

# Asia-Pacific Network for Global Change Research (APN)

Over 25 years of policy-relevant research on  
global change in the Asia-Pacific region

## Recent Activities

Dr Linda Anne Stevenson  
Acting Director and Programme Director  
APN Secretariat

**5th International Climate Change Platforms  
Meeting, 24-25 October 2024**



# About

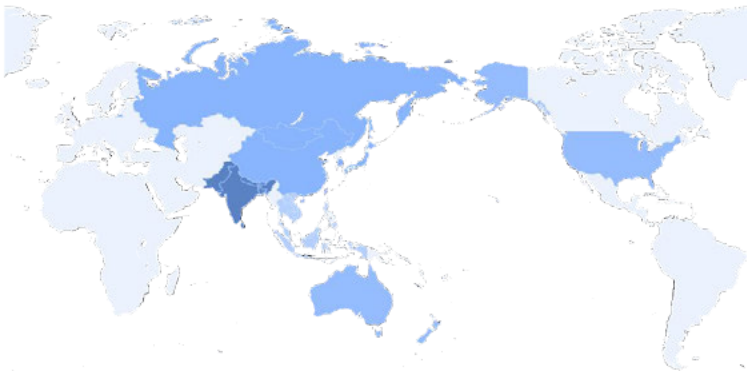
**Established**    ☐ 1996

**Member countries**    ☐ 22 countries in Asia-Pacific region  
☐ Additional “approved countries”

**Secretariat**    ☐ Kobe, Hyogo Prefecture, Japan

**Donors**

- ☐ Ministry of the Environment, Japan
- ☐ Hyogo Prefectural Government, Japan
- ☐ Ministry for the Environment, New Zealand
- ☐ Ministry of Environment, Republic of Korea



## Focus areas



## Strategic goals

### REGIONAL RESEARCH

Support regional cooperation in global change research on issues particularly relevant to the Asia-Pacific region.

### CAPACITY DEVELOPMENT

Enhance capabilities to participate in global change and sustainability research and support science-based decision-making.

### SCIENCE-POLICY LINKAGES

Strengthen interactions among scientists and policymakers; provide scientific input to policy decision-making, and scientific knowledge to the public

### STAKEHOLDER ENGAGEMENT

Cooperating with other global change and sustainability networks and organisations.

# Fifth Strategic Plan (2020-2026)



## Direction of APN in the Fifth Strategic Phase

Contribute to the realisation of global agendas, such as:



## Focused activities in the Fifth Strategic Phase

- Explore new research initiatives that contribute to:
  - Climate Change: AP-PLAT and WCRP-CORDEX programme;
  - Synergies between climate change and disaster risk reduction;
  - Achieving carbon neutral society;
  - Addressing issues on marine plastic debris and microplastics.
- Advance work in areas of circular and ecological economy (CEE), zero carbon cities, nature-based solutions and climate-smart agriculture, etc.
- Provide support to early career professionals through tailored activities and programmes that meet their specific needs.
- Strengthen linkages between scientists, policymakers and practitioners etc. and provide sound scientific information for policymaking processes.



Abe, T., Bastaman, H., Fukushi, K., Heath, L. C., Hill, D. P., Hoshino, Y., ... Yoshikawa, K. (2021). APN Fifth Strategic Plan. doi:[10.30852/sp.5](https://doi.org/10.30852/sp.5)

# 26th Intergovernmental Meeting

The **26th Joint IGM and SPG Meeting** held at the National Research and Innovation Agency (BRIN), Jakarta, Indonesia on 13-14 June 2024

## Highlights:

- Discussion of FY2024 work programme
- Launch of the special publication, “Climate Change Adaptation, Disaster Risk Reduction, and Loss and Damage”
- The 10th Early Career Professionals Poster and Networking session
- Ceremonial signing of MOUs with USP and AIT to strengthen collaboration in Asia and the Pacific





## Core Programmes

In its 5th Strategic Phase, APN has two key programmes addressing its six focus areas, of which APN supports new projects through donor funding.

### Focus areas:

- Air, land, coasts, & oceans
- Biodiversity & ecosystems
- Climate
- Food, water, & energy
- Human dimensions
- Risks and resilience

### Collaborative regional research (CRRP)

A key pillar of APN's science agenda, involving multi-country research projects.

70%

Projects led by **researchers from developing countries** (FY 2020 to FY2024)

### Scientific capacity development (CAPaBLE)

Building scientific capacity at local, organisational and systemic levels.

