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Message from the Director



It is my great pleasure to release the 2010 3rd Quarter Edition of the APN Newsletter. For those who are reading our newsletter issue for the first time, we used to name it based on the four seasons in Japan (Winter, Spring, Summer and Fall) but since the timing varies in different parts of the Asia-Pacific region and some of our member countries do not have four seasons, we are now back to the conventional naming (1st, 2nd, 3rd and 4th Quarter) of the newsletter issues to avoid confusion.

The past three months have been exceptionally busy with the review of proposals submitted under our Special Call for Proposals for Focussed Activities and the submission process for the Annual Calls for Proposals. Thank you very much to our dedicated Members of the Scientific Planning Group (SPG) Sub-Committee and Capacity Development Committee (CDC) for their exemplary work and commitment. Thanks in advance also to our SPG Members, invited experts to the SPG and external reviewers for the work ahead as we will again count on your expertise and kind cooperation for a successful, transparent and efficient review process.

We organised and successfully conducted three main events in August and September: APN Climate Synthesis First Author's Workshop; 16th Steering Committee (SC) Meeting; and the International Symposium on Coexistence with Nature:

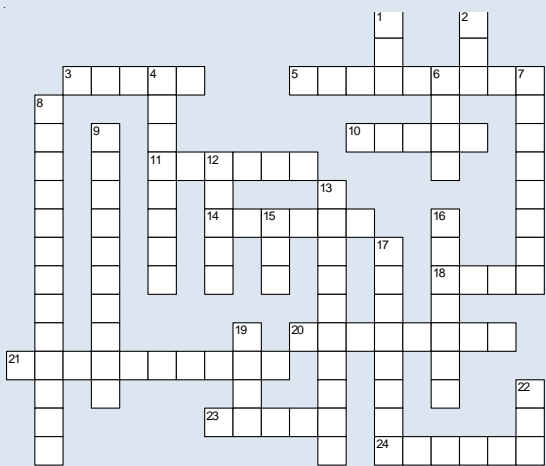
Biodiversity and People – Hyogo Dialogue for the Future. Details are contained in the inside pages of this newsletter edition, together with a brief background about the APN side-events and exhibit at the United Nations Convention on Biological Diversity 10th Meeting of the Conference of the Parties (UNCBD COP10) in Nagoya, Japan (currently ongoing at the time of writing).

New information materials were published including: Bulletin/Policy Brief No. 5, which highlights APN forestry-related activities; introductory APN flyer/poster; three event-related posters for XXIII International Union of Forest Research Organisations (IUFRO) World Congress, UNCBD COP10, and Group on Earth (GEO) Beijing Ministerial Summit and Exhibition. Bulletin 1 that highlights APN major activities and publications in 2009/10 and those 2010 approved (continued and new) projects, were translated into the following languages of APN member countries: Bahasa Malaysia, Korean, Mongolian and Thai. This newsletter issue covers a section on APN new publications.

The dynamic features of the APN website is work in progress and many updates have been posted in the past quarter such as new established project-related websites, new project-related outputs (book of abstracts, final project reports, policy brief, proceedings,

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CROSSWORD CHALLENGE



Across

- 3 new APN national Focal Point for Thailand (first name)
 5 ASEAN _____ of Biodiversity is a recognition programme for ongoing projects on biodiversity conservation and advocacy in Southeast Asia
 10 UNSDR stressed that it is paramount that risk reduction becomes part and parcel of _____ planning
 11 2009 Nobel Prize Awardee in Economics who delivered a keynote speech at the 23rd IUFRO World Congress

- 24 venue of the major global change open science conference to be held in March 2012

Down

- 1 must be improved dramatically to fill up the large gap in traditional pollution control and the mitigation of carbon emissions

- 14 hydrological projections have to reflect the average of at least a _____ so that the projected hydrological changes could be considered as a result of change in climate rather than due to erratic weather variability
 18 OECD noted that approximately half of the total global urban coastal population threatened by coastal flooding and storm surges is located in just 10 cities, 9 of which are located in _____
 20 the country that established a new research institution, Global Change Impact Studies Centre to study various aspects of this phenomenon while other countries in the South Asia region also established similar institutions to focus attention on climate change
 21 this factor and social justice issues, institutional, jurisdictional and social conflicts have tendency to worsen the climate-related issues
 23 a network that promotes global cooperation in forest-related research and enhances the understanding of the ecological, economic and social aspects of forests and trees (abbrev.)
 2 a comprehensive assessment conducted to identify Japan's current state of biodiversity (abbrev.)
 4 newest APN Steering Committee Member (last name)
 6 aims to develop innovative and strategic policy proposals towards a sustainable Asia and the Pacific (abbrev.)
 7 a Japanese term referring to socio-ecological production landscapes formed through harmonised human-nature relationships
 8 knowledge or research gaps, human and financial resources, and _____ capacity were identified barriers to effective urban development planning
 9 Shifting society to sustainability will require changes also in _____ and consumption patterns
 12 Pakistan and this country have indeed been suffering from acute water shortage in the last few years and relations between the two deteriorated mainly because of disputes on sharing of waters and tributaries
 13 disaster risk reduction and disaster management are important context for integrating or mainstreaming _____ into decision-making for the cities at risk
 15 first global agreement on the conservation and sustainable use of the rich biological diversity of life on Earth (abbrev.)
 16 Asian _____ mega-cities has been identified by the IPCC as global 'hot spots' of disaster vulnerability
 17 a emotional persuasion rather than _____ persuasion are more effective in communicating the urgent issues to the farmers and to the community
 19 major sponsor of the International Conference on Planet Under Pressure: New Knowledge Toward Solutions (abbrev.)
 22 committed to supporting the Parties to the CBD and joining other partner organisations in safeguarding biodiversity through the promotion of related research and capacity development activities

Message from the Director

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training report, etc.). You will also find interesting global change announcements from APN-supported projects and partners in the global change community. Please visit our homepage (<http://www.apn-gcr.org/newAPN/indexe.htm>) for details. Some of the updates mentioned above are enumerated in this newsletter edition.

As part of APN's Communications and Outreach Programme and to strengthen the implementation of the strategies outlined under the Science-Policy Agenda of the 3rd Strategic Plan (3SP), the Secretariat and some members actively engaged in the following events: Australian National University Climate Change Institute Young Scholars Conference; Commencement Exercise at United Nations University; Postgraduate Course on Climate Change; Visioning Institutional Frameworks for Global Sustainability Research Meeting and Open Forum; International Forum for Sustainable Asia and the Pacific (ISAP2010); 19th Asia-Pacific Seminar on Climate, Change; IUFRO World Congress 2010; Storm Surges Congress on Risk and Management of Current and Future Storm Surges; Global Land Project 2010 Open Science Meeting: Land Systems, Global Change and Sustainability; International Group of Funding Agencies for Global Change Research (IGFA) Annual Meeting; and project-related events (Workshop on Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities; and Workshop on

Integrated Studies of Environmental Changes in Tibet-Himalayan Region). Many of these events are covered in this newsletter issue and full account of some events will be reported in the 4th Quarter Edition of the APN Newsletter to be released in January 2011.

I would also like to take this opportunity to thank our Programme Fellows, Mr. Erdenesaikhan Nyamjav and Ms. Lizhier Coralde for their valuable contribution and support to APN. They have been with us for one year and both confirmed their willingness to stay with APN for another year. In this 2010 3rd Quarter Newsletter Edition, they are happy to share with our readers their Programme Fellowship experiences with APN for a year.

Please read through this issue for more reports and updates. I would like to conclude this message by drawing your attention to our recent hot summer in Japan. In the past two months, the temperature was extremely high (35-40°C), the hottest summer on record in Japan, which may be an indication of climate change. Research on global environmental change, therefore, is becoming more crucial and the APN plays a more important role. I again urge you to cooperate with us in playing a key role towards the sustainable development of nations in the Asia-Pacific region. Please feel free to contact me (tfujitsuka@apn-gcr.org) should you wish to partner with us in this endeavour.

The Asia-Pacific Network for Global Change Research (APN) is an international network of Governments whose mission is to enable investigations of changes in the Earth's life support systems and their implications for sustainable development in the Asia-Pacific region. The APN, therefore, supports investigations that will:

1. Identify, explain and predict changes in the context of both natural and anthropogenic forcing;
2. Assess potential regional and global vulnerability of natural and human systems; and
3. Contribute, from the science perspective, to the development of policy options for appropriate responses to global change that will also contribute to sustainable development.

APN defines "global change" as the set of natural and human-induced processes in the Earth's physical, biological, and social systems that, when aggregated, are significant at a global scale.

News from the Secretariat

APN Welcomes New Focal Points

Please join the APN Secretariat in welcoming our new national Focal Points (nFPs):

BANGLADESH

The APN is pleased to welcome the new nFP for Bangladesh, **Mr. A.N. Shamsuddin Azad Chowdhury**. Mr. Chowdhury is the new Joint Secretary (Administration) of the Ministry of Environment and Forests, Bangladesh. He is the successor of Mr. Martuza Ahmed who has been supportive with the APN's activities since his involvement in July 2009. For official correspondence, you may contact chowdhurynasim59@yahoo.com or jsadmin@moef.gov.bd.



THAILAND

Mr. Chote Trachu is the new Permanent Secretary of the Ministry of the Environment, Thailand and in this capacity, was nominated as the APN new nFP for Thailand. He is the successor of the late Mr. Saksit Tridech who joined APN in November 2007 and provided full support and valuable contribution. For official correspondence, you may reach him by email at chote.t@mnre.mail.go.th.



The APN looks forward to continued support of the Governments of Bangladesh and Thailand in APN's activities under the leadership of Messrs. Chowdhury and Trachu.

Conference on Marine Biodiversity of East Asian Seas: Status, Challenges and Sustainable Development, Nhatrang City, Viet Nam, 6-7 December 2010

The Conference will be held jointly by the APN, Institute of Oceanography, Viet Nam Academy of Science and Technology, and A.V. Zhirmunsky Institute of Marine Biology, Far East Branch of the Russian Academy of Sciences in Nhatrang City, Viet Nam on 6-7 December 2010. For more details please view the second announcement on the APN website.

Message from the Steering Committee Chair



Dear Members of the Asia-Pacific Network for Global Change Research, at the end of last August, the 16th Steering Committee Meeting was held in Kobe. The Meeting was a meaningful one where the SC Members discussed and exchanged various options and views as a follow-up to the 15th Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting in Busan, including ways to enhance interactions with international/intergovernmental bodies that are closely related to global change research, the policy on data management, and so on.

I hope that the coming 16th IGM/SPG Meeting to be held in Sri Lanka in the first half of next year will lay down a stepping stone to further enhance APN activities in the Asia-Pacific region.

