# APN Adaptation Ativities

Akio Takemoto, Ph.D. Director, AP Secretariat









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### Essence of Cancun Agreements

- · Cancun Adaptation Framework
  - · Planning, prioritizing and implementing; Assessment
  - · Institutional capacities
  - · Building resilience
  - · Disaster risk reduction strategies
  - · Research, technologies, data, information, observation...
  - · Adaptation Committee
  - · National adaptation plans (NAPs)
  - Synergies and engagement with national, regional and international organizations, centres and networks
  - · Loss and damage (insurance)

## Background

### 2011 Climate Synthesis Report in AP Recommendations (adaptation)

- Climate change and disaster risk management must be mainstreamed into national development strategies....
- Critical to climate adaptation research, practice, and policy are downscaled climate
  date.
- Develop localized climate change impact assessment tools, especially IAMs...
- Encourage APN member countries to increase the capacity to formulate national strategies on
- Community-based climate adaptation, as well as reducing walnerability and building resilience, requires much more attention....
- Develop programmes to enhance the capacity of major players in adaptation planning and implementation; local universities and academic institutions, communities and local governments...



## APN's Climate Adaptation Programme from April 2012 to March 2015

- Component 1: Scoping workshop to enhance climate adaptation actions of APN developing countries
  - · Collaboration with ICAS Ibaraki University
  - · Determine prioritized thematic areas
- · Determine methodologies and tools to support developing countries
- Component 2: Joint Training Course on adaptation planning and implementation in the AP region
- Collaboration with UN-CECAR (UN Climate and ecosystem Adaptation Research)
  - · Invite researchers and practitioners in prioritized thematic areas
- Component 3: Proposal Development Training Workshop (PDTW) with focus on adaptation
- Results of 1st year activities will be input for a new adaptation programme (proposed to IGM18 (March 2013) for approval)

## Communication for developing adaptation programme (since IGM17, March 2012)

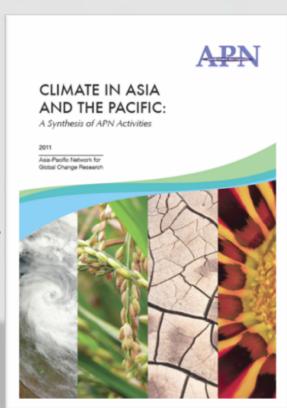
- Planet Under Pressure 2012; March 26-29, 2012, London, UK
- 5th GEOSS International Asia-Pacific Symposium: April, 2-4, 2012, Tokyo Ianan
- Adaptation Policy & Technology Forum for Impacts of Global Change: May 11, 2012, Mito, Japan (Meeting with ICAS, Ibaraki University)
- UNFCCC/SBSTA36, International Research Dialogue with Parties: May 19, 2012, Bonn, Germany
- Adaptation Futures Conference 2012: Networking Beyond Rio+20: Climate Adaptation Partnerships for Sustainable Development': May 29-31, 2012, Tucson, USA
- Meeting with Asian Development Bank: July 16, 2012, Manila, Philippines
- APN-START Science-Policy Dialogue on Challenges of Global Environmental Challenge in Southeast Asia: July 19-21, 2012, Bangkok, Thailand

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## Objective of the Workshop

- The objective of the workshop is to develop a strategy that can be incorporated into the APN Strategic Plan for enhancing climate adaptation in the Asia-Pacific region from the viewpoint of mainstreaming scientific knowledge into the formulation and implementation of climate adaptation plans.
- The workshop aims to identify needs, gaps, and lessons on planning and implementation of adaptation, and to develop a strategy for APN to enhance adaptation activities in the region by collaborating with international and regional organizations and networks.

## Objective: 1

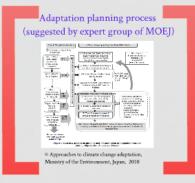
### Questions: points for discussion

- What needs, gaps and lessons are identified for planning and implementing adaptation?
- How can we mainstream scientific approaches into climate adaptation policy in Asia-Pacific region?
- What thematic areas, approaches and tools should APN focus on?
- How can APN collaborate with other organizations and networks in order to maximize their own functions for implementing climate adaptation activities

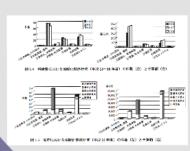
### Question 1 Status-quo on adaptation plans in USA



US-EPA Home Page, http://www.cles.org/us-status-regions/policy-maps/adaptation



Large amount of money is spent for climate adaptation research in Japan



### Observation

- Climate Adaptation is mainstreamed into science and technology policy, but not into environment policy (even in developed countries).
- In some developed countries, local governments (prefecture/municipality) established adaptation frameworks and plans, but it is not clear whether science-based climate risk assessment is implemented for public projects.