54%

Projects led by **early career professionals** (FY2020 to FY2024)

63%

Projects reported engaging **early career professionals** (FY2020 to FY2022)

For more information: <https://www.apn-gcr.org/core-activities/>

# Annual Call for Proposals

## 2024 Priority topics for four APN subregions

**Launching on 10  
November 2024**

APN Received a record  
of **180** summary  
proposals

Proposals to fund were  
selected by the  
Steering Committee in  
June 2024 at the 26th  
Intergovernmental  
Meeting

### South Asia

Climate change adaptation, losses and damages, and the impacts of extreme events

Future GHG emission scenarios, including decarbonisation pathways

Integrated urban waste management for sustainable development

Enhancing urban and rural water security in South Asia in the face of Global Change

Ecosystem resilience: Addressing climate change and ecosystem services through promotion of ecosystem-based adaptation

### Southeast Asia

Climate change and variability (CC&V) and disaster risk reduction

Transboundary issues (specifically air pollution, marine plastics, marine debris)

Big Earth Data for SDGs

Bio-circular green economy (BCG) and circular ecological economy (CEE)

Achieving SDGs in the face of a changing climate: Food, water and energy security

### Temperate East Asia

Nature-based solutions for climate resilience and ecosystem restoration

Climate extremes, carbon neutral societies, and alternative energy production

Big Earth Data for global change

Knowledge innovation for sustainable resource management

### Pacific

Global change and its impacts on ecosystems and livelihoods in the Pacific

Climate adaptation, disaster risk reduction, displacement and relocation

Climate variability and change and their impacts in national and regional contexts

Biodiversity and ecosystem conservation for human wellbeing and protection in the Pacific

# 2024 Call for Proposals

## - topics with an adaptation focus -

### South Asia

#### Climate adaptation & extreme events:

- Focus on adapting to monsoons, heatwaves, and floods
- Climate-smart solutions to increase resilience in urban and rural settings

#### Water security under global change:

- Ensuring resilient water systems amidst changing precipitation patterns

#### Resilience Building:

- Strengthening communities against extreme weather impacts
- Adapting water management systems for long-term climate resilience

### Southeast Asia

#### Disaster risk reduction (DRR) & climate change:

- Early Warning Systems and proactive adaptation to mitigate disaster risks

#### Food, water, energy security under climate stress:

- Ensuring resilience of essential resources, aligned with SDG goals

#### Resilience Building:

- Preparedness for climate-related disasters
- Securing critical resources for sustainable adaptation

# 2024 Call for Proposals

## - topics with an adaptation focus -

### Temperate East Asia

#### **Nature-based solutions (NBS) for climate resilience:**

- Using ecosystems to build resilience against climate impacts

#### **Sustainable resource management:**

- Innovative approaches to enhance resilience of water and waste systems

#### **Resilience Building:**

- Restoring ecosystems to act as buffers against climate risks
- Reducing vulnerability through efficient resource management

### The Pacific

#### **Ecosystem & livelihood resilience:**

- Adapting to global change impacts on food security and ecosystems

#### **Community adaptation & relocation:**

- Protecting vulnerable communities through climate adaptation strategies and DRR

#### **Resilience Building:**

- Enhancing resilience of ecosystems to support livelihoods
- Adapting to displacement and ensuring community safety amidst climate threats

