Title of Proposed Panel

(Sentence case, maximum 200 characters, including spaces)

Tracking adaptation: methods, evidence and challenges

Summary of proposed panel. This should outline an introduction of the objective/ purpose of the panel and contribution to new knowledge or practice

Maximum 1500 words, excluding title and references

In 2023, the UNFCCC completed the first global stocktake to track progress towards the three goals of the Paris Agreement (Article 7), including the global goal on adaptation, which aims to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change. During this process governments, not-for-profits, international organisations and researchers have shown increased interest in identifying and assessing the current state of adaptation within their jurisdictions. However, existing research demonstrates a lack of agreement on what information should be included in an adaptation stocktake. Few papers documenting existing methodologies have been published, and their purposes and methods differ substantially. Efforts to date demonstrate that measuring adaptation progress is conceptually, empirically, politically and methodologically challenging due to differing purposes and sectors and scales of analysis, difficulties in classifying activities as adaptation of one kind or another, and challenges in defining and measuring progress. This panel seeks to explore the challenges of adaptation tracking using examples of stocktake from Australia, the Maldives, and the Marshall Islands. The panel will explain the different approaches used, their rationales, and their strengths and weaknesses. Key findings are that: there is no perfect approach to adaptation stocktaking; different approaches are required for different contexts; a mix of methods and scales and analysis is likely to yield the most comprehensive picture of the state of adaptation; and assessments of 'progress' are challenged by the difficulties in evaluating adaptation.

INDIVIDUAL PANELLIST CONTRIBUTION

Moderator Details

Full Name: Dr Colette Mortreux **Organisation:** Monash University

Bio sketch (up to 50 words): Colette is a human geographer whose work focuses on climate change adaptation, disaster risk reduction and migration. She is interested in how environmental change impacts community development, and how communities make decisions in the context of uncertain environmental futures.

Panellists (minimum of three)
Full Name: Matt de Boer
Organisation: Adapterra

Bio (up to 50 words): Matt de Boer is a climate adaptation specialist and practitioner with 19 years of industry experience in NZ and Australia, and ten years in local government. A thought leader in community climate adaptation planning, risk and

resilience, Matt's specialty is navigating complex adaptation governance issues and translating research insights into practical community outcomes.

Full Name: Tia Brullo

Organisation: The University of Melbourne

Bio (up to 50 words): Tia is a human geographer with research interests in climate change adaptation, urban sustainability and development. She is currently a Research Fellow at the University of Melbourne, investigating planning and practice undertaken in Australia to understand what enables 'best practice' adaptation.

Australia's Adaptation Database: Insights from the first national stocktake of adaptation

Panellist 1 Contribution: (Maximum 250 words, excluding references)

Introduction: Identifying and assessing the state of adaptation to inform risk management, investment and decision making is one of the most crucial and enduring adaptation challenges. The process of conducting an adaptation stocktake raises significant conceptual and empirical challenges – including defining what is to be included as 'adaptation' - leading to a lack of agreement on suitable methodologies. This presentation summarises the methodology for, and findings from Australia's first national adaptation stocktake; an ongoing project which began in 2023.

Objectives:_This research aimed to understand develop and test suitable approaches for assessing progress in climate change adaptation in Australia.

Methodology:_Data was collecting using a staged approach which included surveys of adaptation professionals and consultation with key stakeholders. The structure used to classify and categorise the data collected was developed based on existing literature, tested and revised to improve suitability. This methodology offers a foundation for future stocktaking across different scales and sectors, while acknowledging the significant challenges of adaptation stocktaking.

Findings: Using this Australian Adaptation Database, analysing a sample of over 500 adaptation interventions, we highlight key trends in the type, location and hazards that Australia's adaptation is responding to, as well as emerging gaps. Finally, we discuss the need for this work to collaborate more closely with the private sector, and how adaptation data can be better crowdsourced in the future.

Panellist 2

Full Name: Sergio Jarillo and Ifham Hassan Zareer Organisation: The University of Melbourne and

Bio (up to 50 words): Sergio is an interdisciplinary social scientist with more than 15 years of experience conducting in-depth field-based research on the human dimensions of climate change adaptation in island communities. He uses collaborative and participatory approaches to advance bottom-up framings of climate change adaptation that can benefit communities. Ifham is an anthropologist with experience in climate change adaptation, protected area management and environmental conservation. She has also worked in UN-funded projects in gender and education in the Maldives.

Title of Presentation 2

Adaptation projects in the Maldives: A stocktake analysis

(Panellist 2 Contribution: Maximum 250 words, excluding references)

Introduction

As a low-lying island nation, the Maldives faces unique challenges in implementing climate adaptation measures. This research provides the first comprehensive documentation of adaptation projects across the Maldivian atolls, examining their implementation and effectiveness on the ground.

Objectives

This study aims to create a systematic inventory of adaptation initiatives, document their current status, and analyze the relationship between project design, implementation approaches, and community engagement. It seeks to evaluate the gap between adaptation planning and on-ground realization while identifying best practices and challenges.

