need to be dynamic in their ability to adapt
6. **Consensus and inclusion:** adaptation should go hand-in-hand with consultation and consensus building, so that the views of all stakeholders are taken into account
7. **Technology and tradition:** adaptation approaches should embrace innovation and modern technology as well as traditional knowledge

## Key Discussions and Next Steps

The open discussions covered a wide range issues, concerns, and ideas. In summary, given the climate change patterns and projections and the unique vulnerability of atolls, participants recognized the importance of:

- Accelerating adaptation planning, actions, and investments
- Addressing data and broader knowledge gaps, including through the possible establishment of an Atolls Center of Excellence
- Developing credible long-term adaption plans at the national, sector, and local levels, with a fundamental focus on building resilience to climate and disaster risks
- Continuing dialogue, knowledge-sharing, and collaboration among atoll nations and development partners, at both working/technical level and at the highest level, among leaders
- Continuing to raise awareness on the unique circumstances of atolls, taking advantage of major upcoming events and scientific reports and publications