

Asia-Pacific Network for Global Change Research (APN)

20 years of policy-relevant global change research in
the Asia-Pacific region



Bridging Science & Policy
for a Sustainable Asia-Pacific

APN Secretariat
Dyota Condrorini

Asia Pacific Network for Global Change Research (APN)



An inter-governmental network of 22 countries* in the Asia-Pacific fostering **research**, **capacity development** and **science-policy interaction** in the fields of **global change and sustainability**

APN's main activities include:

- Supporting regional research and capacity development on fields related to global change and sustainability
- Strengthening evidence-based science-policy linkages, informing decision-making and enhancing public awareness

Our donors



Ministry of the
Environment, Japan



Hyogo Prefectural
Government, Japan



Ministry for the
Environment
Manatū Mo Te Taiao

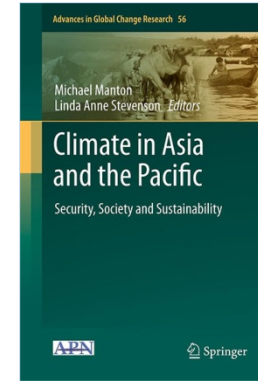
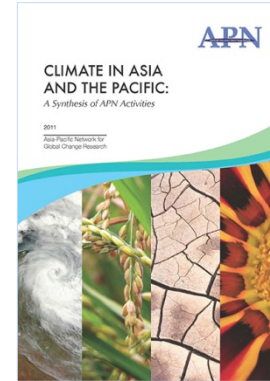
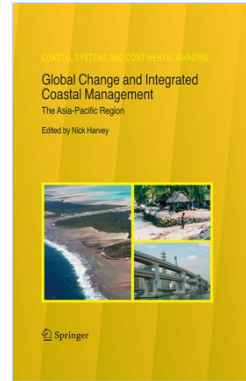
Ministry for the
Environment, New Zealand



Ministry of Environment,
Republic of Korea

** We are supported by all member countries through their in-kind contribution in terms of reviewing proposals, hosting and participating in APN meetings, in-country promotion of APN, etc. APN funded projects also provided substantial in-kind support through staff time, facilities and equipment, etc.

1998
1st Regional
Research Project



launched

1996-2004
 First Phase

2005-2010
 Second Phase

2010-2015
 Third Phase

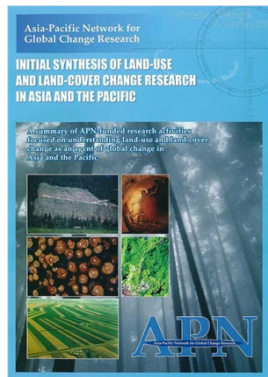
1996
Founded

2003
1st CAPaBLE
Project

2007
\$10m
disbursed

2010
22
members

2016
>\$26m
disbursed



419
projects funded
as of May 2016

What have we achieved?

Regional Research Programme

- **182** peer-reviewed publications
- **641** tangible outputs
- **22 (47%)** projects directly linked with major GC programmes & projects (WCRP, IHDP, IGBP, DIVERSITAS, etc)

Over **2600** people directly engaged
(scientists, policy makers, practitioners ...)

218
collaborators

47
project
leaders

218

47

CAPaBLE Programme

60 CAPaBLE Projects

223 workshops/events

4117 people directly engaged

161 publications: proceedings, policy briefs, toolkits, training manuals ...

www.apn-gcr.org/resources/

What have we learned?

- It is highly crucial to **respond to policy needs**
 - APN's supported research and capacity development should be aligned with member countries' policies
- **There is an increasing needs for capacity development** in member countries, which APN should be able to respond to.
 - In addition to sharing theoretical knowledge, practical (hands-on) training is also needed
- There is a need to **strengthen APN's network of researchers to involve all disciplines, including social disciplines and to engage more trans-/multi-disciplinary research**
- There is a need to **strengthen the network, and establish collaboration and partnerships** with other network and organizations that share common goals and similar interests
- There is a need to be **more proactive in communicating** results and findings, **outreaching** wider communities and public

What have we planned?