Now, the 2010/2011 projects under the Annual Regional Call for Research Proposals (ARCP) and Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) are well in progress. The APN Secretariat just announced to proponents the Results for 2010 Special Call for Proposals for Focussed Activities. Congratulations to the successful proponents and thanks to all proponents for their interest in the APN.

I am pleased with the progress we have made to date in all of our programmes and activities and expect that APN will continue to grow qualitatively as well as quantitatively and will engage more in external activities to strengthen ties with international bodies such as the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) to be established in the near future. In this regard, I deeply appreciate the untiring efforts by the Secretariat and many valuable inputs and contributions by individual SC Members.

I wish you and your family continued health and happiness. Thank you.

Suho SEONG

News from the Secretariat

APN Joins Partners at UN Convention on Biodiversity (CBD) COP 10 in Promoting Biodiversity Conservation in the Region



In taking active role at the United Nations Convention on Biodiversity 10th Meeting of the Conference of the Parties (UNCBD COP10), in Nagoya, Japan, 18-29 October 2010 and to celebrate the 2010 International Year of Biodiversity, the APN, in collaboration with the Hyogo Prefectural Government, Japan and other key partner organisations, planned side-events and an exhibit to promote APN activities in the region that contribute to biodiversity conservation and sustainable development.

The CBD is the first global agreement on the conservation and sustainable use of the rich biological diversity of life on Earth. This international treaty was signed at the 'Earth Summit' in 1992, the largest-ever meeting of world leaders which convened at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil. Around 150 governments signed the document at the Rio Conference and since then, with rapid and widespread acceptance, 192 states and the European Union are now party to the CBD.

With the heightened concern about environmental destruction and loss of species and ecosystems and to contribute in reducing the current rate of biodiversity loss, the APN is committed to supporting the Parties to the CBD and joining other partner organisations in

safeguarding biodiversity through the promotion of related research and capacity development activities.

On 24 October 2010, the APN held a Biodiversity Interactive Forum at Nagoya Gakuin University. Three Japanese experts were invited to talk about the Non-Governmental Organisations/Non-Profit Organisations (NGO-NPO) initiatives on safeguarding biodiversity in Hyogo Prefecture. Mr. Kazuhiko Takemoto, APN Secretariat Steering Committee Member and Senior Adviser to the Minister, Ministry of the Environment, Japan (MOEJ) facilitated the Forum.

A side-event entitled 'Towards Biodiversity Conservation and Sustainable Development of Forests in the Asia-Pacific Region' convened on 25 October 2010 at the Nagoya Congress Center. The APN co-organised this event with the Hyogo Environmental Advancement Association (HEAA). Three expert presentations from local and abroad and a panel discussion composed the side-event.

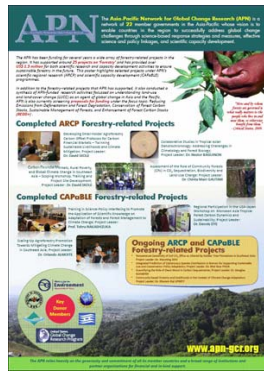
Of the three expert presentations, Dr. Chimednyam Dorjsuren, National University of Mongolia introduced the joint reforestation project of HEAA and Mongolian Forest Forum. A report about the importance of symbiosis between fungi and trees and how to use this symbiosis for a sustainable forest development was presented by Prof. Koji Iwase, Tottori University, Japan. APN's Dr. Linda Anne Stevenson, presented on the five new focused activities on the APN's science theme *Ecosystems, Biodiversity and Land-Use*, all of which are forestry-related, recently awarded by the APN.

The three invited presenters led a panel discussion, together with Dr. Henry Scheyvens, Natural Resources Management Group, Institute of Global Environmental Strategies (IGES). Prof. Hisakazu Kato, Teikyo University, Japan gave provided the opening speech and the closing remarks.

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News from the Secretariat

APN New Publications



Bulletin/Policy Brief No.5, Poster and Press Release

Bulletin No. 5, a Poster and Press Release were published in time for APN's participation at the International Union of Forest Research Organisation (IUFRO) World Congress 2010 'Forests for the Future: Sustaining Society and the Environment' that took place on 22-28 August 2010 in Seoul, Republic of Korea. The publications highlight selected APN forestry-related projects. In particular, the Press Release entitled *APN Takes Action for Sustainable Forestry* notes APN's commitment to joining IUFRO and other key organisations worldwide to ensure that forests are managed sustainably for current and future generations.

Generic Poster/Flyer

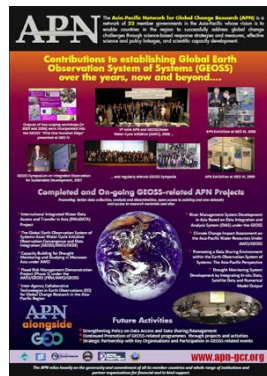


This publication covers the APN 3rd Strategic Phase (2010-2015) and outlines the APN main goals, unique structure, scientific themes and areas under the Science Agenda, strategies under the Institutional Agenda, major partner organisations, and key donor members. From this original English-language poster/flyer, several versions will be produced in local languages of APN member countries and will be disseminated across the region.

Bulletin No. 1 in Five New Translations



The English version, which was released in May 2010 to highlight APN's major activities and publications in 2009/2010 and APN-supported projects in 2010/11 under ARCP and CAPaBLE Programmes, is now available in Bahasa Malaysia, Japanese, Korean, Mongolian and Thai: Log on to: www.apn-gcr.org/newAPN/resources/promotionalMaterials.htm to download.



Posters for UNCBD COP10 and 2010 GEO-VII Plenary and Ministerial Summit and Exhibition

The bilingual Poster (English and Japanese) for the United Nations Convention on Biological Diversity 10th Meeting of the Conference of the Parties (UNCBD COP10) highlights APN activities that contribute to safeguarding biodiversity in the region. The latter Poster (in English) was published to demonstrate APN's contributions to establishing a Global Earth Observation System of Systems (GEOSS) over the years, including the completed and ongoing GEOSS-related APN projects as well as future activities. They are available for download on the APN website.

APN Videoconference with the Participants of the ANU Climate Change Institute Young Scholars Conference 2010

With the success of the APN Videoconference at the Asia-Pacific Economic Cooperation (APEC) Climate Change Symposium in October 2009, Canberra, Australia organised by the Australian National University Climate Change Institute (ANU CCI), the APN was again invited to participate via videoconference at the 2010 Young Scholars Conference held in July 2010, ANU, Canberra, Australia. The Secretariat Director, Mr. Tetsuro Fujitsuka addressed the delegates via video linkup. He comprehensively provided an overview of wide-ranging APN activities which was well received by the young scholars. They showed interest on developing collaborative projects in the future, with APN's support. Ms. Perlyn Pulhin, Programme Officer for Communications and Development also joined the videoconference and provided answers to some questions that were asked by the participants.

The conference brought together young scholars from the physical, natural and social sciences/humanities working on aspects of climate change. It also provided an opportunity for students to showcase their research through selected presentations and poster session. This

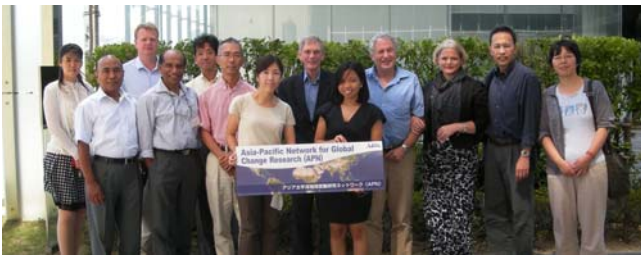
opportunity enabled young scholars from around the world to engage with key Australian-based scholars working on various aspects of climate change; exposed them to representatives of the climate change policy community; and provided a forum to enhance their networking opportunities and career paths.

The programme included a series of panel presentations from participants focussing on the broad themes of their research; personal research experience(s) in the context of the research they conducted or are currently undertaking; and reasons for conducting the work. The young scholars applicants who have been selected to attend the conference but whose presentations cannot be accommodated in the programme were asked to contribute to the poster session.



News from the Secretariat

APN Climate Synthesis Workshop, Kobe, Japan, 25-27 August 2010



Climate issues are becoming more relevant and pressing these days, and the APN is conducting a two-year Synthesis Activity on *APN and Climate Change: Perspectives from Asia and the Pacific*, which officially kicked-off in a Scoping Meeting held last year at the APN Secretariat in Kobe, Japan. Following that Meeting, the APN convened its First Authors' Workshop on 25-27 August 2010 also in Kobe, Japan. The Workshop produced a first draft of Synthesis Report, due for publication in March 2011.

Synthesis Activity Overview

This APN activity is part of a stronger effort to contribute, from the science perspective, to the development of policy options for appropriate responses to global change that will also contribute to sustainable development. Fifty six (56) projects undertaken by the APN in climate-related research and capacity development over a period of 10 years were synthesised by the Climate Synthesis authors. The current Climate Synthesis is the third APN synthesis activity. The two previous syntheses are on "Land-Use Cover Change: An Initial Synthesis (2003)" and "Global Change and Coastal Zone Management: A Synthesis Report (2004)". The latter synthesis resulted in a number of citations in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) as well as the publication of APN's first book on "Integrated Coastal Zone Management" published by Springer in 2006.

Workshop Output

In the draft Synthesis Report, the authors identified knowledge gaps and other issues and provide recommendations for policy- and decision-making related to climate in the Asia-Pacific. In addition to the draft Synthesis Report, the APN will also publish an Academic Book expanding from the contents of the Synthesis Report. The authors devised a draft structure and contents of the Book entitled: *Climate in Asia and the Pacific: Security, Society and Sustainable Development*. The Synthesis authors also identified potential authors for the Academic

Book who are experts in their respective fields. The Synthesis Report and Book are aimed to be published in 2011 and 2012, respectively; prior to the cut-off date(s) for citations for the chapter of the IPCC AR5.

Synthesis Authors

The Workshop was attended by a number of reputable scientists in the region namely: Dr. Ailikun from International Program Office Monsoon Asia Integrated Regional Study (MAIRS) of Atmospheric Physics, Chinese Academy of Sciences, China; Dr. Wenjie Dong from State Key Laboratory of Earth Surface Process and Resource Ecology, College of Global Change and Earth System Science, China; Dr. Lance Heath from Climate Change Institute, The Australian National University, Australia; Prof. Kanayathu Koshy from Centre for Global Sustainability Studies Universiti Sains Malaysia; Dr. Rodol Lasco from World Agroforestry Centre, Philippines; Dr. Michael Manton from School of Mathematical Sciences, Monash University, Australia; Dr. James Salinger from School of Environment, University of Auckland, New Zealand; Dr. Madan Lall Shrestha from Nepal Academy of Science and Technology, Nepal; and Dr. Linda Anne Stevenson from the APN Secretariat. Dr. Srikantha Herath from United Nations University, Japan was not able to join the Meeting but provided his input remotely.

