

Asia-Pacific Network for Global Change Research (APN)

Over twenty years of policy-relevant research on global change in the Asia-Pacific region

Partnerships for regional research and capacity building
for a more resilient Pacific

Gen'ichiro TSUKADA, Director, APN Secretariat

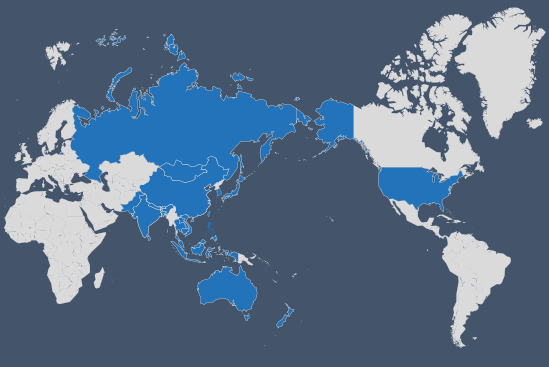
2020 Pacific Ocean Pacific Climate Change Conference

28 October 2020



Vision

Established in 1996, APN is an intergovernmental network of 22 countries working towards a **vision** for an Asia-Pacific region that is successfully addressing the challenges of global change and sustainability.



Goals

- Support **regional cooperation** in global change research
- **Enhance capacity** to participate in global change and sustainability research and support science-based decision-making
- **Strengthen interactions** among scientists and policymakers, and provide scientific input to policy decision-making and scientific knowledge to the public
- **Cooperate** with other global change and sustainability networks and organizations



Collaborative research



Capacity building



Science-policy dialogue

Member Countries:

Australia, Bangladesh, Bhutan, Cambodia, China, **Fiji**, India, Indonesia, Japan*, Lao PDR, Malaysia, Mongolia, Nepal, **New Zealand***, Pakistan, Philippines, Republic of Korea*, Russian Federation, Sri Lanka, Thailand, **United States of America**, Viet Nam

Approved Countries: Maldives, Myanmar, **Pacific Island States**, Singapore

*Donor Countries

APN and its 4th Strategic Phase (2015-2020)

1. Over US\$7M for **119 projects** completed
2. Over 70% of projects engaged early-career scientists
3. Over 1,600 scientists directly engaged
4. Over 11,600 people directly engaged
5. Over 650 distinct outputs

APN Knowledge Synthesis

Uchiyama, C., Stevenson, L. A., & Tandoko, E. (2020). Climate change research in Asia: A knowledge synthesis of Asia-Pacific Network for Global Change Research (2013–2018). *Environmental Research*, 188, 109635. doi:10.1016/j.envres.2020.109635



Member country priority topics

The phrase cloud above illustrates that marine ecosystems and marine biodiversity, coastal zones, and microplastics are important issues for governments in the Asia-Pacific region. Indeed, the impacts of microplastics on fisheries are of growing importance.

Science-policy engagement and partnerships

APN is engaged in a number of international science-policy processes



Intergovernmental Panel on Climate Change (IPCC) AR6

- Approximately 30 members, project leaders and collaborators in APN activities are authors, lead authors, coordinating lead authors or reviewers.
- Reviewed the FOD of WG2 providing over 90 review comments
- Forwarded over fifty (50) publications/papers from the APN-funded project as supporting literature/references when we made substantial comments.
- Published Special Issue comprising 15 articles in Environmental Research: [Climate Change Impacts, Vulnerability and Adaptation: Asian Perspective](#) targeted for IPCC AR6.

United Nations Framework Convention on Climate Change (UNFCCC)

- Subsidiary Body for Scientific and Technological Advice (SBSTA)
- International Warsaw Mechanism
- National Determined Contributions (NDCs)

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

- Partner & observer organization of IPBES, its Capacity Building Forum and Stakeholder Forum.
- Japan Biodiversity Fund: Partnering with IGES in conducting Science-Policy Dialogues on the IPBES Asia-Pacific Regional Assessment Report.

Sustainable Development Goals (SDGs)

- More than 100 projects have multiple connections with the SDGs mainly 13, 14, 15 in over 5 years.



Shrestha, S., Stevenson, L. A., Shaw, R., & Pulhin, J. (2020). Special Issue on Climate Change Impacts, Vulnerability and Adaptation: Asian Perspective. *Environmental Research*. Available from <https://www.sciencedirect.com/journal/environmental-research/special-issue/10KXCRMVJ96>