Vision

An Asia-Pacific region that is successfully addressing the challenges of global change and sustainability

Goals

Regional
Collaborative
Research

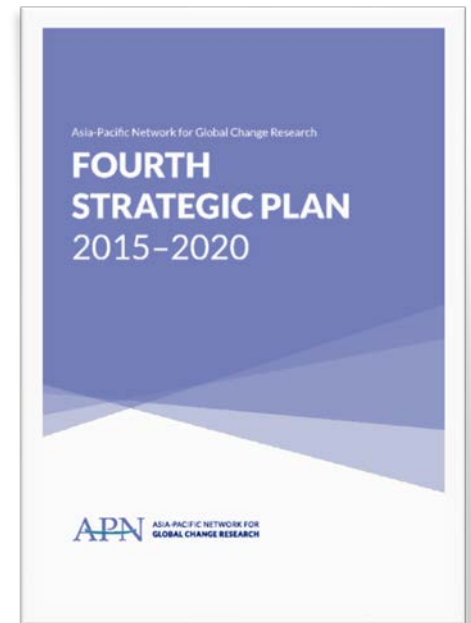
Capacity
Development

Science-Policy
Interaction

Partnerships
with
stakeholders

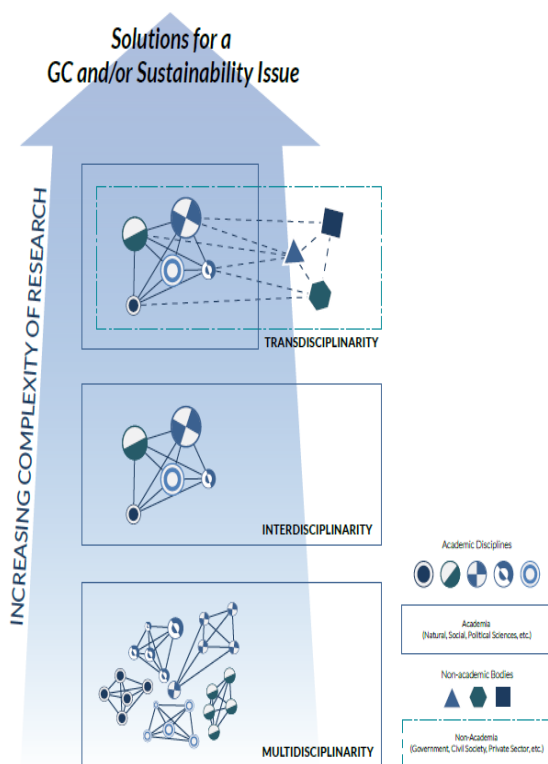
4th Strategic Plan:

- **Research Agenda**
- **Capacity Development Agenda**
- **Science-Policy Agenda**
- **Communication and Outreach Agenda**