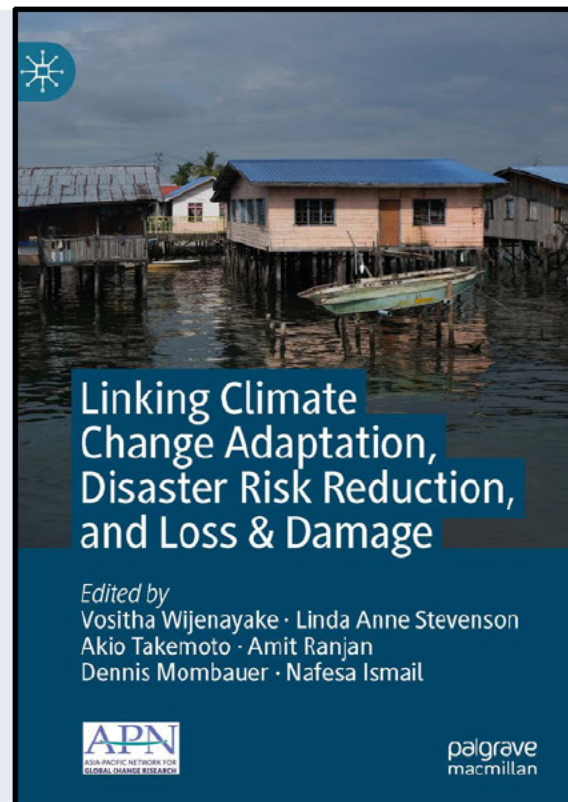


# ■ Recently published work

## Synthesis of outputs from APN Climate Adaptation Framework

Released in June 2024: <https://link.springer.com/book/9789819980543>

- Advance knowledge on loss and damage, and its interlinkages with climate adaptation and disaster risk reduction.
- The book includes twelve case studies conducted across South and Southeast Asia, covering sectors including agriculture, rural livelihoods, energy, infrastructure and natural resources.



# ■ Science-policy interface and global agendas

## Intergovernmental Panel on Climate Change (IPCC)

- More than **100 publications** from APN-funded projects and activities have been cited in the Working Groups (WG) I, II and III contributions to the IPCC AR6.
- **Secured funding to engage ECPs in the 7th Assessment Cycle.**
- **Co-organiser of an online event on Climate Change and Cities to discuss knowledge gaps, methods for advancing climate science in the Asia-Pacific region and strategies for engaging with the IPCC.**

## United Nations Framework Convention on Climate Change (UNFCCC)

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

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

- Partner and observer organisation 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 goals 13, 14 and 15 in over 5 years.

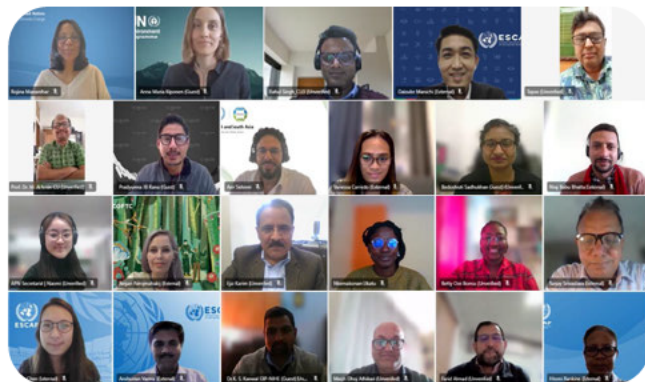
# UNFCCC LAKI: Hindu Kush Himalayan (HKH) Phase II

With engagement since 2023, the APN Secretariat has leveraged global change research to address climate change adaptation knowledge gaps in the Hindu Kush Himalayan region.

**Partners:** UNFCCC Lima Adaptation Knowledge Initiative, UNEP Global Adaptation Network, and ICIMOD.



*Participants of the LAKI HKH Stakeholders Consultation at the **8th Asia-Pacific Climate Change Adaptation Forum**, in Incheon, Republic of Korea (August 2023)*



*Knowledge partners gather virtually at the **LAKI HKH Phase II Second Technical Experts Meeting**, convened by UNEP, UNFCCC and ICIMOD (March 2024)*



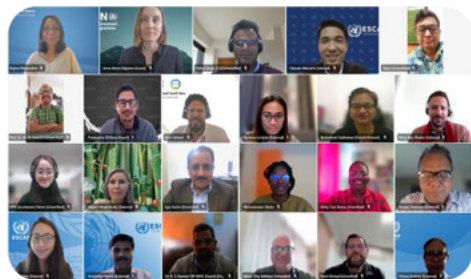
*Asia-Pacific States discussion at the **Experts Dialogue on Mountains and Climate Change** at the UNFCCC SBSTA60 in Bonn, Germany (June 2024)*



# ■ APN contributions to the UNFCCC Lima Adaptation Knowledge Initiative for the Hindu-Kush Himalayan Region (LAKI HKH Phase II)



Participants of the LAKI HKH Stakeholders Consultation at the 8th Asia-Pacific Climate Change Adaptation Forum, in Incheon, Republic of Korea (August 2023)



Knowledge partners gather virtually at the **LAKI HKH Phase II Second Technical Experts Meeting**, convened by UNEP, UNFCCC and ICIMOD (March 2024)