Mr. Yukihiro Imanari, APN Executive Manager, provided opening remarks and welcomed the participants. Mr. Erdenesaikhan Nyamjav (Programme Fellow) and Ms. Kristine Garcia (Coordinator), provided assistance to Workshop participants.

For more information about the APN Synthesis Activities, please access this link <http://www.apn-gcr.org/newAPN/activities/synthesis.htm> on the APN website.



Symposium on Adaptation to Climate Change through Integrated Coastal Zone Management, Kobe, Japan, 08 October 2010

The APN, in collaboration with the Institute for Global Environmental Strategies Kansai Research Center (IGES-KRC), International Centre for Environmental Management of Enclosed Coastal Seas (EMECS) and other key partner organisations co-organised a Symposium on Adaptation to Climate Change through Integrated Coastal Zone Management on 8 October 2010 in Kobe, Japan. Six Japanese experts were invited to give keynote speeches and present on specific themes related to coastal zone management.

The APN wishes to thank its partners and all the participants who supported the successful conduct of the symposium. Partnership with IGES-KRC, EMECS and other organisations who share the same interests and whose activities and programmes are valuable in the pursuit of APN's goals and objectives will be continuously pursued.



News from the Secretariat

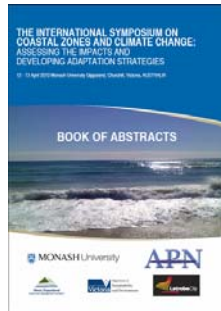
Recent APN Project-related Outputs

In keeping its members, stakeholders and the general public updated with new project developments such as release of reports/publications, developed or updated project websites, and events' schedule, the APN announces such through its electronic mailing list (EML) and the APN website. To subscribe to APN EML, please log on to: <http://www.apn-gcr.org/newAPN/opportunities/subscribeToEml.htm>.

Project outputs

Book of Abstracts

- The International Symposium on Coastal Zones and Climate Change: Assessing the Impacts and Developing Adaptation Strategies (ARCP2008-07CMY-Dutta Climate Perturbation and Coastal Zone Systems in Asia-Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy)



Final Project Reports

- ARCP2009-03CMY-Nikitina: Reducing Water Insecurity through Stakeholder Participation in River Basin Management in the Asia-Pacific
- CBA2009-10NSY-Li: Inter-Agency Collaborative Technologies in Earth Observations (EO) for Global Change Research in the Asia-Pacific Region: Full Proposal submitted following conditions of APN Seed Grant CBA2008-13NSG-Li

Policy Brief

- Promoting Agroforestry as a Climate Change Mitigation and Adaptation Strategy in Southeast Asia (CBA2009-08NSY-Almoite: Scaling-Up Agroforestry Promotion towards Mitigating Climate Change in Southeast Asia)
- LEAD UPDATE: Climate Change and Health – Bridging the Gap, First National Training Session, Cohort 15 (CIA2009-07-Lotia: Capacity Development of the Scientific Community for Assessing the Health Impacts of Climate Change)



Proceedings

- Proceedings of the International Symposium on Coastal Zones and Climate Change: Assessing the Impacts and Developing Adaptation Strategies (ARCP2008-

07CMY-Dutta: Climate Perturbation and Coastal Zone Systems in Asia-Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy)

Training Report

- First National Training Session for Climate Change – Health Cohort: Climate Change and Health – Bridging the Gap (CIA2009-07-Lotia: Capacity Development of the Scientific Community for Assessing the Health Impacts of Climate Change)

Website

- ARCP2010-18NMY-Lutaenko: Coastal Marine Biodiversity of Viet Nam: Regional and Local Challenges and Coastal Zone Management for Sustainable Development



- ARCP2010-11NMY-Asanuma: Asian Drylands Landsurface Process Model Intercomparison Project (ADMIP): Intercomparison of Landsurface Process Modelling in Asian Drylands



- ARCP2010-01CMY-Sthiannopkao: Collaborative Research on Sustainable Urban Water Quality Management in Southeast Asian Countries: Analysis of Current Status (comparative study) and Development of a Strategic Plan for Sustainable Development

- ARCP2009-06CMY-Braimo: Managing Ecosystems Services in Asia: A Critical Review of Experiences in Montane Upper Tributary Watersheds

- ARCP2009-10NSY-Gautam: Assessment of Role of Community Forests (CFs) in CO₂ Sequestration, Biodiversity and Land Use Change



UNITED NATIONS
UNIVERSITY

Commencement Exercise at UNU: Postgraduate Course on Climate Change, Tokyo, Japan, 01 October 2010

Dr. Linda Anne Stevenson, APN Secretariat Executive Science Officer was invited to attend a graduation ceremony at United Nations University (UNU): Postgraduate Course on Climate Change, in Tokyo, Japan, on 01 October 2010. The Secretariat Director, Mr. Tetsuro

Fujitsuka also had the chance to attend. The UNU's mission is to contribute to resolving the pressing global sustainability problems through research and capacity building efforts and APN is committed to strengthening its partnership with UNU to explore new synergies for research, network-building and capacity development.

For more information about UNU, visit: <http://unu.edu/about/index.html>.

News from the Secretariat

Programme Fellowship: APN'S Excellent Example of Capacity Building

Over a year ago I joined the APN Secretariat as a Programme Fellow for Science and Institutional Affairs. At the Secretariat, I have been working under the direct supervision of Dr. Linda Anne Stevenson, Executive Science Officer and Mr. Yukihiro Imanari, Executive Manager. My supervisors are very instrumental in advising me in both scientific and project management matters. My fellowship experience would not be very fruitful without the support of other APN Secretariat personnel: Coordinator, Ms. Kristine Garcia for scientific matters; Programme Officer for Communications and Development, Ms. Peryn Pulhin for all sorts of communication affairs; another Fellow, Ms. Lizhier Garcia for her IT skills; and a great administration team including Mr. Akihiro Shiomi, Ms. Natsuki Niimi, Ms. Yuko Noda and Director Mr. Tetsuro Fujitsuka.

I completed my degree in environmental studies and, prior to joining the APN, I gained some experience in environmental impact assessments and biodiversity conservation. However, my background actually fell short of scope in global environmental change. Although I worked short-term for a national project funded by global donors, I was not knowledgeable about how international project funding is realised. The fellowship has offered me a broad range of opportunities to recognise my quests and, consequently, to develop my capacity in many aspects.

On a daily basis, I assist in the management of APN projects from drafting project contracts to reviewing project financial reports. With a given number of projects, I need to be organised about documentation in a timely manner and multi-tasking at the same time. Working on a wide pool of projects across Asia and the Pacific helps me to broaden my knowledge spectrum to understand regional environmental issues and cultural sensitivity to work with different Asian nations.

As part of APN's annual activities, there are occasions to engage in platform discussions/interactions between scientists and policy-makers from Asia-Pacific countries. In the events of APN's Inter-Governmental Meeting, Scientific Planning Group Meeting and Steering Committee Meeting, I helped in preparing item papers and assisted throughout meetings. These made me realise the important elements of laborious work to back-up government-level meetings and tremendous amount of effort and resources required to reach a collective decision.

As Programme Fellow for Communications and Development at the APN Secretariat, I work closely with Peryn Pulhin, the Programme Officer for Communications and Development and Natsuki Niimi, Support Staff. Our team carries out strategic ways to disseminate as widely as possible the excellent results and outputs from global change research and capacity development projects that the APN has funded and is currently supporting in the region.

To cite a few of our communication tools, we maintain and regularly update the APN website and database. We also manage the production and release, including the design, printing and systematic distribution of APN publications and information materials like the APN newsletter, annual reports, brochures/flyers, synthesis reports, posters, evaluation reports, proceedings of meetings/workshops, project bulletin, and other reports.

With my web skills, I was tasked to assist in revamping the APN website and to develop a new Information System. We launched the new face of our website in April 2010 and the Information System is now work in progress. This system aims to strategically improve our current

At the APN Secretariat, it is one of my regular duties to work hand-in-hand with eminent scientists on the implementation of APN's Science Agenda. For instance, being part of the Climate Synthesis Team, who recently reviewed APN projects related to climate, allowed me to interact



with world-renowned climate scientists from the region. In another APN Scoping Meeting for International Symposium on Low Carbon Societies for Sustainability, in Kobe, in 2009, I also worked with a mix of international and Japanese scholars. On top of their valued work, these scientists are inspiring people for their wisdom and competences.

To recall a memorable event, APN also kindly provided an opportunity for me to attend a major international conference. Along with Dr. Stevenson, I attended the *2010 International Climate Change Conference – Climate Adaptation Futures: Preparing for the Unavoidable Impacts of Climate Change*, which brought together over 1000 participants from 60 different countries. At this event, I had conversations with scientists from all continents including former APN project leaders, and interacted with decision-makers from world's governing organisations like United Nations Environment Programme (UNEP) and UN Framework Convention on Climate Change (UNFCCC). Such experience indeed developed capacity for my personal skills, professional competence and for accruing knowledge in the recent developments in climate change adaptation science.

Not limited by the above, every endeavour of my affiliation with APN has contributed to advance my understanding of global change research and its implications in the region of Asia and the Pacific. There is much more to learn from APN. I am further inspired to work for and contribute to, within my limited capacity, the ever-growing importance of global change research. All in all, I am very thankful to APN! - *Erdensaikhan NYAMJAV*

communication tools and help us in performing daily tasks more efficiently. I am proud of what we do, making sure that we are strongly conveying appropriate messages to our audience and thinking of innovative and creative ways of promoting APN and its activities in the region.

Aside from these tasks, I also assist in the organisation and running of APN meetings and other events, most importantly in the preparations for the Intergovernmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting. Last year, the 15th IGM/SPG Meeting was held in Busan, Korea. It was an interesting experience for me to get involved in this very important event for the APN and its members and to realise what the APN network is all about. I witnessed how representatives from each member country actively brainstorm and discuss the future direction of APN after careful evaluation of its past activities. I am proud to work in an organisation that helps developing countries fill their gaps through capacity building/development and provide free access to up-to-date scientific findings in global change research in the region.

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News from the Secretariat

APN 16th Steering Committee Meeting Convenes in Kobe, Japan



With the active participation of the Steering Committee (SC) Members and the effective work of the Chair, Mr. Suho Seong, the 16th SC Meeting successfully convened in Kobe, Japan 30-31 August 2010.