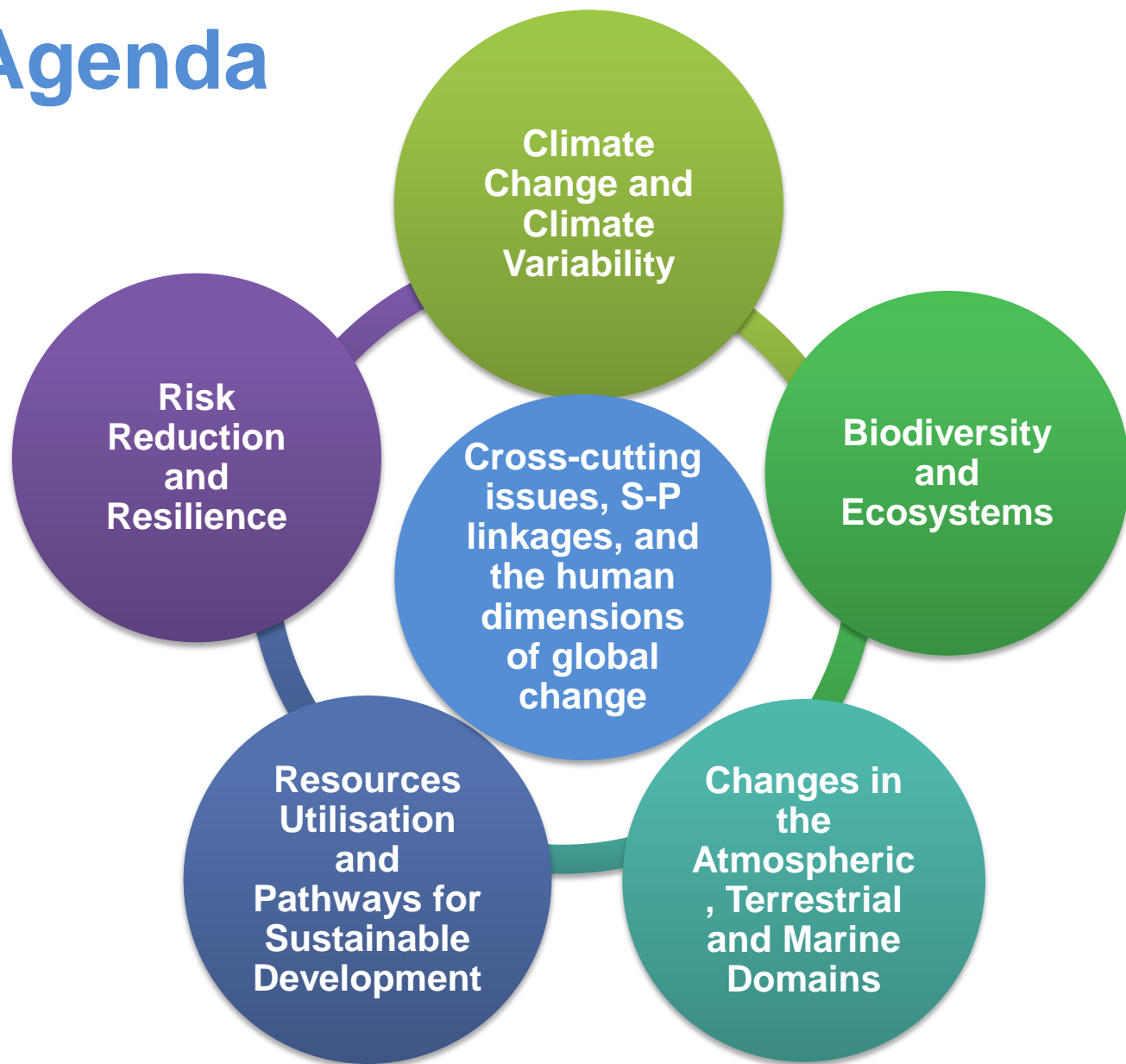


<http://apn-gcr.org/r/4sp>

Research Agenda



Shifting focus towards
solutions-oriented research
(source: 4th Strategic Plan)



Capacity Development Agenda

Who?

- Young and early career scientists
- Policy makers
- Community leaders
- Resource managers

How?

- CAPaBLE Programme
- Proposal Development Training Workshops
- Science-Policy Dialogues and other forums
- Stakeholder engagement throughout projects
- Mitra Award/poster sessions
- Synthesis and assessments



Science-Policy Agenda

- **APN is committed to:**
 - strengthening evidence-based science-policy linkages
 - informing decision-making
 - enhancing public awareness
- **Science-Policy Dialogues**
 - Bangkok, Thailand (2012)
 - Thimphu, Bhutan (2014)
 - Ulaanbaatar, Mongolia (2015)
 - Paro, Bhutan (December, 2016)
 - *In collaboration with IPBES (2017)*
- **Synthesis of APN Science-Policy Dialogue Series**