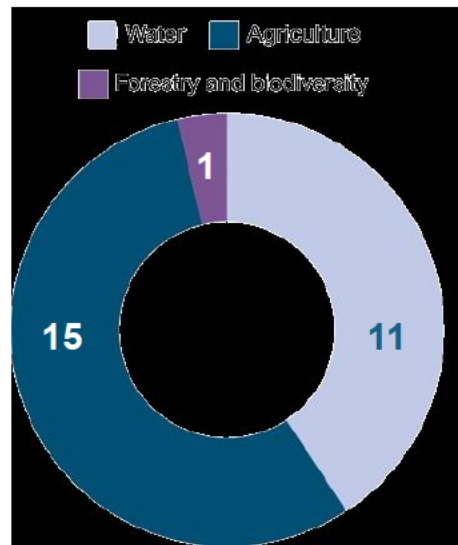


Asia-Pacific States discussion at the **Experts Dialogue on Mountains and Climate Change** at the UNFCCC SBSTA60 in Bonn, Germany (June 2024)

- Outlined the impacts of APN regional research and capacity development activities in the HKH region during the LAKI HKH Phase II **2nd Stakeholder Consultation meeting** at the 8th APAN Forum (Incheon, Republic of Korea).
- Provided a knowledge and impact synthesis of **24 APN CRRP and CAPaBLE projects** addressing priority knowledge gaps in the HKH region in the 2nd Technical Experts Meeting. Two action proposals were also pledged by the APN Secretariat to promote knowledge- and opportunities-sharing for adaptation in the HKH, **in collaboration with UNFCCC, UNEP Global Adaptation Network and UNESCAP**.
- Outlined the **importance of knowledge synthesis and dissemination for the HKH region** at the Experts Dialogue on Mountains and Climate Change at the UNFCCC SBSTA60 (Bonn, Germany) in June 2024.
- **Engaging APN members** on its role in **disseminating adaptation outcomes through CRRP and CAPaBLE projects** at the 26th Intergovernmental Meeting and Associated Meetings, in Jakarta, Indonesia (June 2024)



# ■ APN contributions to the UNFCCC Lima Adaptation Knowledge Initiative for the Hindu-Kush Himalayan Region (LAKI HKH Phase II)



▲ Number of case studies submitted to each LAKI HKH priority knowledge gap thematic area

**24** APN projects identified addressing the LAKI HKH priority knowledge gaps since 2001

**85** Institutions in the Asia-Pacific engaged in within the identified projects

**13** Peer-reviewed articles from APN HKH-projects in the IPCC AR6

## Ongoing synthesis and dissemination initiatives from the APN Secretariat:

- **Engagement at global events:** Contribution to the upcoming LAKI-HKH publication for the UNFCCC COP29 (Baku, Azerbaijan).
- **Open-access presence online:** Compilation of adaptation case studies and solutions on knowledge-sharing platforms and media channels.



**United Nations**  
Framework Convention on  
Climate Change

# Integrating Geospatial Technologies in Climate-Smart Agriculture Planning and Management (Nepal and Bhutan)

Mid-West University, Nepal; Nepal Academy of Science and Technology, Royal University of Bhutan, and partners from Pakistan.;

**Priority Knowledge Gap:** Lack of context-specific adaptation options and technologies for addressing climate extremes, impacts, and risks in agriculture at the local level.

**Target Users:** Local government officers, extension workers, researchers, and local communities (farmers).

## Key Outputs:

1. **Training Programme:** Geospatial technologies and climate-smart agriculture, with 150 trained participants across Nepal and Bhutan.
2. **Spatial Datasets:** Open-access watershed data and an assessment report for Nepal and Bhutan.
3. **Web-Based Platform:** Developed for spatial data management and field monitoring infrastructure.
4. **Capacity Building:** Institutional strengthening for ongoing geospatial training and data use

## Results:

- Enhanced skills in geospatial tools for 150 participants, improving decision-making in climate-smart agriculture.
- Adoption of best practices in local communities to increase resilience against climate impacts.



# Development of an Adaptation Communication Framework for Mainstreaming Indigenous and Local Knowledge (ILK) in the Hindu-Kush Himalayan Region:

**Institute for Global Environmental Strategies (IGES), Japan;**  
**Collaborators: ICIMOD, Keio University (Japan), HNBGU (India), Royal University of Bhutan, and AMARC Asia-Pacific.**

**Priority Knowledge Gap:** Limited access to traditional and indigenous knowledge on agricultural adaptation.

**Target Users:** Local communities, marginal groups, researchers, and local governments.

## Key Outputs:

1. **Community Radio Programmes:** Nine programs developed in India, Nepal, and Bangladesh, reaching over 100,000 citizens.
2. **Regional Adaptation Communication Framework:** Developed to integrate ILK with modern adaptation strategies.
3. **Knowledge Products:** Ten peer-reviewed publications and a draft guidebook on ILK for climate adaptation.
4. **Capacity Building:** Over 800 participants engaged in workshops in Nepal, Bhutan, India, and Pakistan to enhance ILK application for climate adaptation.
5. **Digital Media Outreach:** Community radio programs and digital content disseminated via YouTube and local media.

