



CORDEX South Asia Training Workshop $17^{th} - 20^{th} \text{ October 2012}$

APN Presentation: Recent Climate Activities Linda Anne Stevenson APN Executive Science Officer



Background Information on the APN

1. Background Information on the APN

APN: An Overview

- Established in 1996, secretariat based in Kobe Japan since 1999
- Network of 22 member governments in the Asia Pacific region
- Supporting regional global change research and Enhancing scientific capacity in developing countries
- To improve decision-making in focus areas of global change and sustainable development

We define global change as the set of natural and human-induced changes in the Earth; in its physical, biological, and social systems that, when aggregated, are significant at a global scale.

Member Countries

Pacific Island Countries and Singapore are approved countries whose scientists are eligible to receive funding under APN awards.



Australia



Bangladesh



Bhutan



Cambodia



China



Fiji



India



Indonesia



Japan



Lao DPR



Malaysia



Mongolia



Nepal



New Zealand



Pakistan



Philippines



Republic of Korea



Russian Federation



Sri Lanka



Thailand



USA



Viet Nam



Financial Resources (US\$3M/year)

The APN is sponsored by the governments of:

- Japan
 - Ministry of the Environment Hyogo Prefecture
- United States of America National Science Foundation US Global Change Research Program
- Republic of Korea
 Ministry of Environment
- New Zealand
 Ministry for the Environment













3RD STRATEGIC PHASE



2010-2015 Third Strategic Plan



Supporting <u>regional cooperation in global change</u> <u>research</u> on issues particularly relevant to the region



GOALS

Strengthening <u>appropriate interactions among</u> <u>scientists and policy-makers</u>, 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

ARCP – Regional Research Programme CAPaBLE – Capacity Building Programme

Under APN's Science, APN provides support that falls into the following four broad categories:

Climate
Change and
Climate
Variability;

Ecosystems, Biodiversity and Land Use;

Changes in the Atmospheric, Terrestrial and Marine Domains

Resources
Utilization and
Pathways for
Sustainable
Development

Approximately 90 projects ongoing through our competitive calls for proposals

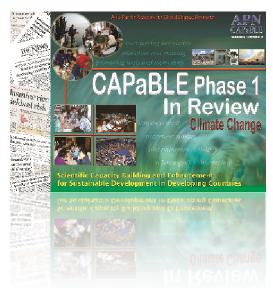


General Climate Activities and APN's Climate Synthesis

2. General Adaptation Activities and APN's Climate Synthesis

Scientific Activities in Climate Change – Vulnerability, Impacts & Adaptation – became a focus for APN in 2004

Capacity Development and Research in Climate Change under CAPaBLE Phase I



A review in 2008 highlighted that the CAPaBLE Programme had:

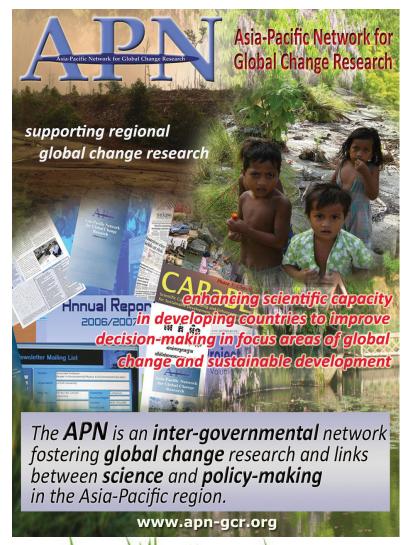
- Trained over 300 scientists
- Raised awareness of over 4000 people
- Published over 50 peer-reviewed papers

"In Review" highlighted CAPaBLE as

Policy relevant, conducting underpinning research, developing capacity, creating partnerships, raising awareness, promoting sustainable societies.