Mr. Suho Seong, nFP for the Republic of Korea (ROK) opened the 16th SC Meeting and gave short remarks. A one-minute silence was observed to respect the nFP for Thailand, Dr. Saksit Tridech who died in a helicopter accident on 17 August 2010. This was followed by welcome remarks from Mr. Shingo Kawasaki, Director Policy Division, Environmental Development Bureau, Agricultural and Environmental Affairs Department, Hyogo Prefectural Government, Japan. He welcomed the participants and expressed profound gratitude for the efforts and cooperation of the SC Members in steering the APN. The Hyogo Prefectural Government assured its continuous support and partnership with APN. The Secretariat Director, Mr. Tetsuro Fujitsuka also gave short remarks expressing sincere thanks to all the SC Members for their valuable input and contributions in the continued success of the APN.

Active discussions transpired during the Meeting that touched on the following: Summary of Activities/Action Points since the 16th IGM/SPG Meeting; Financial Report; Membership and Network Development; Resources Development; Updates on the Call for Proposals for Focussed Activities; Progress on the Climate Synthesis; Scientific Capacity Building for Climate Impact and Vulnerability Assessments (SCBCIA) Project Updates; Annual Regional Call for Research Proposal (ARCP) and the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programme Updates; Interaction with Science-Policy Bodies; APN Data Sharing and Management; Policy on Conflicts of Interest; Communications and Outreach; Major Events to April 2011 and APN Engagement; Operating Plan; 16th IGM/SPG Meeting Preparations; and Host of the 17th IGM/SPG Meeting.

The SC provided constructive discussion and strategic guidance on the specific actions that need to be taken as well as the priority areas for the period of the 3rd strategic phase (2010-2015). To ensure the effective implementation of activities outlined in the 3rd Strategic Plan (3SP) under the two main agendas (Science Agenda and Institutional Agenda), the SC discussed in length the short-, mid- and long-term action and strategies of the APN Annual Operating Plan. The APN will explore new and more dynamic approaches based on the strategic mechanisms that are currently in place under the two strong pillars of APN's activities: the APN's research (ARCP) and capacity development (CAPaBLE) Programmes.

As part of the review of the APN's Institutional Policy on Data and Data Management and on Reviewer Conflict of Interest, feedback from the SPG Members was presented to the SC. The timeline for the offline

discussion and further review was revised to accommodate further input from the SC and to assure that all members will have the opportunity to comment before endorsement of these policies is sought at the 16th IGM. The SPG Co-Chairs and the Secretariat will work closely together to finalise the policies that will be circulated to APN members for their comments.

A number of suggestions were solicited from the SC to address resources development, which is crucial in managing the currently available funds as well as increasing the core budget to support new initiatives, sustain the grants that are awarded to projects and expand its activities in the Asia-Pacific region. To facilitate the process of devising a robust resources development strategy, an ad hoc committee was formed composing of the SPG Co-Chairs, nFP's for Japan and U.S.A, the nFP/SPG Member for New Zealand, Prof. Roland Fuchs (SC invited expert) and with support from the Secretariat. The ad hoc committee will look into diversifying and mobilising the resources of APN through direct financial and in-kind contributions from the Governments of APN member countries and financial support from potential external sources such as foundations, funding agencies, and the private sector.

The Meeting also discussed ways to establish strategic mechanisms and approaches to further strengthen the APN member countries 'sense of ownership' and engagement/involvement of member countries (particularly new and inactive members) and non-member countries/organisations in APN activities effectively and efficiently. Due to political sensitivity, extra caution is deemed necessary in addressing various issues under membership and network development; for example in reengaging involvement of inactive representatives or countries and in responding to non-member countries/organisations expressing interest to become actively engaged in APN activities.

Noteworthy is the successful conduct of the Climate Synthesis Workshop reported by the Secretariat at the Meeting. This is part of a two-year activity on Climate in Asia and the Pacific, synthesising the work of over 50 APN-funded climate-related projects. A draft Synthesis Report, written by the Climate Synthesis Team (group of reputable scientists from the region), was made available to the SC for comment. Two (2) more publications are expected to be produced as part of this activity: 1) a glossy publication that summarises the major outcomes of the synthesis, and 2) an academic book to provide input into the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5).

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News from the Secretariat

from page 8 - APN 16th Steering Committee ...

On Project Management and the APN Calls for Proposals, it was reported that seven (7) ongoing projects under SCBCIA are already providing significant results. The APN is also managing 35 new and continuing projects under the ARCP and CAPaBLE Programmes. The submission and review process under the new Focussed Activities launched in April, as well as the Annual Calls for Proposals (ARCP and CAPaBLE) are well in progress. Despite a fairly tight schedule, the SPG Sub-Committee (SPG-SC) and the Capacity Development Committee (CDC), with support from the Secretariat, are committed to ensure that the necessary outputs will be delivered as scheduled. Cooperation and expertise from the SPG and external reviewers are sought for an effective, efficient and transparent review process.

The SC appreciates the additional support from the Ministry of the Environment Japan (MOEJ) that helped realise the successful launch of the SCBCIA and the Special Call for Proposals. Seventy-five (75) Expressions of Interest were received for the two (2) Focussed Activities on: 1) Ecosystems, Biodiversity and Landuse; 2) Resources Utilisation and Pathways for Sustainable Development.

In advancing APN's efforts in science-policy, it was stressed that it is crucial that APN continue to ensure that the results of appropriate APN-funded research are fed into the IPCC Assessment Reports. SC members also recognised the importance of sustained dialogue with the global change community on emerging scientific findings and other developments in climate change research, particularly those highlighted at sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA). This is particularly relevant in ensuring that APN's programmes and activities are aligned with other programmes of the global change community. The APN will continue to look for new opportunities in enhancing APN engagement with policy bodies, in



cooperation with the global change research community and key partner organisations.

On the institutional side, the APN Financial Report 2009/2010 will be revised further to incorporate comments from the SC before being presented at the next IGM. Newly nominated nFPs and SPG Member following the 15th IGM/SPG Meeting in Busan will be welcomed at the 16th IGM/SPG Meeting in Colombo, including the representatives from Bhutan who were appointed for the first time. Preparations for the Sub-Regional Committee Meetings in South and Southeast Asia that will be held back-to-back with the Proposal Development Training Workshop are also well in progress.

A report on the status and plans in implementing the APN's Communications Strategy (i.e. publications, website, database/electronic mailing list) was well received by the SC. The SC provided strategic direction for engaging in a number of major events that will be held in the near future such as the Convention on Biological Diversity, the 10th Meeting of the Conference of the Parties (CBD COP10), the Annual Meeting of the International Group of Funding Agencies for Global Change Research (IGFA), the United Nations Framework Convention on Climate Change (UNFCCC) COP16/6th Conference of the Parties serving as the Parties to the Kyoto Protocol (CMP6), and SBSTA33.

Another highlight for the SC at this meeting was the presence at the 16th SC Meeting of Mr. Kazuhiko Takemoto, Advisor to the Minister, MOEJ, and one of the charter members of the APN. He was involved in the preparations and initial development of APN and one of the members of the first APN Interim Secretariat. Having witnessed how APN evolved since its conceptualisation, he expressed his great satisfaction on the accomplishments (both scientifically and institutionally) so far achieved by the network and in the significant developments of the APN through the years. Mr. Takemoto was co-opted by acclamation as an expert member of the APN Steering Committee.

With regards to updates on the preparations for the next IGM/SPG Meeting to be held in Colombo, Sri Lanka, the host country representative offered full support and cooperation to realise a successful IGM/SPG Meeting. Sri Lanka will work very closely with the Secretariat to kick-off the local arrangements and set the final dates for the main IGM/SPG Meeting and the associated committee meetings.

from page 3 - APN Joins Partners at UNCBD COP 10 ...

On 26 October 2010, another side-event was co-organised by APN and the Hyogo Prefectural Government, and convened at the Nagoya Congress Centre. Dr. Tsogtbaatar Jamsran, APN Scientific Planning Group (SPG) Member for Mongolia gave a presentation highlighting joint efforts of the Hyogo Prefectural Government and APN in safeguarding biodiversity in the Asia-Pacific region.

An expert from the Hyogo Prefecture showcased Hyogo's biodiversity conservation efforts such as the reintroduction of Oriental White Storks into the wild. Another invited expert shared about the *Satoyama* Initiative at the local level. *Satoyama*, a Japanese term referring to socio-ecological production landscapes formed through harmonised human-nature relationships, exist in various part of the world. The presentation focused on 'Hyogo method' of conserving ecosystems and addressing environmental pressures.

As the state of the environment is becoming more severe and with

Japan's call to global warming prevention that also affects biodiversity, it is also interesting to note that the Hyogo Prefecture pledged to reduce carbon dioxide emissions (CO₂) by 6% from the 1990 level by 2010. In the industrial sector, emission reduction projects are being promoted in major companies and, for the household sector, the Institute for Global Environmental Strategies (IGES) has developed software called 'Eco-Home Diagnosis' Program, which is being used to analyse sources and quantities of CO₂ emitted per household in order to provide customised measures for CO₂ reduction. More local initiatives in tackling environmental issues related to biodiversity conservation were highlighted at the side-event.

Information materials such as posters, bulletins/policy briefs and CD-ROMS were published/prepared for display and wide dissemination at the APN designated biodiversity interactive fair (booth). A poster, side-event flyer and bulletin/policy brief were designed specifically for the event.

News from the Secretariat

International Symposium “Coexistence with Nature: Biodiversity and People – Hyogo Dialogue for the Future”, Kobe, Japan, 09 September 2010

In light of United Nation (UN)'s declaration of 2010 as the “International Year of Biodiversity” and as a pre-event for the upcoming UN Convention on Biological Diversity 10th Meeting of the Conference of the Parties (CBD COP10), the Asia-Pacific Network for Global Change Research (APN), together with Hyogo Prefectural Government, Museum of Nature and Human Activities, Hyogo Environmental Advancement Association and Environmental Management of Enclosed Coastal Seas (EMECS), jointly organised an International Symposium on “Coexistence with Nature: Biodiversity and People – Hyogo Dialogue for the Future” held on 9 September 2010, in Kobe, Japan.

The symposium, which attracted 350 participants, provided a platform for understanding and discussing the importance of biodiversity and a venue to share knowledge derived from various activities in the region. The event consisted of four parts: Keynote Speech; Session 1 – “Importance of Ecosystem Conservation and Services”; Session 2 – “Involvement of Citizens and Non-Governmental Organisations/Non-Profit Organisations (NGOs/NPOs) for Biodiversity Conservation”; and Panel Discussion.

Mr. Kazuo Kanazawa, Vice-Governor of Hyogo Prefecture, welcomed the participants and introduced the biodiversity conservation activities and achievements by the prefectural government including the White Stork Conservation Programme, which raised the population of endangered white storks up to 46 to date. He then explained the importance of the Annual Green Tax System in running these biodiversity conservation programmes.