## Results:

- Empowered local communities through media and workshops, enhancing resilience by integrating traditional knowledge with climate-smart practices.
- Scaled up ILK communication efforts across the region via community radio, benefiting over 100,000 people.





# Knowledge sharing with partners

## Preserve

- Data/metadata
- Meaningfully organized
- Searchable
- **Permanent**

## Share

- Governments
- Researchers
- Practitioners
- General public

## Synthesize

- By topic
- By intended audience

## Monitor

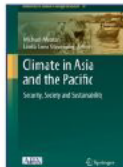
- Reach
- Uptake
- **Impact**

## Cooperate

- Producers
- Users
- Communicators
- Like-minded organizations



[www.apn-gcr.org](http://www.apn-gcr.org)



WEB OF SCIENCE™



United Nations  
Framework Convention on  
Climate Change

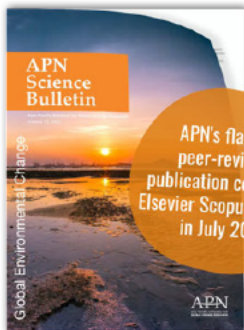


RRC.AP  
Regional Resource Centre for  
Asia and the Pacific





# Thank you!



## APN Science Bulletin

Peer-reviewed articles from APN projects

[www.apn-gcr.org/bulletin/](http://www.apn-gcr.org/bulletin/)



## APN website

[www.apn-gcr.org](http://www.apn-gcr.org)

## Policy briefs

Policymaker-oriented concise summary of APN project outputs

<https://www.apn-gcr.org/briefs>

## Publications library

Reports, proceedings, guides, toolkits and other outputs from APN projects

[www.apn-gcr.org/publications-library/](http://www.apn-gcr.org/publications-library/)

## Newsletter: APN Updates

Register here for regular email updates from the APN Secretariat

[www.apn-gcr.org/getmail](http://www.apn-gcr.org/getmail)

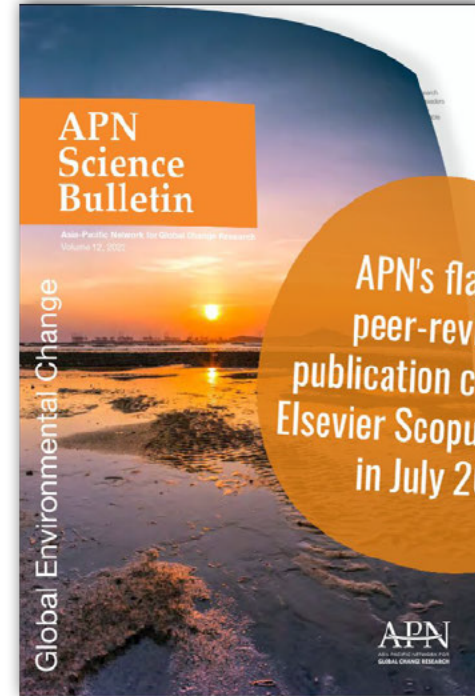
<http://www.apn-gcr.org>

@apngcr



# ■ APN Science Bulletin

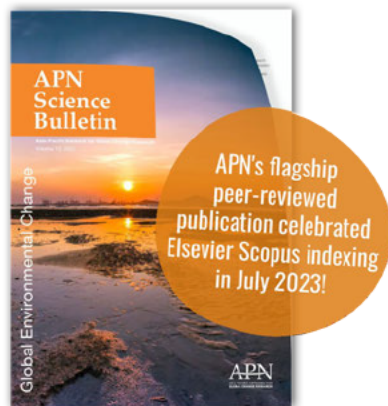
- The APN Science Bulletin is a peer-reviewed digital publication that features APN's regional research and capacity building projects. The Science Bulletin is intended for readers from both science and policymaking communities, as well as young scientists in the Asia-Pacific region who are keen on issues related to global environmental change, sustainable development and the science of sustainability. The publication celebrated Elsevier Scopus Indexing in July 2023.
- <https://www.apn-gcr.org/bulletin/>



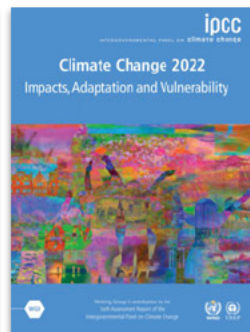


## ■ Contribution to IPCC

More than 100 publications from APN projects and activities have been cited in the Working Groups I, II and III contributions to the IPCC Sixth Assessment Report.