Climate Change Challenges that we took to SBSTA28 (2008)

- Climate change is the foremost concern particularly vulnerabilities, impacts and adaptation
- lack of human & institutional capacity & limited financial resources are the main challenges in implementing climate research
- mainstreaming climate research results into national policy



Climate Change Challenges that we took to SBSTA30 (2009)

Sectors Most at Risk

Agriculture, Water (floods, drought, security), Forests, Coastal zones, Mangroves, Maritime resources, etc



mainstreaming adaptation strategies most challenging



2009: APN's Response

Scientific Capacity Building for Climate Impact and Vulnerability
Assessments under the CAPaBLE Programme & the APN Climate
Synthesis of Activities

APN Climate Synthesis Report

Synthesis of climate-related research and capacity development over 10 years

56 completed projects in an 78-page synthesis where "policy" is cited **143 times**....



- 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



http://goo.gl/gVW8M

http://www.apn-gcr.org/uploads/reports/2011/Climate%20in%20Asia%

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2011 Climate Synthesis Report in AP Climate Change Adaptation

Recommendations:

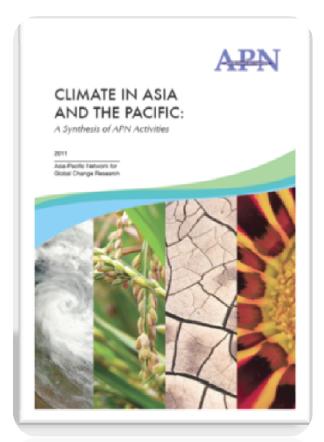
- Community-based climate adaptation, as well as reducing vulnerability and building resilience, requires much more attention....
- Climate change and disaster risk management must be mainstreamed into national development strategies....
- Critical to climate adaptation research, practice, and policy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

Some other Conclusions:

- Critical to climate adaptation research, practice and policy are <u>downscaled climate data</u>.
- ☐ Developing <u>Regional Climate Models (RCMs)</u> in Asia helps provide more detailed information on monsoon circulation.
- □ High-resolution regional/local information from RCMs can be used in impact, vulnerability and adaptation studies.
- ☐ There is a need for RCMs and statistical downscaling methods to help localise GCM results.
- ☐ Especially problematic in the Asia-Pacific are <u>small</u> <u>islands states</u>, <u>Southeast Asia</u> and areas in <u>South Asia</u> with rough and steep terrain like the Himalayas.

Key Messages for Adaptation.....

- Adapt now!
- Enable adaptation
- Integrate adaptation with development
- Increase knowledge
- Strengthen institutions
- Protect natural resources
- Provide financial assistance
- Involve those at risk
- Use place-specific strategies















New Climate Adaptation Programme (IGM17 & SBSTA36)

Regional scale Research

Downscaled modeling technologies

Information and knowledge sharing

Disaster risk management (contributing to loss and damage)

Systematic training and capacity building for **scientists /practitioners**

Science-Policy dialogues in AP region











APN's Adaptation **Policy Brief**



BACKGROUND





The need for climate change adoptation is increasingly being recogstand by communities, with accountable one on assessing volumebilthis and identifying adaptation options. The complexity of adaptaton due to the multidisciplinary nature of the required solutions. and the lack of long-term data pose a great challenge, porticularly in the Asta-Partic region. Approaches at the graceroots levels that tovolve communities and local governments to incorporate chinate change adaptation practices into development planning will be needed, and integrated Assessment Models (IAMs) will need to be contemporal for local to segtonal and sectoral levels.

In the lead-up to the Rio+30 conference, the Asta-Pacific Network for Global Change (APSI) organized a sension at the Chraste 'Adaptation Potures' Conference held on 29-31 May 2012 at The Univariety of Arteona, USA. The section focused on the proportions of partnerships and nationiting to facilitate the adoption of local, national and regional eduptation strategies. The present policy brief builds on the collective messages that arose from the session, and in published to convey these menouges at Rice 20 and beyond.



