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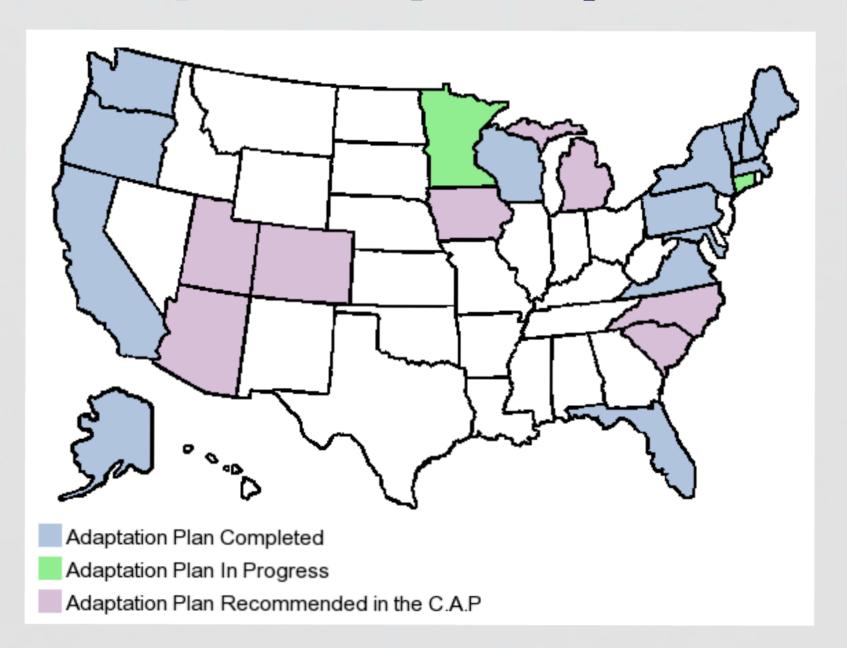
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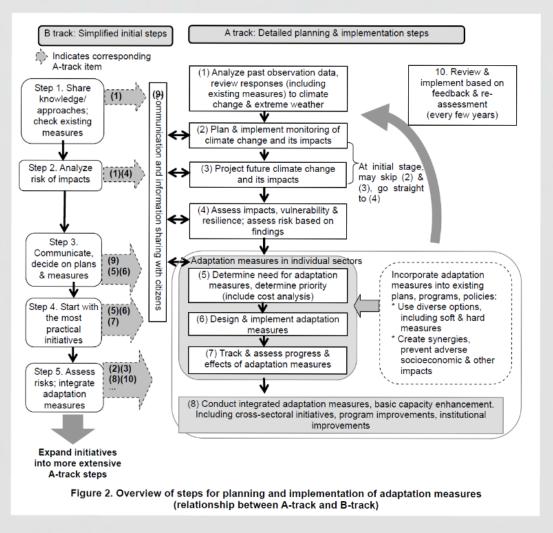
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## Question l Status-quo on adaptation plans in USA



# Adaptation planning process (suggested by expert group of MOEJ)



© Approaches to climate change adaptation, Ministry of the Environment, Japan, 2010

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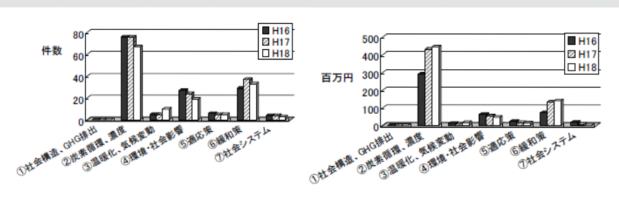


図 1.4 科研費における温暖化関連研究(平成 16~18 年度)の件数(左)と予算額(右)

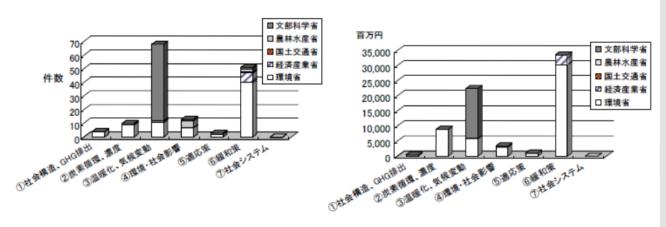


図 1.5 省庁における温暖化関連研究(平成 18 年度)の件数(左)と予算額(右)

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## Question (2) Strategic thinking for mainstreaming scientific approach

- How can we support member countries to formulate adaptation plans based on scientific assessment
- How can we support member countries to undertake climate risk assessment as a screening tool for policy planning
- Infrastructure projects (i.e., traffic roads, irrigation, power plants, bank protection)
- · City planning (i.e., facilities' layout, emergency measures, disaster
- · Agriculture /food security (i.e., water resource management,

## Objective: 2

## Strategic thinking for mainstreaming scientific approach

- · What are the roles of APN?
  - · Can we enhance adaptation activities under existing programmes (ARCP, CaPABLE)?
  - Do we need to establish new research and capacity building programmes focusing on adaptation?

    How much is feasibility of the new program proposal?