Keynote Speech: “Our Future and Biodiversity”

At her keynote speech, Dr. Izumi Washitani from University of Tokyo noted that the current state of biodiversity and its conservation are crucial for the future of humanity. She described and summarised the results of the Japan Biodiversity Outlook (JBO), which is a comprehensive assessment conducted by the JBO Science Committee to identify Japan's current state of biodiversity. She also emphasised the importance of involving citizens in monitoring biodiversity in a way that they would enjoy closer interaction with living organisms. This is one of the most effective approaches to stop or minimise biodiversity loss and forge the way to a better future.

Session 1: Importance of Ecosystem Conservation and Services

Prof. Yoshitaka Tsubaki, Director, Center for Ecological Research, Kyoto University introduced the participants to the concepts of biodiversity and ecosystem services. Ecosystem services are the condition and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life. From an ecological viewpoint, he challenged the participants to list, evaluate and prioritise ecosystem services, which raised the relevance of appreciating the nature and value of ecosystem services. He then presented some examples to stress the importance of inter-specific interactions in biodiversity concept.

Assistant Prof. Shigeo Yachi, Secretary of International Programme of Biodiversity Science (DIVERSITAS) in the Western Pacific and Asia (DIWPA) described the results of the studies they conducted in analysing and monitoring biodiversity in Lake Biwa, Shiga. His team used both geographical datasets (historical geographical image comparison between 1947 and 2001) and sociological surveys of



local community. Their studies showed that emotional persuasion rather than rational persuasion are more effective in communicating the urgent issues to the farmers and to the community.

Dr. James Peters, Chief Advisor, Asian Development Bank (ADB)-Supported Greater Mekong Sub-Region (GMS) Core Environment Programme, GMS Environmental Operations Centre, presented successful initiatives on mobilising ecosystem services markets in support of biodiversity conservation and climate change adaptation strategies in the GMS. His presentation illustrated that tackling biodiversity issues cuts across national borders and is closely related to economic development. Hence, biodiversity conservation requires a comprehensive approach and needs to be incorporated into all types of planning (economic, urban, strategic, etc.).

Ms. Fumiko Nakao, Fellow, United Nations University (UNU) thoroughly explained the concept of “Satoyama,” internationally known as Socio-ecological Production Landscapes. The Satoyama Initiative envisions to realise societies in harmony with nature and to promote a sustainable balance of socio-economic activities (such as agriculture and forestry) and conservation of natural landscapes. Although such lifestyle was a common traditional practice in many countries, those landscapes today face the pressure of rapid urbanisation and destruction. The Government of Japan and the UNU initiated the concept and is further promoting it at the global scale.

Session 2: Involvement of Citizens and NGOs/NPOs for Biodiversity Conservation

In this session, Mr. Teppei Douke, Member, Nature Conservation Society of Japan, introduced the activities and roles of citizens toward CBD COP10. He mentioned that civic groups are allowed to speak at COP, which makes the CBD more participatory for citizens than any other international convention. Thinking globally, he spoke on how the local citizens could contribute to the goals of the CBD through activities of Japan Civil Network for Convention on Biological Diversity (JCN-CBD).

“Real work takes time and effort,” said Mr Shigeru Ogura, Representative and Facilitator, Miki Circle of the Friends of Nature, who worked for many years to bring back once extinct species into his community yard. For instance, it took five years of intense work and careful nurturing to re-plant Japanese Lily back in the community garden, so did the Spring Goddesses, which took 10 years of work to re-introduce back to its original community. His group is now working hard to conserve

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biodiversity in the Miki area. With support of local government, this group reach out their activities to the public and school children.

Talking about local initiatives, Mr. Yukio Yasui, Representative, Hyogo Waterfront Network shared how they work toward biodiversity conservation as part of region-wide environmental preservation activities carried out in cooperation with local residents. He stressed the need to establish partnerships among landowners, water right holders, resident associations, local schools, governmental agencies, experts, NPOs, and children as well who all play crucial roles in saving the future through biodiversity conservation.

The symposium also featured a successful biodiversity conservation activity from overseas. Dr. Anak Pattanavibool, Thailand Country Programme Director, Wildlife Conservation Society (WCS), Thailand Programme, was invited to share his work on saving hornbill birds (Bucerotidae) in Budo Mountain in Thailand. Having a very high market value, hornbills were extensively threatened by local villagers due to poaching and destruction of nests. The conservation team effectively approached the once hunter communities of indigenous people and trained the hunters to become guards of the hornbills instead. Dr. Pattanavibool delightfully mentioned the support they are receiving from Japan and other international organisations.

Highlights of the Panel Discussion

At the panel discussion, Dr. Washitani asked the panellists to provide feedback on the Hyogo Declaration, written on behalf of the citizens of Hyogo. She then encouraged everyone to think how they can conserve biodiversity in their daily lives and act accordingly. The speakers and the public expressed their huge support for the declaration.

The participants had the opportunity to ask questions and provide comments on the topics that were discussed. The participants showed

great interest in the Satoyama Initiative and were pleased to learn about the activities performed by the Hyogo Government and other local conservation groups. They were happy to hear other interesting international initiatives and requested to involve more global examples in the future.

Noteworthy is a lady who urged the Government and the rest of the community to also start looking at the mountain back yard that is still left unattended and so animals like wild boars go down into towns and residential areas in search of food.

Closing

Dr. Washitani thanked everyone for participating and closed the discussion by encouraging everyone to think and act towards conserving biodiversity.

End Note

The APN would like to express its gratitude to the Hyogo Prefectural Government and all partners for their support in the successful Symposium.



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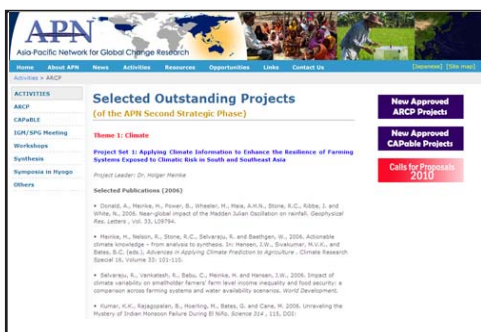
I was amazed to learn how APN attempts to bridge the scientific community with policy-makers with high hopes that eventually the results of the most recent studies will be implemented in respective member countries. The Meeting was a great success and it was all because of good teamwork. Working in an international organisation like APN, we often interact with people with great diversity in terms of culture, religion, levels of economic development, modes of political organisation and historical experience. It is important to consider these differences in order to effectively work together in achieving a common goal.

My experience in APN introduced me to a wide variety of existing non-economic and non-governmental organisations in the Asia-Pacific

region and around the globe. I have learned how countries recognise the need to perform collaborative arrangements beyond their own national borders to find solutions to prominent global issues such as the environment, rural poverty, and health, etc. I also discovered the important role played by private corporations and generous countries like Japan, Republic of Korea, New Zealand and USA in providing funds and other resources to these organisations.

I am thankful for this great opportunity and for the people that made it easy for me, to my colleagues at the Secretariat and to the APN network. I am very much looking forward to another fruitful year with you guys. Kudos APN! - *Lizhier CORALDE*

Outstanding Projects of the APN 2nd Strategic Phase on the APN Website



The APN aims to launch a new section on the APN website by end of November 2010 to feature the eight outstanding projects among the 80 projects sets that were evaluated under the APN's Second Strategic Phase (2005-2010). We take this opportunity to congratulate the project leaders and collaborators for their success and contribution to the APN.

A special page for each of the projects will highlight how project-related activities have developed since APN funds were granted. The goal is to share with the APN community the milestones achieved by the projects and follow-up activities since completion. Note that the Summer Edition of the APN Newsletter (previous issue) featured five of these projects and this newsletter issue is featuring the remaining three projects in the succeeding pages.

APN Out and About

APN Workshop on 'Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities', Nakorn Pathom, Thailand, 20-22 August 2010

In response to the limited capacity to conduct risk and vulnerability assessments in most coastal Asian cities, an International Workshop on *Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities*, convened on 20-22 August 2010, in Nakorn Pathom, Thailand.

This workshop was funded by APN through the Scientific Capacity Development for Climate and Impact Vulnerability Assessments (SCBCIA) Special Call for Proposal, with Project Reference CIA2009-01 Snidvongs, under the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programme. It was built on recent studies of Asian Cities sponsored by the Asian Development Bank (ADB), World Bank, Japan International Cooperation Agency (JICA) and on the 'Cities at Risk' Workshop that was held last year and funded in part by APN.

The workshop was organised by the Southeast Asia global change SysTem for Analysis, Research, and Training (START) Regional Center in collaboration with East-West Center; START International Secretariat; Ibaraki University, Japan; United Nations University, Institute for Environment and Human Security, Germany; Manila Observatory, Philippines; University of South Carolina, U.S.A., and University of Western Ontario, Canada. This was hosted by the Southeast Asia START Regional Center (SEA START RC). On behalf of the APN, Ms. Perlyn Pulhin, gave a short presentation on the last day of the Workshop highlighting the opportunities in APN that the participants could benefit from.

Responding to the Challenge

Asian coastal mega-cities has been identified by the Intergovernmental Panel on Climate Change (IPCC) as global 'hot spots' of disaster vulnerability arising from the combined effects of sea level rise, climate change, and continued urban growth in areas subject to coastal and riverine flooding and storm surges. A recent report from the Organisation for Economic Cooperation and Development (OECD) noted that approximately half of the total global urban coastal population threatened by coastal flooding and storm surges is located in just ten (10) cities, nine (9) of which are located in Asia. Due to increasing physical risks and exposure of infrastructure and population, there is a high tendency for 'city-scale disasters' to occur, with substantial loss of life and infrastructure, and of damage as well to the national and regional economies.

It is paramount that risk reduction becomes part and parcel of urban planning (United Nations Strategy for Disaster Reduction, 2009). Unfortunately, this is not the case at present. To address this, the workshop aimed at enhancing capacity in Asian coastal cities to conduct climate change risk and vulnerability assessment as part of urban development planning, with particular reference to coastal and riverine flooding. The week-long workshop involved teams from five (5) selected Asian coastal cities: Bangkok (Thailand), Ho Chi Minh (Viet Nam), Jakarta (Indonesia), Manila (Philippines) and Mumbai (India). Each team was composed of researchers and officials/practitioners from urban planning, development, hydro-meteorology and disaster management agencies.



Workshop Structure

The workshop consisted of expert presentations, group and city-specific reporting and discussions, field exposure and hands-on exercises on: 1) risk analysis of coastal flooding from climate change and sea level rise, including risk mapping; 2) analysis of socio-economic vulnerability and vulnerability mapping; and 3) integration of risk and vulnerability analyses into the urban development planning process. A brief project overview and the objectives and framework were explained to the participants prior to main workshop sessions. Specific objectives included, to: a) help develop capacity on the part of urban planners, managers, and researchers in climate change vulnerability assessment and application to urban development planning and governance; b) promote locally-led vulnerability research in Asian coastal cities linked to user needs; and c) help develop partnerships between researchers, planners, and policy-makers, and develop communities of knowledge for vulnerability assessment in each participating city such that information on climate change risks, impacts and vulnerability could be well incorporated into the planning process.