Examples of APN funded projects which cover the Pacific Region

Project title	Project Leader	Countries involved	Programme
Risk and Resilience in the Pacific : Influence of Peripherality on Exposure and Responses to Global Change	Prof. Patrick D. Nunn, University of the Sunshine Coast	Australia, FSM, Fiji	CRRP
Plausible alternative futures of island mangroves in the Asia-Pacific : Scenario-based analysis and quantification of mangrove ecosystem services in coastal hazard mitigation and climate change adaptation	Associate Prof. Shizuka Hashimoto, University of Tokyo	Fiji, India, Japan, China, Philippines	CRRP
Climate Change Adaptation in Post-Disaster Recovery Processes : Flood-Affected Communities in Cambodia and Fiji	Prof. Andreas Neef, University of Auckland	Cambodia, Fiji, New Zealand, Australia	CAF
Developing Capacity for Post-typhoon Disaster Waste Management in Coastal Cities in China, Fiji, and the Philippines	Dr Glenn Fernandez, Institution Sichuan University	China, Fiji, Japan, USA, Philippines	CAPaBLE
Enhancing capacity of scientists and practitioners for promoting resilient food systems in Indonesia and the South Pacific	Prof. William Bellotti, University of Queensland	Australia, Fiji, Indonesia, Pacific Islands	CAPaBLE
Capacity Building for Research in Relation to IPCC, SDGs and the Paris Agreement	Prof. Joy Jacqueline Pereira	Pacific Island Countries	Joint APN Activity



Outstanding APN funded projects in the Pacific Region

Risk and Resilience in the Pacific: Influence of Peripherality on Exposure and Responses to Global Change

(led by Prof. Patrick D. Nunn,
University of the Sunshine Coast)

Summary of the project:

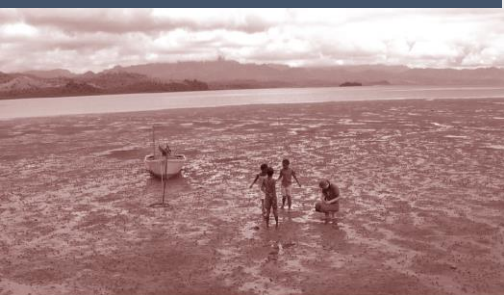
- Research was conducted in 73 communities in 18 islands, covering Fiji and the Federated States of Micronesia to understand the current capacities to adapt to impacts of climate change in the communities
- Developed an easy-to-use tool to evaluate and understand the challenges that peripheral communities face, and the diverse coping capacities of the communities

Adaptation in Post-Disaster Recovery Processes: Flood-Affected Communities in Fiji

(led by Prof. Andreas Neef,
University of Auckland)

Summary of the project:

- Explored how rural communities living in disaster-prone river basins of Fiji respond to increasing incidences of floods, droughts and cyclones under the influence of climate change and other risk factors by adopting an integrated and participatory action research approach



Toward APN Fifth Strategic Phase Period (2020-2024)

APN is currently drafting its Fifth Strategic Phase Plan (2020-2024).

- **The direction of APN to move forward at the Fifth Strategic Phase Period**
 - Contribution to the realization of the global agenda such as SDGs, Paris Agreement, Sendai DRR Framework and Post-Aichi Biodiversity Targets, as well as the accumulation of scientific knowledge at IPCC, IPBES, etc.
- **Possible focused activities during the Fifth Strategic Phase Period (under discussion)**
 - Launch long-term flagship/comprehensive collaborative research programme;
 - Contribute to the Asia-Pacific Adaptation Information Platform (AP-PLAT) by promoting relevant programmes on climate change adaptation;
 - Promote related programmes focusing on scientific research of early-career scientists through, for example, seed grants;
 - Promote effective collaboration with like-minded networks/institutions for securing implementation of policy-relevant science activities, etc. ;
 - Consider the role between APN and other international research institutions as well as APN and other international funding mechanisms; and
 - **Initiate activities in the Pacific region in close collaboration with relevant institutions in the region**

APN's possible focused topics in the Pacific Region

- **APN is committed to contributing to a more resilient Pacific as it works in line with the global agendas of IPCC, the Paris Agreement, the Sendai Framework and the SDGs, by partnering with like-minded institutions in the region**
- **APN's possible focused topics in the Pacific Region are:**
 - Climate change and climate variability and their related impacts (climate projections/downscaling, extreme events, AP-PLAT, DRR and adaptive recovery, etc.)
 - Ecosystem-based adaptation and disaster risk reduction
 - Smart agriculture (resource allocation, livestock, food, technology transfer, innovation, extension, etc.)
 - Transboundary issues (pollution, water quality, human health, fisheries and microplastics, marine plastic debris, invasive species, waste management, etc.)
 - Global Change and Sustainability in the COVID-19 Era: Pursuit of transformation to more resilient societies
- **APN is planning to launch FY2020 Calls for Proposals under the CRRP and CAPaBLE Programmes in November 2020 for funding from October 2021**

Thank you

APN E-Lib:

Reports, proceedings, guides, tool kits
and other output from APN funded
projects

www.apn-gcr.org/resources/

Science Bulletin:

Peer-reviewed articles from APN funded
projects

<http://www.apn-gcr.org/resources/items/browse?collection=7>

Policy Briefs:

Policymaker-oriented concise summary
of APN project outputs

<http://www.apn-gcr.org/resources/items/browse?collection=10>

APN Updates:

Regular email updates from the APN
Secretariat

<http://www.apn-gcr.org/eml/lists/?p=subscribe&id=4>

