Promoting research and enhancing understanding of climate information through strengthening science-policy interface: *Examples from the Asia-Pacific*

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APN Steering Committee Member

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United States Global Change Research Program

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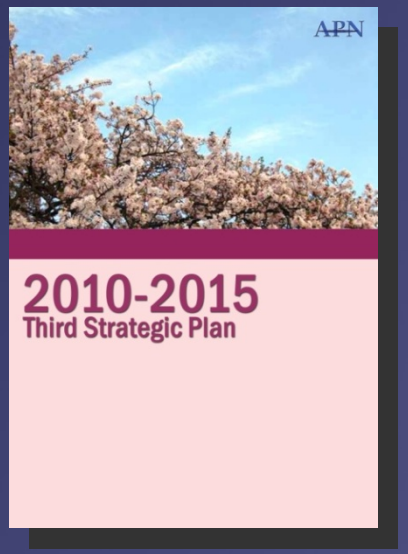
3RD STRATEGIC PHASE



APN GOALS

- Supporting regional cooperation in global change research on issues particularly relevant to the region
- **Strengthening appropriate interactions among scientists and policy-makers, and providing scientific input to policy decision-making and scientific knowledge to the public**
- Improving the scientific and technical capabilities of nations in the region, including the transfer of know-how and technology
- Cooperating with other global change networks and organisations

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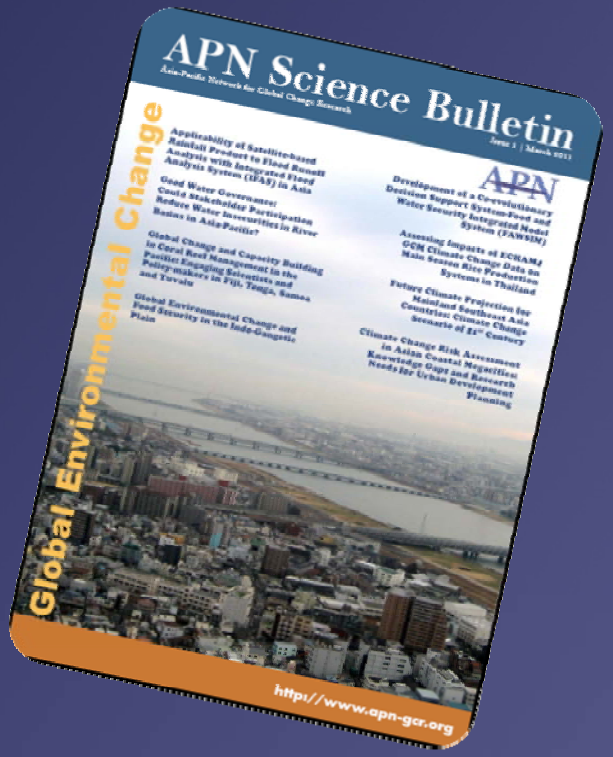
Drawing on 4 projects from the APN Science Bulletin, we will show some stories of science-policy communications through various approaches including dialogues, research and training:

- Science-Policy workshops in the Pacific Islands
- Integrated Assessment Modeling in Temperate East Asia
- Homegarden Systems in South Asia
- Creating a Research Policy Network for Climate Adaptation in Asia



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Global Change and Capacity Building in Coral Reef Management:

Engaging Scientists and Policy-Makers in Fiji, Tonga, Samoa & Tuvalu

(APN Ref: CBA2010-15NMY-South)

POLICY-MAKERS & SCIENTISTS NOTED THE NEED FOR/TO:

- Develop a regional climate change clearing house
- Continued/consistent capacity building in all countries
- Address the disconnect between communities, government and other players
- Harmonise projects for better coordination among agencies
- Raise public awareness of coral reef issues, and find ways to introduce curricula in schools.
- Facilitate attachments between USP students and their home governments.
- Introduce coral identification training in Tonga, Samoa and Tuvalu (Taxonomists limited)
- Encourage closer cooperation with SPREP on coral reef & management issues.
- Instil and promote good governance at the community level.
- Continuous monitoring in support of government policies, and create relevant statistics on stock and fishing in order to understand trends.