Each participating urban teams were asked to prepare city reports in advance on the current status of urban development plans, the degree to which they take into consideration risks and vulnerabilities associated with climate change, the existing information base (historical data, maps of past extreme events, risk maps), urban governance structure (including agency responsibility for climate change and disaster management), and existing analytic capacity related to climate change in local universities and government agencies.

Applying the Lessons Learned from the first 'Cities at Risk' Workshop

Following the recommendations outlined in the first 'Cities at Risk' Workshop, the current workshop emphasised a new approach which involves starting from the present urban climate, including variability and then to see how changes in climate will pose stress in the city. This is different from the traditional approach of assessing future climate change risks at the urban scale wherein global climate models are downscaled to help provide regional and smaller scale climate change projections – a 'top down' approach to vulnerability assessment. For planning purposes, resolution at the urban scale produced in such approach is not yet satisfactory. Non-scientists find it difficult to understand the process and outcomes are not easy to incorporate into a policy framework.

The new approach that was tackled in the workshop includes looking for critical outcomes and thresholds and working backwards to see if climate change results in crossing thresholds. Through examination of

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vulnerabilities, thresholds and sensitivities, the need for detailed downscaled data is obviated and actions can still be taken based on a risk management and precautionary-principle approach. Risk analysis of coastal flooding from climate change and sea level rise, including risk mapping, was given as an example to better understand the new approach. Invited experts gave specific presentations related to these topics.

A hands-on exercise on assessing socio-economic vulnerability including vulnerability mapping and visualisation helped focus on vulnerability of population (life, welfare, livelihood subgroups) as well as the vulnerability of physical and economic infrastructure. It is anticipated that the populations most at risk will disproportionately consist of lower income families. The analysis, therefore, may also contribute directly to other development goals, including poverty reduction. Expert presentations on risk communication and visualisation as well as integration of risk vulnerability into urban planning and development, and governance well complemented the hands-on exercise.

Knowledge Gain: Participatory Approach

Constructive dialogues among scientists, urban planners and officials, policy-makers, representatives of disaster management and development agencies, and practitioners, have been effective in reviewing and confirming scientific findings and projections regarding climate-related risks for Asia's coastal mega-cities. The presentations and the sharing of experiences and approaches among city teams raised awareness of the growing risks posed by the increased urban development in Asian coastal cities, combined with sea level rise, climate change and other drivers. Below is a list of some of the topics discussed in the five-day workshop wherein the participants actively engaged in the discussion:

- Perception of climate change related risks, planning and adaptation and perceived data gaps among stakeholders including gender perspective on climate change risk and vulnerability
- Existing knowledge of climate change impacts and urban development with focus on selected direct and indirect impacts of climate change in urban areas
- Climate change and urban governance focussing on climate resilient governance indicators as well as institutional capacity and policy as response to climate change
- Social, political and economic characteristics of the cities that make them more vulnerable to climate change impacts
- Geo-physical or ecological characteristics that heighten cities' vulnerability and risks to climate change related impacts such as heavy rains, floods, typhoons, subsidence or sea level rise
- Suggestions for future collaborative research to provide decision-makers support for policy planning and programme formulation and implementation



- Overview of disaster risk reduction terminology and demonstration examples of risk assessment with focus on characteristics of vulnerability
- Visioning and participatory process as a tool for developing stakeholder partnerships and strategies to deal with multiple stresses

Research Status, Gaps, Challenges and Recommendations

With reference to the outcomes of the first 'Cities at Risk' Workshop and the studies sponsored by the World Bank, ADB, and JICA, the city teams reviewed and discussed the related studies and existing projects in the region and in each of the countries, concerned with urban development planning and climate change vulnerability assessments. The workshop identified barriers to effective urban development planning including knowledge or research gaps, human and financial resources, and institutional capacity.

The workshop participants looked at the best ways to assess/map climate risks taking into account the possible effects of current and future climate changes. Each of the city teams were asked to share how social/economic vulnerability to climate related risks have been assessed and mapped, for whom this is targeted, who are doing this mapping exercises and the details of the assessment. Interesting discussions also focussed on information/knowledge management identifying effective approaches on communicating climate risks and vulnerability. The discussion also touched on existing urban Geographic Information System (GIS) information base that may be used for climate risk and vulnerability assessment.

On governance, the city teams identified the roles of the agencies and institutions in risk and vulnerability assessments as well as the skill level and capacities needed to perform such roles. Discussions also ensued tackling urban master plan, how effective the building codes, land use regulations, sanitation codes and other factors are being enforced, how helpful are the existing early warning systems, and the problems encountered in implementing evacuation or emergency response plans for various type of weather and climate related disaster.

Based on the reports/presentations from the city teams derived from secondary sources and status from the country, notes during the group discussion, comments from experts and representatives from each city teams in response to the reports/presentations and based on the current experiences or researches in their respective organisations and cities, below are some of the knowledge status, gaps, challenges and recommendations that were identified. As the below listings are author's personal compilation, the list therefore is not appropriate to

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use in generalising the situation in all coastal Asian mega-cities. The organiser of the workshop and the project leader and collaborators will provide a final project report in due course.

- Exposure per unit, sectors, activities, individuals, households, social groups, communities, livelihoods are not factored in existing assessments
- Studies related to social and economic vulnerability and climate related risk vary in frameworks and the methods are initiated by different agencies who do not usually share information among them
- Science-based yet practical mechanisms to develop efficient measures to respond to climate change related risks are lacking
- Mainstreaming climate change issues into socio-economic, sectoral and local development strategies and plans remains big challenge
- There is a need to develop action plans that are well-coordinated for all ministries, sectors and regions
- Awareness on climate related risks among policy-makers at different levels is still low and appropriate communication tools for advising and instructing policy-makers are necessary
- Technical knowledge among government agencies and non-government organisations needs to be further enhanced
- Climate change data that addresses current needs are inadequate and more analytic studies on climate change impacts are needed
- Current climate and hydrodynamic are already extreme and are expected to intensify so there will be more severe storms, storm surges and tidal flooding (Asian Development Bank, 2008; International Centre for Environmental Management, 2009)
- There is knowledge gap among public regarding risk associated with climate change, particularly the difference between climate risk and vulnerability
- Although communications and outreach activities through media are now usual component of seminars and public consultations, layman's terminologies which are more appropriate for the general public are not being used
- Climate risk and vulnerability issues and discussions are going on in the scientific community, but a few, if any are well communicated to the wider public. Therefore, there is still a huge gap in disseminating climate risk information.
- There is a knowledge gap among city level officials on climate change adaptation compared to officials at the national level



- More proactive measures rather than reactive measures are crucial in tackling the problem of climate change
- Public funding and commitment to respond to climate related risks and vulnerability have been or are mostly project-based and donor-driven. Therefore, sustainability and progress of past and current initiatives are major concerns.
- At local and district levels, the terms of local government executives (usually three years) highly constrain the effectiveness of implementing risk reduction measures
- There is lack of expertise in constructing proper instruments to monitor the social impact of climate change and there is limited understanding on the dynamic and complex processes of social vulnerability to climate change
- Governance and social justice issues, institutional, jurisdictional and social conflicts have tendency to worsen the climate-related issues (based on preliminary review of frameworks for climate risk and approach in socio-economic vulnerability assessment)

Recommendations:

- Sustain efforts in strengthening the capacities of organisations and institutions and the policies on climate change
- Use mass media like television, radio, and newspaper to the fullest in disseminating information on climate risk and vulnerability
- Work on a special campaign on climate risk for the people who are at most risk such as the poor and marginalised
- Support more interdisciplinary research which will determine the interactions between and among human and natural systems and more assessment studies on climate with the associated geophysical and ecological risk to food, water and energy security as well as health to serve as inputs into decision support systems for national planning and local governance
- Prioritise risk assessments for areas wherein pre-existing vulnerabilities due to such conditions as socio-cultural conflicts may exacerbate environmental changes due to climate change
- Incorporate practical climate change macro and micro indicators, particularly social vulnerability index to assist governments in development planning that take into account impacts of climate change
- Assess or map the effects of current and future climate changes and various climate risks taking into consideration the people's urban development perspective on climate change risk (floods, water and food supply, land loss, air quality, heat stress, disease outbreaks, etc.) and vulnerability

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APN Out and About

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- including landscape urbanism, landuse plan and informality and settlement
- Establish/strengthen appropriate and strategic mechanisms to monitor or check the progress in implementing National Target Plan/Programme on Climate Change

Way Forward

On the last day of the workshop, the city teams presented their suggested capacity building and research follow-up activities. Noteworthy is the report from Mumbai City which specifically mentioned an ongoing APN-supported activity under the Annual Regional Call for Research Proposals (ARCP) being led by Prof. Anand Patwardhan. The rapporteur of the group highlighted that the APN-funded research project is attempting to enhance adaptation to climate change by integrating climate risk into long-term development plans and disaster management. The project recognises disaster risk reduction and disaster management as an important context for integrating or mainstreaming adaptation into decision-making for the cities at risk.

Under this APN project is a comparative analysis of the immediate to medium-term post disaster recovery scenario in the aftermath of extreme weather events of flooding faced by the three vulnerable Asian cities – Mumbai, Dhaka and Bangkok. The impacts on the magnitude and direction of the development trajectory of the cities will be examined. Proposed activities, detailed outcomes and their relevance were emphasised in the presentation including: 1) better understanding of the process of responding to climate-related hazards, including aspects such as relief and recovery planning and implementing adaptation interventions; 2) improving the understanding of vulnerability and the actual design and implementation of adaptation

interventions by integrating climate risks considerations into decision-making at the project, local and national levels; 3) ensuring that rapid growth of infrastructure enhances climate resilience and adaptive capacity and is done in a manner sensitive to the possibilities of mal-adaptation. Findings are expected to help inform the broader 'Cities at Risk' theme developed by START and the International Council for Science (ICSU) International science project on Integrated Research in Disaster Risk.

The city teams were asked to provide the workshop organiser by end of the month a one-page abstract on the 'Assessment of Climate Change Related Risk', 'Information/Knowledge Management', and 'Governance', incorporating the lessons they learned from the five-day workshop. The abstracts will be further summarised to help define future research areas. These will be reflected on the workshop proceedings and the final project report.

On another note, a Coastal Cities at Risk (CCaR) project will be proposed for funding to the International Development Research Centre of Canada and the Canadian Research Tri-Councils (Natural Sciences and Engineering, Social Sciences, Health Research). The overall objective of the project is to develop the knowledge base and enhance the capacity of mega-cities to successfully adapt to and when necessary cope with risks posed by the effects of climate change, including sea level rise, in the context of urban growth and development.