Communication and Outreach

- Raise awareness on APN's activities and achievement
- Effectively and widely disseminate solution-oriented outputs, outcomes and findings of APN activities
- Inform about APN's opportunities (funding, partnership)
- Foster effective communication among members
- Facilitate effective communication among researchers, practitioners and other stakeholders

Target Audiences	Communication tools and products:
<ul style="list-style-type: none">• APN members, government, international organisations and donors• Decision makers and practitioners• Scientists, researchers• Media• Private sector, general public	<ul style="list-style-type: none">• Print media/e-publications (reports, books, information sheets, policy briefs, etc)• Mass media• Electronic media (owned media, social media)• Events

Engaging **different target audiences** with tailor-designed information using the **most appropriate tools**.

GEOSS-related Activities



GEOSS

- **Connect the demand** for sound and timely environmental information **with the supply** of data and information about the Earth that is collected through observing systems and made available by the GEO community.
- **facilitating** Earth observations' **accessibility and application to global decision-making** within and across many different domains

Social Benefit Areas: (i) Biodiversity and Ecosystem Sustainability; (ii) Disaster Resilience; (iii) Energy and Mineral Resources Management; (iv) Food, Security and Sustainable Agriculture; (v) Infrastructure and Transportation Management; (vi) Public Health Surveillance; (vii) Sustainable Urban Development; (viii) Water Resources Management

APN

Enable investigations of changes in the Earth's life support systems **and their implications** for sustainable development in the Asia-Pacific region through support for research, capacity development and science-policy linkages that:

- **Identify, explain, project** and **predict** changes in the context of both natural and anthropogenic forcing;
- **Assess** potential regional and global vulnerability of natural and human systems; and
- **Contribute**, from the science perspective, to the development of policy options for appropriate responses to global change and sustainable development.

Research & Capacity Development

Pathways: (i) Climate Change and Climate Variabilities; (ii) Ecosystems and Biodiversity; (iii) Changes in Atmospheric, Terrestrial and Marine Domains; (iv) Resources Utilisation and Pathways for Sustainable Development; (v) Risk Reduction and Resilience

ARCP & CAPaBLE Programme

Until 2013, APN financially supported 10 projects (773,193 USD) related to GEOSS. Seven projects are directly related to Asian Water Cycle Initiative

1. GEOSS/Asian water Cycle Initiative/Water Cycle Integrator (GEOSS/AWCI/WCI)
2. River Management System Development in Asia based on Data Integration and Analysis System (DIAS) under the GEOSS
3. Climate Change Impact Assessment on the Asia-Pacific Water Resources under AWCI/GEOSS"
4. "Flood Risk Management Demonstration Project (phase 1) under the Asian Water Cycle Initiative for the Global Earth Observation System of Systems (FRM/AWCI/GEOSS)"
5. International Integrated Water Data Access and Transfer in Asia (IIWaDATA) Project
6. Impact of Climate Change on Glacier Melting and Water Cycle Variability in Asian River Basins
7. Demonstration Study on Advancing Global Change Research Approaches Based on Inter-Agency Collaboration and Data Infrastructure of GENESI and GeoBrain
8. Drought Monitoring System Development by Integrating In-Situ Data, Satellite Data and Numerical Model Output
9. The Global Earth Observation System of Systems Asian Water Cycle Initiative Observation Convergence and Data Integration (GEOSS/AWCI/OCDI)
10. The Capacity Building for Drought Monitoring and Studying in Monsoon Asia Under the Framework of Asian Water Cycle Initiative (AWCI)

2016 APN's CRRP and CAPaBLE Awardees

2015 APN Call for Proposals identified priority areas: **Increasing community resilience in coastal and mountain areas**; Energy, environment and ecosystems; **Extreme weather and its impacts**; Climate change and health; **Water, energy and food security**; Global change data management (data policies, access); **Risk reduction and resilience**; and Sustainable consumption and production