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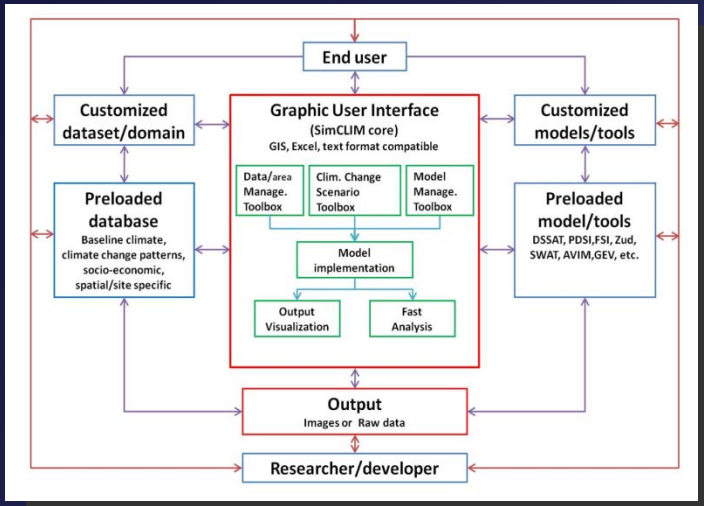
Integrated Model Development for Water and Food Security Assessments in Northeast Asia: China, Mongolia, Russia



- FAWSIM MODEL (IAM): consists of three major components: a database that supports climate change scenario generation; a set of impact models; and interface for end-users.
- FAWSIM provides an efficient tool for stakeholders by integrating baseline climate, climate change scenarios and relevant environment, socio-economic data, with a series of impact models, and graphic user interface.
- FAWSIM allows for multi-scale, multi-disciplinary impact assessments; climate change scenario uncertainty analysis; the assessment results can be visualized and further analyzed thus facilitating training and capacity building.
- The open framework makes FAWSIM a co-evolutionary decision support system that can be regularly upgraded and improved through the interaction between end users and the developers.

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Vulnerability of Home Garden Ecosystems to Climate Change and Its Impacts on Food Security in South Asia

INVOLVES SCIENTISTS, GOVERNMENTS LOCAL COMMUNITIES

The projects is assessing the effects of climate change on home garden systems, which are the predominant types of highland farming in South Asia (Sri Lanka, Bangladesh and India)

(a) Documenting key characteristics of home-garden systems covering major climatic zones

(b) Establishing patterns of climate change and their indicators over a period of more than 50 years

(c) Developing a bio-economic models to identify the contribution of climate change on the status of food security and sequestering carbon for win/win solutions.

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Strengthening Capacity for Policy Research on Mainstreaming Adaptation to Climate Change in Agriculture and Water Sectors

Malaysia, India, VietNam, Japan, Cambodia, Philippines

The project has theoretical and practical significance and is positioned to feed into the 5th IPCC and national policy processes and adopts a three-pronged approach to strengthen research capacity on adaptation through:

- Identifying practical options for mainstreaming and **metrics for monitoring the effectiveness of adaptation policies and measures;**
- **Exchanging adaptation policy-relevant information** through creation of a network;
- **Disseminating outputs** beyond the project boundaries.

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APN Climate Synthesis

- Synthesis of climate-related research and capacity development over ***10 years***
- ***56*** completed projects in an 88-page synthesis where
- "policy" is quoted ***143 times***....
- Synthesis will be released end June 2011.

APN Climate Synthesis Scoping Meeting 10-11 November 2009 APN Secretariat, Kobe, Japan

Focus Chapters

- Food, Agriculture and Climate
- Seasonal Climate Prediction & Application
- Climate Variability, Trends and Extremes
- Regional Climate Change Modeling
- Vulnerability & Adaptation to Climate Change
- Climate Change Mitigation
- Climate Change Policy & Outreach

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Communicating outside the science arena for climate vulnerability and adaptation

From recent APN Climate Synthesis Report:

- Raising awareness of civil society and policy-makers about climate change and its impacts is an important step towards developing appropriate adaptation strategies.
- Adapting to climate change requires multi-disciplinary approaches. Multi-disciplinary workshops have helped address this important need.

- APN has facilitated communication between research modellers and policy-makers using Integrated Assessment Models (IAMs) as a foundation for a science / policy dialogue in the Asia-Pacific region.
- IAMs have become a kind of information exchange to support policy-making through the whole process of vulnerability assessment through to decisions for adaptation strategies.

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What have we learnt?

- Big issue in Asia-Pacific (and elsewhere) is policy staff turnover;
- need to be prepared to repeat the exercise several (many times);
- this area of work is an acronym soup!! Need to continually be aware and define terms;
- projects need to be real and relevant.

- Local languages are important;
- building networks and building trust is vital as skilled human resources are limited;
- build confidence by finding 'win/win' solutions;
- building confidence and trust takes time – need to meet for a at least a week for this to happen.

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Food for thought

- Human society doesn't observe climate nor climate change:
  we observe the 'weather' - hot/cold, wet /dry;
- Psychologists tell us there are 2 main human character types – those open to change and those that a threatened by change;
- Communicating issues around 'climate change' is therefore a real issue for the second group of citizens;
- Might need to frame issues around more of the same eg. more frequent extreme events etc.;
- Need greater involvement of social science;
- Recommended reading:
  "*Requiem for a species: why we resist the truth about climate change*" by Prof Clive Hamilton.

The Science-Policy Bridge exists, but needs strenghtening

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