Methodology

The research employed semi-structured interviews (n=116) with 81 participants, chosen because of their roles as primary stakeholders in the adaptation projects; these included council members, Women's Development Committee members, civil society organizations, and project managers. Data collection combined formal interviews, observations and documentation review, with projects logged using Kobo Toolbox and analysed qualitatively.

Findings

Overall, the Adaptation Archive Project suggests that the Maldives is actively working on climate change adaptation, with projects in all the islands visited. Many projects do not tackle immediate environmental problems but address instead development issues. Infrastructure and engineering ('hard' solutions) are the preferred national government approaches to adaptation, although sociocultural, behavioural and educational approaches are also pursued, especially by Island and Atoll Councils and, to a lesser degree schools, with less financial resources. Preserving on-island livelihoods is seen as an important requisite to guarantee adaptation. The main challenges remain timely implementation of projects and community engagement (consultation and awareness), as well as island depopulation due to lack of jobs in outer islands.

Panellist 3

Full Name: Jon Barnett and Nina Incerti Zapedowski

Organisation: The University of Melbourne and the Australian Department of Climate Change, Energy, the Environment and Water

Bio (up to 50 words)

Jon Barnett is Australian Research Council Laureate Professor in the School of Geography, Earth and Atmospheric Sciences at Melbourne University. He is a political geographer whose research investigates social impacts and responses to environmental change.

Nina Incerti is Senior Policy Officer in the Australian Government Department of Climate Change, Energy, the Environment and Water. Nina has worked in consulting, research, and government, with a focus on climate change adaptation, nature-based solutions, and climate finance.

Title of Presentation 3

Top-down and bottom-up approaches to adaptation tracking: findings and lessons from the Republic of the Marshall Islands (RMI)

Adaptation stocktakes are an important way for countries to understand where adaptation is happening, when, in which sectors, and for whom. They can also help assess adaptation progress and effectiveness, be a mechanism for sharing lessons, and meet reporting obligations and transparency. In Pacific SIDS, adaptation stocktakes are rare, despite these being among the most vulnerable of all countries to climate change, and seemingly significant activity by communities, countries, and international actors to affect adaptation. Challenges in coordination among donors and government departments, the absence of central data repositories, shortages of staff, and the dispersed geographies of island all inhibit adaptation stocktakes.

Objectives

In this paper we report on two separate activities that together provide insight into the state of adaptation in the Republic of Marshall Islands (RMI). The first of these was analysis of the allocation of international adaptation finance within the RMI through mapping and quantitative analysis of a database of bilateral and multilateral aid projects funded in the RMI between the years 2015 to 2019. The second was data collected about adaptation activities as part of a nation-wide consultation on adaptation conducted in over 2021-2023 in support of the RMI National Adaptation Plan. Together these approaches form contrasting 'top-down' and 'bottom-up' modalities towards tracking and assessing adaptation action in the RMI. We explain the methods, rationale, findings, and challenges and opportunities provided by each approach, and the synergies and dissimilarities between them.

Methodology

The assessment of international adaptation finance involved analysis of a unique registry of development projects funded by international bilateral and multilateral donors in the Marshall Islands between 2015 – 2019 collected by the Marshallese Ministry of Finance. The initial registry listed 218 projects. Data analysis entailed (1) preliminary screening, (2) classification of adaptation activities using a context-specific taxonomy, (3) geographic coding of activity and (4) assessment of spatial and sectoral allocation of adaptation finance. The assessment of local actions was conducted as part of the community consultations associated with two climate change projects, both of which were managed by the International Organisation for Migration (IOM) office in Majuro, and both of which used similar methodologies. Data collection was from all fifteen atolls and islands lasted over a period of 18 months between October 2021 and April 2023. Methods were mixed and included a 'day in the life' survey, a baseline survey, hazard mapping, focus group interviews, individual interviews, and observations. A total of 1362 people contributed information. Based on the population of islands as stated in the 2021 census, this represents 3.2% of the entire population of the country.

Findings

The analysis of international adaptation projects found flows of adaptation finance were heavily skewed towards a small number of large-scale civil works projects in urban areas funded by multilateral institutions. Rural areas attracted far smaller scale

projects across a diversity of sectors funded largely by bilateral donors. International adaptation finance to the RMI was inequitably and sporadically distributed, insufficient relative to needs, and requires improved coordination to support effective allocation. The assessment of local actions did not identify the few adaptation projects directed to rural islands, finding that local people are seeking to adapt drawing on their local knowledges, social capital, and very limited financial resources, and that climate change (and especially heat) is constraining adaptation action. Collectively our results suggest that there is significant potential in combining both top-down and bottom-up approaches to developing adaptation stocktakes to support comprehensive tracking and assessment of adaptation efforts.

Hybrid Platform requirements

Please note that a AF2025 has made every effort in budget constraints to encourage hybrid participation. There will be nine hybrid rooms with fixed cameras and technical support. Allocation of hybrid rooms will be made by the Science Committee. Please indicate if you are requesting a hybrid format:

- $\circ\quad$ We request a hybrid format (similar to Zoom/Webinar or Teams).
 - Our time zone preferences are.....
- Xxx We are not requesting a hybrid format