With the overall success of the workshop, the APN would like to congratulate the organisers, partners and the participants. A project article will be featured in the next edition of the APN Newsletter and both the workshop proceedings and final project report will be uploaded on the APN website as soon as they are completed.

Visioning Institutional Frameworks for Global Sustainability Research/ Sponsors Meeting and Open Forum, Paris, 22-24 June 2010

The APN Executive Science Officer, Dr. Linda Anne Stevenson, attended the Visioning Institutional Frameworks for Global Sustainability Research/Sponsors Meeting and Open Forum, which convened in Paris, on 22-24 June 2010. The Meeting was organised as a workshop and included both plenary and break-out group discussions. Active discussions transpired to agree on the essential elements of an Institutional Framework for implementing the *Grand Challenges for Global Sustainability Research*.

This strategic visioning process is being led by the International Council for Science (ICSU). The document *Grand Challenges for Global Sustainability Research* (ICSU-International Social Science Council, 2010) defines five major research challenges for the next decade and emphasises the need for an integrated, trans-disciplinary approach to address these.

Around 40 people attended the Meeting composing of representatives of co-sponsors of the global environmental change (GEC) programmes and global observing systems, chairs of the scientific committees for these programmes, research funding agencies, and international experts on related research and organisational structures. They shared their views on what would be the most suitable institutional framework to support this research agenda. The Meeting was chaired

by Johan Rockström, with support from an expert ICSU visioning task team.

The discussions were informed by a prior online consultation and an Open Forum on 22 June which had brought together over 100 experts to address both the *Grand Challenges* document and the Institutional Framework. Please visit this site for details: <http://www.icsu-visioning.org/>

APN Out and About

APN at the 2nd International Forum for Sustainable Asia and the Pacific



Following its participation in the First International Forum for Sustainable Asia and the Pacific (ISAP) in 2009, the APN participated in the 2nd ISAP which was held on 12-13 July 2010 in Yokohama, Japan to further strengthen the ties/collaborations that were established during the 1st ISAP and explore new emerging issues in the field of global change research, capacity building/enhancement and policy development. Representatives from the APN Secretariat, Mr. Tetsuro Fujitsuka (Director), Ms. Kristine Garcia (Coordinator) and Ms. Lizhier Coralde (Programme Fellow for Communications and Development) participated in selected open sessions, that convened in parallel with the Expert Workshops and relevant international Network Meetings, and used the opportunity to communicate with potential partner organisations.

The APN was successful in further raising its profile and visibility by displaying and disseminating information materials in a designated exhibition booth. The APN exhibition booth attracted a number of participants which included students, scientists, non-government organisations and other related-organisations. The APN Secretariat was also able to meet few APN current and former project collaborators and project leaders. Furthermore, one of the presenters, Prof. Kazuya Yasuhara, Professor Emeritus of Ibaraki University, mentioned and acknowledged the contribution of APN in the region particularly on climate change adaptation initiatives.

ISAP, based on the global networks and research results that IGES has developed so far, promotes diverse discussions on sustainable development in Asia and the Pacific, and provides opportunities to boost information sharing and strengthen collaborative efforts with experts and related organisations. Being held once a year with timely theme, ISAP aims to develop innovative and strategic policy proposals towards a sustainable Asia and the Pacific.

This year, the ISAP theme was "*Sustainable and Low-Carbon Development and Innovative Pathways for Asia-Pacific*". This umbrella theme included several sub-themes under sustainable development namely climate change and sustainable consumption and production.

Prof. Hironori Hamanaka, Chair of the Board of Directors of IGES delivered his opening remarks and welcomed the participants on the first day of the Symposium. This was followed by speeches from Mr. Shigefumi Matsuzawa, Governor of Kanagawa Prefecture and Mr. Kazuhiko Takemoto, Vice Minister for Global Environmental Affairs, Ministry of Environment, Japan. The Opening Session also featured keynote speeches on long-term perspectives to build a low carbon Asia-Pacific and "Establishing an Asian-style cooperative system towards a Low-Carbon Asia-Pacific 2020"

Recent developments on the issues that were raised during the 1st ISAP which included low carbon-economy, biodiversity, green

consumption, reducing emissions from deforestation and degradation (REDD), biofuels, co-benefit approach and capacity development were also discussed in the Forum. Following Copenhagen Accord at the Conference of the Parties at its fifteenth session (COP15) held in Copenhagen in December 2009, Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests, and Enhancement of Forest Carbon Stocks (REDD-plus) was one of recent developments that were highlighted in Day 1.

Another important topic that was highlighted on Day 2 of the Forum was biodiversity which was the focus of the session "*Harnessing Biodiversity: Strategic policies and concerted action*". Discussions included the Conference of Parties to the Convention on Biological Diversity (COP10 CBD) to be held in Nagoya, Japan in October 2010; ecosystem services and biodiversity challenges which talked about, as an example, the sub-global assessment of Satoyama and Satoumi in Japan; and the international cooperation which focussed on Intergovernmental SciencePolicy Platform on Biodiversity and Ecosystem Services (IPBES).

Not only that the Forum demonstrated the alignment of the APN Science Agenda with the developments in global change research, it also showed the relevance of APN activities particularly the 2010 Special Call for Proposals for Focussed Activities (Forestry and REDD-Plus and Resources Utilisation and Pathways for Sustainable Development. The Forum is also very useful for the APN in planning its future activities in the region.

Asia-Pacific Perspectives on Future Climate Regime

This Open Session aimed at providing updated information on post-Copenhagen development to the audience and discussing various perspectives on the future climate regime from Asia-Pacific perspective. The Session started with a brief introduction by the moderator to explain the objective and the outline of the session. The first presentation provided an overview of post-Copenhagen development and put the Session in the context of the current development of international negotiations on future climate regime. The following two presentations introduced China's and Indonesia's expectations for the future climate regime. The final presentation touched upon comparability of mitigation efforts/actions among developed and developing countries.

Accounting for Co-benefits: Toward Stronger Climate Change, Development, and Air Pollution Policies in Asia

This session aimed to familiarise the audience with diverse views of co-benefits and understand how accounting for different co-benefits could strengthen climate change, development, and air pollution policies in Asia. The session also introduced plans for a Co-benefits Partnership for Asia that will contribute to the development, sharing, and application of knowledge on co-benefits.

REDD+: Progress, Challenges and Ways Forward: From Local to Global

Parties to the UNFCCC are currently attempting to reach agreement on a decision for enhanced national/international action for developing countries to reduce emissions and enhance carbon stocks in their forest sectors. However, history shows us that slowing or halting deforestation is not a simple task. The objective of this session was to increase understanding of progress towards a global decision on REDD+ and to extract lessons from national REDD+ preparations and REDD+ demonstration activities.

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APN Out and About

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Mainstreaming Adaptation: Linking Research and Actions on the Ground

This plenary session brought together various members of the UNEP Asia Pacific Adaptation Network and other important players in national level policy research and policy decisions and practitioners to divulge into the issue of how networking of service providers (research institutions and knowledge generators) and service clients (governments at various levels and developmental agencies) can be effective in initiating pragmatic adaptation policy actions where they are needed most. The session followed the style of a panel discussion.

Transitioning to Sustainable Consumption and Production: Opportunities for Asian Prosperity on a Finite Planet

The session identified some of the major shortcomings of the current approaches to a low-carbon society. It indicated key entry points for more effective policy approaches to sustainability and discuss what factors can facilitate a sustainability transition of the Asia-Pacific region. One of the messages came out of the discussion was that development strategies relying mainly on technological progress and efficiency improvements are infeasible. Shifting society to sustainability will require changes also in lifestyles and consumption patterns. To make that happen there is a need to critically examine the factors that shape our aspirations and our perception of a good life, and the structures that constrain and enable our lifestyle choices and habits.

For more information, please visit this link: <http://www.iges.or.jp/en/news/event/isap2010/index.html>

Coping Strategies for Groundwater Under Threat

It is said groundwater is under stress but we do not know much what really happens on groundwater resources in different regions in Asia. This session aimed to facilitate the understandings on the state of groundwater problems, measures taken and future challenges through panel discussion.

The Challenges and Opportunities for Improving Corporate Environmental Management in Developing Asia

The fast growth of economy has caused various problems on the environment in developing Asian countries. Corporate environmental management (CEM) must be improved dramatically to fill up the large gap in traditional pollution control and the mitigation of carbon emissions. By picking up China and India as the representatives from developing Asia, this session briefly introduced current CEM practices in these two countries, and discussed policy needs for enhancing CEM from a future perspective.

Can Biofuels Contribute to Building a Sustainable Society?

This session discussed issues relating to the sustainability of biofuels based on recent research. Discussed topics are: food-fuel conflict, land use change, analysis of stakeholder viewpoints, and specific issues relating to Japan and other Asian countries.

APN at the 23rd IUFRO World Congress, Seoul, Korea, 23-28 August 2010



Committed to strengthening close cooperation with the key international organisations in facing the challenges in earth's sustainability and recognising the vital role played by the forest science in achieving this, APN representatives, Mr. Tetsuro Fujitsuka, APN Secretariat Director and Ms. Lizhier Coralde, Programme Fellow, joined the XXIII

International Union of Forest Research Organizations (IUFRO) World Congress - "Forests for the Future: Sustaining Society and the Environment," held in Seoul, Republic of Korea, 23-28 August 2010. The congress attracted more than 2,700 participants from 92 countries.

IUFRO is a non-profit, non-governmental international network of forest scientists. Established in 1892, it is one of the oldest and largest international institutions with a membership of about 15,000 forest scientists, government officials and experts and 700 organisations from 110 countries. The network promotes global cooperation in forest-related research and enhances the understanding of the ecological, economic and social aspects of forests and trees. It disseminates scientific knowledge to stakeholder and decision-makers and contributes to forest-policy and on-the-ground forest management.

IUFRO congresses are held approximately every five years and in 118 years, it was only the third time it was held in Asia. Each congress was organised around a specific theme and serves as an opportunity to discuss, exchange, and disseminate scientific knowledge within and beyond IUFRO's global network. APN maximised this opportunity to share its recent findings and achievements especially in the wide area of forest research and to encourage more scientists to get involved in APN activities.

At the opening ceremony, the participants were welcomed by the President of Republic of Korea, Hon. Lee Myung-bak. The event consisted of keynote speeches, 15 sub-plenaries, 150 technical sessions, 1,048 poster sessions, side events, and a trade and exhibition. On the fourth day, field trips were organised so participants could experience innovative forest-related projects around the country.

Plenary Sessions

The first keynote speech was delivered on Monday morning by a famous Korean poet Ko Un entitled "Forest Is Short; Desert Is Long". He called for the development of a Human Charter for the Forest to prevent future damage against the forests and stressed that voluntary institutions are urgently needed to ensure that such a declaration does not become a mere slogan. He concluded stating that 'nations of tomorrow' will succeed as nations, only if they are 'nations of forest'.