Relevant GEOSS area – Disaster Resilience

1. Risk and Resilience in the Pacific: Influence of Peripherality on Exposure and Responses to Global Change (<http://www.apn-gcr.org/resources/items/show/2049>)
2. SEACLID/CORDEX Southeast Asia Phase 2: High-resolution analysis of climate extremes over key areas in Southeast Asia (
3. Rapid mapping technique for disaster observation and environmental change data acquisition (<http://www.apn-gcr.org/resources/items/show/2045>)

Relevant GEOSS area – Public Health Surveillance

1. Assessing the health effects of extreme temperatures and the development of adaptation strategies to climate change in the Asia-Pacific region (<http://www.apn-gcr.org/resources/items/show/2056>)

Relevant GEOSS area – Water Resource Management

1. Anthropogenic perturbations to carbon export and greenhouse gas evasion from Asian river systems (<http://www.apn-gcr.org/resources/items/show/2047>)
2. Development of new water supply strategies in two watersheds of India and Sri Lanka in the context of climate change, rapid urbanization and population growth: a vulnerability assessment approach (<http://www.apn-gcr.org/resources/items/show/2052>)
3. Adapting groundwater of Asian cities to climate change: bridging the science and policy interface (<http://www.apn-gcr.org/resources/items/show/2042>)

Relevant GEOSS area – Food Security & Sustainable Agriculture

1. Managing organic amendments to reduce greenhouse gas emissions and supplement fertiliser nitrogen inputs in tropical Indian and Sri Lankan agricultural soils (<http://www.apn-gcr.org/resources/items/show/2051>)
2. Identification of the best agricultural management practices with better greenhouse gas benefits in salinity affected areas of South Asia (<http://www.apn-gcr.org/resources/items/show/2055>)
3. Water-Energy-Food nexus perspective: Path making for Sustainable Development Goals (SDGs) to country actions in Asia (<http://www.apn-gcr.org/resources/items/show/2054>)
4. Mainstreaming weather and climate information application for agro-ecosystem resilience in a changing climate (<http://www.apn-gcr.org/resources/items/show/2043>)
5. Capacity Development of Agrarian Research-Policy-Technology Personnel in Sri Lanka on 'Global Change and Sustainability' (<http://www.apn-gcr.org/resources/items/show/2041>)

Relevant GEOSS area – Sustainable Urban Development

1. Appropriate Solid Waste Management Towards Flood Risk Reduction Through Recovery of Drainage Function of Tropical Asian Urban Cities (<http://www.apn-gcr.org/resources/items/show/2053>)
2. Enhancing perception and capacity for national and provincial leaders and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Vietnam (<http://www.apn-gcr.org/resources/items/show/2039>)

Relevant GEOSS area – Biodiversity & Ecosystem Sustainability

1. Assessing land use functions for sustainable land management in Asia countries (<http://www.apn-gcr.org/resources/items/show/2050>)
2. Ecosystem Based Adaptation approach for Sustainable Management and Governance of Coastal Ecosystems (ENGAGE) (<http://www.apn-gcr.org/resources/items/show/2044>)

More projects information: <http://www.apn-gcr.org/resources/>

Potential Collaborative Activities

- Funding support for research and capacity building activities through the annual calls for proposals programme and framework: Collaborative Regional Research Programme, CRRP and Capacity Building Programme, CAPaBLE
- Sharing research results/accessing data-APN E-Lib
- Capacity development activities and technology transfer in the region in cooperation with other institutions: APN proposal development training workshop for young scientists
- Facilitating/partnering in science-policy linkages
 - ❑ Science Policy Dialogue on Low Carbon Development, Bangkok, February 2017
 - ❑ Science Policy Dialogue Series (in collaboration with IPBES) 2017 - 2019
- Linking with partner research programmes and facilitating regional collaboration (AWCI is a current good example)