  - $\bullet$  What are the roles of other organization and networks in collaborating with APN?

Focused areas, innovative tools and methodologies

- · Do we need to set up focused thematic areas to be supported by APN?
- What are innovative tools and methodologies to support developing countries in promoting science-based adaptation activities? (examples)
  - Developing a training modules for capacity building activities
  - Developing evaluation methods for effectiveness of climate-proof
  - projects (thorough competitive process)

    MOU for multi-year collaboration with international organizations and networks

## Question (3) Necessary tools for two approaches

Top-down approach (in particular)

- · Database (temperature, rainfall, water resources, land use, etc.) · Climate modeling, Downscaling, GIS
- · Good practices
- Impact and Vulnerability Assessment methodology
- · Bottom-up approach (in particular) Database

- accessible for local government and community
- · Good practices
- · System for stakeholder involvement
- IVA Guidance for infrastructure projects planned by local

- World Climate Research Programme (WCRF)
   CORDEX Acia (Coordinated Regional climater)

## Question (4) Possible collaboration

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  - City planning (i.e., facilities' layout, emergency measures, disaster risk management)
  - Agriculture / food security (i.e., water resource management,
     Selection of varieties)

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## Question (4) Possible collaboration

- World Climate Research Programme (WCRP)
  - CORDEX Asia (Coordinated Regional climate Downscaling Experiment Asia)
  - Global change research community
    - Contribution to the "Future Earth" process
- [Innovative approach]
  - United Nations University
    - Training course for early career scientists and practitioners (1st APN-UNCECAR joint training course: November 11-23, 2012, Bangkok, Thailand)
  - Asian Development Bank
    - Data sharing, joint analytical works and joint capacity building projects on climate risk assessment tools
    - A regional climate scenarios and library

# Question (4) Possible collaboration

- [Innovative approach]
  - Japan International Cooperation Agency
    - Good practices for mainstreaming adaptation into development projects
  - Asia-Pacific Adaptation Network (APAN)
    - Utilizing databases for developing assessment tools and for capacity building activities
      - Database of good practices on adaptation
      - Database of adaptation technologies
      - · Adaptation Forum
  - · Ministry of Interior, Thailand
    - Development of climate risk assessment tools for community-based adaptation
  - Institute of Global Change Adaptation Science (ICAS)
    - Contribution from Japanese Research Community

### Suggestions for Future APN Strategic Programme to Enhance Climate Adaptation in the Asia-Pacific Region

- · The new programme aims to enhance science-based adaptation activities of APN developing countries and comprises the following components:
  - · 1)regional research programme that has a capacity building element
  - · 2) capacity building programme (including projects at national and sub-national scales)
  - · 3)activities jointly conducted with other organizations and networks

## Activities in priority

- · regional research and capacity building projects should contribute to improving applicability by users, focusing on the following themes:
  - · Development of high-resolution observational, model and downscaled datasets that can contribute to filling data gaps
  - · Sharing of needs-oriented data
  - · Calibration and validation of regional climate models; and analysis of projections and assessment of uncertainties
  - · Development and utilization of impact, vulnerability, risk and economic assessments
  - · Improvement of communication skills of scientists and practitioners with stakeholders including local government, community, private sector and civil society, for encouraging policy-makers to formulate and implement adaptation plans based on the latest scientific knowledge
  - · Utilization of available information including climate data in applications for adaptation

## Outcome of the Scoping Workshop

### APN new partnerships (under development)

- Collaboration on a regional climate scenarios consortium and library in the areas of coordination of data collection, rescue, mining and calibration

- · Multi-year collaboration on capacity development for scientists and practitioners on climate adaptation including themes onadaptation plans and "train the trainers" activities
- Organization of a follow-up meeting for recommendations to strengthen partnerships at the 2013

- · Involvement of Japanese scientists for adaptation activities implemented by APN and its partners
- · Organization of follow-up events with APN

### Ministry of Interior, Thailand

. Cooperation with the APN national Focal Point for Thailand on the development of community-base adaptation activities that involves local governments and communities in Thailand

· Training activities for scientists and practitioners on climate adaptation including modeling, downsca resilience, etc

· Collaboration with CORDEX-Asia on capacity development in climate downscaling

### Involvement in UNFCCC Process

Input to the Expert meeting on a range of approaches to address loss and damage associated with the adverse effects of climate change, Bangkok, Thailand, 27-29 August, 2012



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## APN new partnerships (under development)

## **ADB**

- Collaboration on a regional climate scenarios consortium and library in the areas of coordination of data collection, rescue, mining and calibration
- Collaboration on needs assessment of users at national and local levels

## **APAN**

- Multi-year collaboration on capacity development for scientists and practitioners on climate adaptation including themes onadaptation plans and "train the trainers" activities
- Organization of a follow-up meeting for recommendations to strengthen partnerships at the 2013 Adaptation Forum

## **ICAS**

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## **UNU (UN-CECAR)**

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## WCRP

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