Read the press release here:  
<https://www.apn-gcr.org/?p=21069>



Over

60

**APN projects** contributed to IPCC Sixth Assessment Report

15

**Number of countries** where these APN project leaders are from

76%

APN publications **cited in the WGII contribution** as a percentage of all AR6-cited APN publications

In the WG II contribution, most citations appear in

**Chapter 5. Food, fibre, and other ecosystem products**

**Chapter 10. Asia**

**Chapter 15. Small islands**



# Fourth Strategic Phase Report (2015-2020)



Abe, T., Bastaman, H., Deng, X., Fukushima, K., Heath, L. C., Hill, D. P., ... Yoshikawa, K. (2020). APN Fourth Strategic Phase Report. doi: [10.30852/spr4](https://doi.org/10.30852/spr4)



Phrase cloud showing member country priorities (2016-2019).

Over  
**119**  
Projects completed

Over  
**\$7M**  
Funding awarded

Over  
**70%**  
Projects engaged early-career professionals

Over  
**650**  
Publications produced

Over  
**1,600**  
People engaged as project leaders and collaborators

Over  
**11,600**  
People directly reached through project activities

Over  
**97,000**  
Unique page views on project metadata pages on the APN website

# Asia-Pacific Network of Early Career Professionals for Global Change Research (APN-ECAP)

Collaborating team:



Dr Linda Anne Stevenson  
Ms Naomi Young  
Supporting:  
Dr Nafesa Ismail  
Ms Rieko Tamura



Dr Saurav KC  
Ms Susmita Mishra  
Ms Ayushmita Pokhrel  
Mr Ashish Ojha



ECAP working groups at the Regional Workshop



First APN-ECAP Regional Workshop, AIT, Thailand, 2023


**Join our early mailing lists and events!**

Asia-Pacific Network of Early Career Professionals for Global Change Research (APN-ECAP)

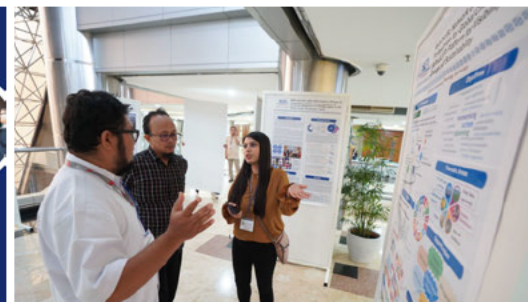
For more information:  
<https://linktr.ee/APNECAP>

**REGISTER TODAY**

Initiating a platform for knowledge sharing, collaboration, and advocacy for global change research amongst early career professionals in the APN-wide network.



Ongoing development of ECAP Database



APN-ECAP poster presentation at the 26th IGM of APN, 2024

# Engaging Early Career professionals

## How to get involved?

- Annual call for proposals (with special consideration for early career professionals)
- Subregional Proposal development training workshops: Submit application to join
- Becoming an external reviewer for APN
- Webinars and conferences
- ECPs, young scientists, postgraduate students (APN-ECAP)

## In-person Proposal Development Training Workshops (PDTWs)



2011, China



2012, Cambodia



2013, Sri Lanka



2014, Lao PDR



2015, Bhutan



2016, Mongolia



2017, Vietnam



2018, Tokyo



2022, Sri Lanka



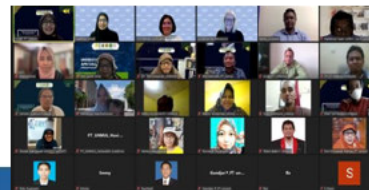
2023, Thailand



2024, Fiji

## Online PDTWs

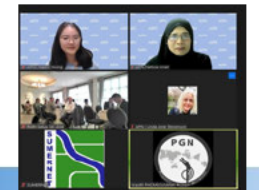
- 2018, Mongolia
- 2022, Fiji



2021, Indonesia



2022, Malaysia



2023, Lao PDR