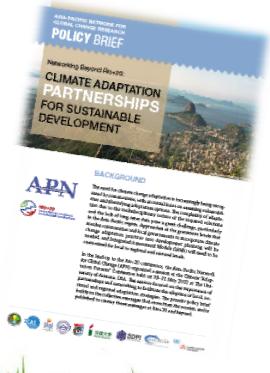
3. APN's Adaptation Policy Brief

Climate Adaptation Messages

Climate Change Modelling in Mangrove Ecosystems

Mr. Kashif Majeed Salik (Pakistan)
"Robust and collective global to
regional responses for climate
change adaptation can be achieved
through joint research and policy
actions by sharing of technology,
knowledge and experiences."







Climate Adaptation Messages

Mainstreaming Climate Change Adaptation into Water & Agriculture Sectors



Dr. S.V.R.K. Prabhakar Institute for Global Environmental Strategies (IGES)



Professor Joy Pereira (Malaysia):

"Means to reach and address issues at the local level are still at nascent stages. There is also a need to strengthen the channels that connect various stakeholders to the local level."



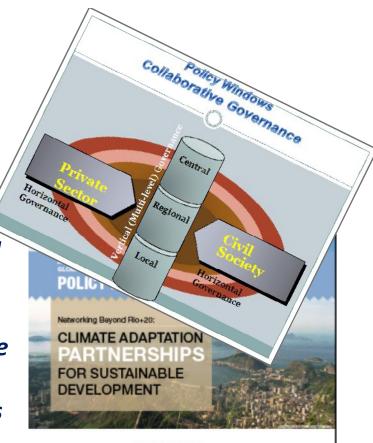
Climate Adaptation Messages

"Encourage horizontal and vertical institutional collaboration"

"Promote two approaches in climate change adaptation: science-driven and society need-based approach (community-based)"

"Great demand and potential to update knowledge dissemination and research through University higher education networks. Financing these efforts remain the main challenge."

"Robust and collective global to regional responses for climate change adaptations can be achieved through joint research-policy-action by sharing of technology, knowledge and experiences."



BACKGROUND



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APN Scoping Workshop for an Adaptation Framework

4. APN Scoping Workshop for an Adaptation Framework

Climate Adaptation Framework Scoping Workshop

OBSERVATIONS

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



Climate Adaptation Framework

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

- ❖ As a result of the discussions at Scoping Workshop the APN hopes to establish a multi-year strategic programme focusing on climate adaptation from FY2013 (April 2013) pending resource availability
- ❖ The new programme aims to enhance science-based adaptation activities of APN developing countries and comprises the following components:
 - regional research programme that has a capacity building element,
 - capacity building programme (including projects at national and subnational scales),
 - activities jointly conducted with organizations and networks



Based on needs, gaps and lessons for climate adaptation in the Asia-Pacific region APN activities will contribute to improving user knowledge in:

- Development of observational, model and downscaled datasets with high-resolution 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 impacts, vulnerability, risk and economic assessments;
- Improvement of communication skills of scientists and practitioners with stakeholders including local government, community, private sectors 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



Climate Adaptation Framework - Partnerships

It is recommended that the APN will enhance partnerships with local, national, regional and international organizations and networks under the new program, including:

- ❖ ADB Climate Change Consortium Climate Knowldege Platform for Asia
- ❖ APAN Networking in Climate Adaptation & Proposal Development Training Workshops
- ❖ ICAS Training , Research and Networking
- * MAIRS Research in Regional Climate Modelling
 - **UNU (UN-CECAR)** Training in reginal climate modelling, VIA, to
- **START:** Just about everything!
- **UNFCCC:** Loss and Damage
- WCRP: Collaboration in general but more recently with the CORDEX-Asia on capacity development on downscaling

.....ad infinitum



It is recommended to further develop APN's climate adaptation programme and expand its partnerships with organizations and networks through relevant platforms in accordance with the Programme of Work and Budget as well as the APN Strategic Plan and Framework Document.

GROW AND STRENGTHEN its PARTNERNSHIP FOR CLIMATE RCM RESEARCH & TRAINING



Thank you for your Attention