THE WAY FORWARD

Current and Future APN Activities

Improved APN call for proposals* and review system and expanding our network of reviewers, to include various range of disciplines

**ongoing 2016 Call for Proposals process*

121 Summary
Proposals under 2016
Call for Proposals

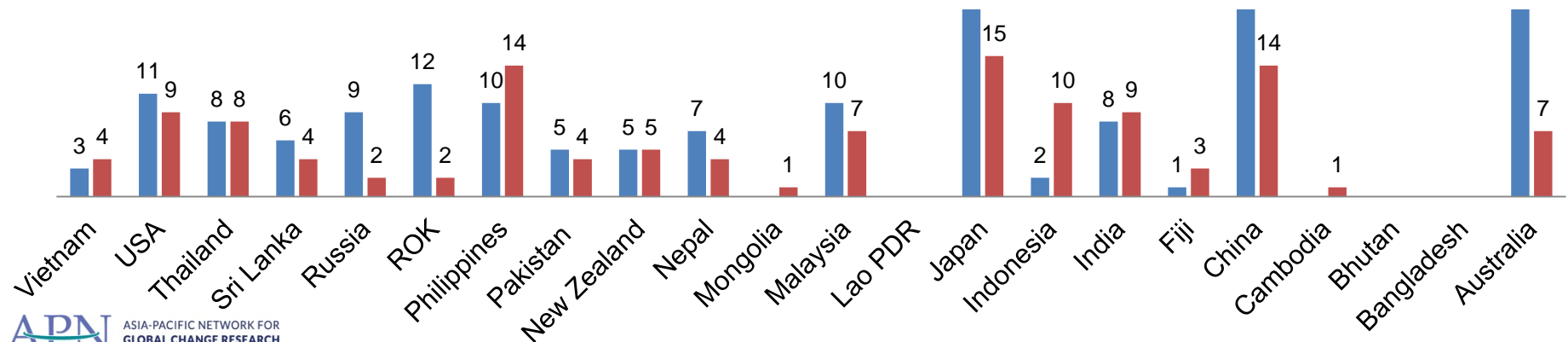
172 Registered
External Reviewers

205 Trained young
researchers/scientists
(under PDTW)

Continued supporting capacity development programmes, including support to young scientists

2008 - 2016 APN Projects: Project Leaders by Country

■ ARCP ■ CBA





**7 Media
Fellows
(South Asia
based)**

Conducted South Asia Media Fellowship Programme (inviting 7 journalists from 7 different countries in South Asia to visit and write about APN's funded research)

Actively pursuing opportunities for collaboration and partnership

**11 South Asia
– based
organisations
joined**

**South Asia Collaborative Workshop –
Bhutan, December 2016**





APN Technology
Transfer Scoping
Workshop – Kobe,
December 2016

Continued being proactive in assisting countries to contribute to global and regional agreement/conventions



Continued to strengthen science-policy interactions, through dialogues, active communication, publication and outreach media

Planned activities:

- Science Policy Dialogue on Low Carbon Development, Bangkok, February 2017
- Science Policy Dialogue Series on Biodiversity and Ecosystem Services (in collaboration with IPBES), 2017 - 2019

Get involved

1. APN Calls for Proposals (CRRP/CAPaBLE):

- www.apn-gcr.org/call/

2. Become an external reviewer

- Review proposals
- Become a peer reviewer of the APN Science Bulletin

3. Become a partner in joint collaborative activities

Thank you!

For more information: <http://www.apn-gcr.org/>

News, announcements and global change community updates.



APN E-Lib: www.apn-gcr.org/resources

Archive of publications, project metadata and outputs of completed/ongoing projects.

Contact us:

APN Secretariat, East Building 4F. 1-5-2 Wakinohama Kaigan
Dori, Chuo-ku, Kobe 651-0073, Japan. Tel: +81-78-230-8017
Fax: +81-78-230-8018; Email: info@apn-gcr.org