On Tuesday morning, Frances Seymour from Center for International Forestry Research (CIFOR) delivered her speech entitled "Forests, Climate Change, and Communities: Making Progress up the Learning Curve". Her discussion focussed on the past and future challenges of forest and communities research and on how to effectively integrate climate change into future studies. She emphasised that there is much to be gained by investing in global comparative studies, but because no single organisation has the capacity to undertake such an operation

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APN Out and About

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on its own, collaborative research must be pursued now more than ever.

José Joaquín Campos Arce of Tropical Agriculture Research and Higher Education Center (CATIE) gave his keynote speech on Wednesday morning about "Integrating Scales and Sectors to Foster Sustainable Livelihoods, Forests and Landscapes." He highlighted that system approaches are necessary to address the complex set of challenges facing the world, as well as achieve sustainable development, which requires interdisciplinary multi-stakeholder platform, mechanisms and intense coordination. He concluded that social and ecological resilience are interdependent and the key for sustainable livelihoods, forests and landscapes.

On Friday morning, Elinor Ostrom, 2009 Nobel Prize Awardee in Economics, delivered her keynote speech entitled "The Potential Role of Communities in Sustainable Forest Resources". She explained that there are multiple factors affecting forest conditions, thus a simple management model is neither useful nor satisfactory. She then advised not to use static solution or "paper park" for conservation purposes. She said that bridging communication between forest users and authoritative agencies enhances cooperation and results to better conservation. She emphasised the feasibility of multidisciplinary and the importance of careful designs, proper training and consistency in conducting research.

Peter Shaw Ashton from Harvard University delivered a speech on Saturday morning about "The Disastrous Trajectory of the Rain Forests: Research Imperatives". He explained that intact forests only remain on steep slopes and with limited access or agriculture potential. The lowland *Dipterocarp* forests or region's most productive were reduced dramatically. He attributed this transformation to low-cost energy. He explained that although temperate forests which underwent the same changes have since re-grown, tropical forests are unlikely to revive. He also emphasised that tropical forest diversity conservation provides resilience to invasive species outbreaks. In order to retain this protection against pathogens, small pockets of protection may be enough but must be placed in areas under high threat.

Sub-plenary Sessions

Participants were given opportunities to listen to presentations and have a dialogue with the experts in 15 sub-plenary sessions related to forest health and restoration, biodiversity, and climate change specifically on the following topics: Forest Health in a Changing Environment; Keep Asia Green: Rehabilitating and Restoring Forest Ecosystems in Asia; Biodiversity, Climate Change and Forestry – Perspective of the Collaborative Partnership on Forests; Promoting Urban Forest Services in Partnership Between Scientists and Communities; IUFRO Award Winners – Next Generation; Can Forestry and Forest Sector Activities Contribute to Mitigating Climate Change?; IUFRO Directors Forum: Forest Monitoring in Times of Climate Change; Forest Biomass Utilisation for Bio-Energy: Technology, Economics and Environment; Conservation and Sustainable Use of Forest Genetic Resources; Enhancement of Service Life of Wood in an Environmentally Conscious Global Society; Agroforestry: The Way Forward; New Frontiers of Forest Economics; Reading the Pulse of Forest Science – IUFRO Priorities 2010-2014; An Honest Conservation about Decentralisation and Forest Livelihoods in a Globalised World; Forest Biodiversity – The Key to Healthy and Resilient Forests. More detailed abstracts of the presentations can be found on the congress' book - "The International Forestry Review".

Technical and Poster Sessions

The technical and poster sessions were focussed on the congress's nine thematic areas specifically on: forests and climate change; biodiversity conservation and sustainable use of forest resources; forest environmental services; Asia's forests for the future; forest products and production processes for a greener future; emerging technologies in the forest sector; frontiers in forest and tree health; forests, communities and cultures; and forests, human health and environmental security. The best posters were selected from each of the nine congress' themes and were given recognition in their respective divisions and announced at the closing ceremony. Abstracts of the presentations are also available in the congress' book.

Congress Resolution

At the closing ceremony, the 2010 Congress Resolution was presented, stating that IUFRO will strive to promote the themes of: forests for people; climate change and forestry; bio-energy; forest biodiversity conservation; forest and water interactions; and forest resources for the future. The resolution also commits IUFRO to: Improving communication within and outside IUFRO; Expanding work on the science-policy interface; Renewing and strengthening forest monitoring activities; Expanding the IUFRO membership; and Promoting high-quality forest-related research and interdisciplinary cooperation.

APN Representation

The APN participated in the Congress' Trade and Exhibition and showcased its recent activities and findings in forest science. Since it was launched, APN has been funding a wide range of forestry-related projects in the region under its scientific research and capacity development activities. The APN has provided over US\$ 1.3 million to around 25 projects on 'Forestry' and will continue to support projects on this area. In much anticipation of the upcoming International Year of Forests in 2011 as declared by the United Nations General Assembly, the APN just concluded a Special Focussed Call on Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests, and Enhancement of Forest Carbon Stocks (REDD+).

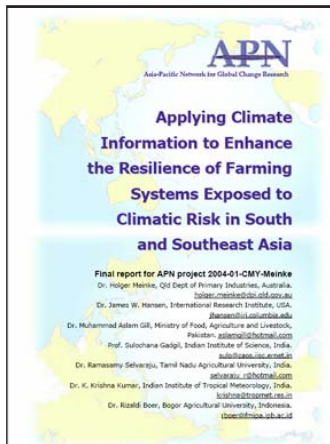
Especially for this event, the APN Secretariat produced a poster listing its completed and on-going forestry-related projects, a press release, 'APN Takes action for Sustainable Forestry' and a bulletin explaining more in detail the projects listed in the poster. The APN distributed flyers and CD-ROMs containing all the recent APN information materials and publications.

The XXIV IUFRO World Congress will be held in Salt Lake City in 2014.



Selected Outstanding Projects of the APN's 2nd Strategic Phase Evaluation

Applying Climate Information to Enhance the Resilience of Farming Systems Exposed to Climatic Risk in South and Southeast Asia



In 2005, a group of scientists completed a 3-year APN-funded project titled 'Applying Climate Information to Enhance the Resilience of Farming Systems Exposed to Climatic Risk in South and Southeast Asia'. The project involved partners in five countries: Australia, India, Indonesia, Pakistan and the U.S.A. During the recent review of APN's activities, this project was evaluated as 'outstanding'. More information about these selected outstanding projects is

available on the APN website: <http://www.apn-gcr.org/newAPN/indexe.htm>.

The project team members are proud of this recognition and asked themselves: What made this project 'outstanding'?

With hindsight, they realised that it was a unique mix of passionate scientists, a common goal as well as a large amount of serendipity. The project was great fun, which helped to establish personal relationships, many of which turned into lasting friendships. The project brought together a very diverse group of scientists with very different disciplinary, cultural and geographic backgrounds – far too many to mention in this brief update.

What they had in common, however, was a sense of purpose that transcended all their differences – they wanted to use their collective knowledge to improve climate risk management for smallholder farmers. The project team established an extensive network linking individuals and institutions across continents. This network lives on today. It continues to evolve and to deliver, five years after the project has officially finished.

Serendipity played a large role in this: more by chance than design the project brought together many like-minded, mid-career scientists who had just begun mentoring younger staff. This had two important, but largely unforeseen consequences:

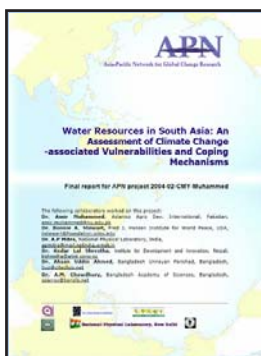
- 1) Younger staff members became exposed to 'hands-on' science that really mattered at farm and policy level. For many, this was extremely motivating and prompted them to pursue further studies. The project network provided many such opportunities. Five years hence, a considerable number of these 'young' scientists now fulfil the roles of their former mentors; the 'trickle-down effect' continues.
- 2) The original 'mid-career scientists', have moved on to senior positions in either their original home institutions or in other organisation; thus expanding the network and the institutional connections. Below is a short update on the original project investigators and their current roles:

- *Dr. James W. Hansen (Jim), International Research Institute (IRI), U.S.A:* Jim is still with the IRI as Senior Research Scientist. He is also a Theme Leader of the new Challenge Program for Climate Change, Agriculture and Food Security (CCAFS): <http://ccafs.cgiar.org/home>.
- *Dr. Muhammad Aslam Gill, Ministry of Food, Agriculture and Livestock, Pakistan:* Aslam raised the awareness for climate risk management with policy and farmers throughout Pakistan. He is now the Commissioner on Minor Crops within the Ministry; he handed his former responsibilities to a (then) junior project member who has since obtained his PhD (Dr Muhamed Asim).
- *Prof. Sulochana Gadgil (Sulo), Indian Institute of Science, India:* Sulo has 'retired'. She continues her work on several international committees and contributes as a frequent speaker to conferences and workshops related to climate research and climate impacts on agriculture.
- *Dr. Ramasamy Selvaraju (Selva), formerly Tamil Nadu Agricultural University, India:* Selva now works as a Natural Resources Officer for Food and Agriculture Organisation (FAO) in their Climate, Energy and Tenure Division (NRC) in Rome and continues to collaborate with National Hydrometeorological Services and Agriculture Ministries for better climate risk management in many countries.
- *Dr. K. Krishna Kumar (Krishna), Indian Institute of Tropical Meteorology (IITM), India:* Krishna is now a Programme Manager with IITM. In addition to his considerable administrative responsibilities, he continues his research interest into monsoonal processes and provides the links to agricultural applications.
- *Prof. Rizaldi Boer, Bogor Agricultural University, Indonesia:* Rizaldi is the founding Director of the new Centre for Climate Risk and Opportunity Management (CCROM) at the university.
- *Prof. Holger Meinke, formerly Queensland Department of Primary Industries, Australia.* Holger is Head of the Centre for Crop Systems Analysis at Wageningen University, The Netherlands. In 2011, he will return to Australia to take up the position of Director of the Tasmanian Institute of Agricultural Research (TIAR) and Head of the School of Agricultural Science at the University of Tasmania (UTAS).

To this day, the Project Officer at the Agricultural Production Systems Research Unit (APSRU) of the Commonwealth Scientific and Industrial Research Organisation in Australia, Peter deVoil, diligently answers support requests from team members. These requests keep trickling in - concrete evidence that though the project finished long ago, it has left a lasting legacy in the form of an active research network that facilitates capacity building and scientific collaboration for better climate risk management across disciplines, institutions, cultures and countries.

Selected Outstanding Projects of the APN's 2nd Strategic Phase Evaluation

Water Resources in South Asia: An Assessment of Climate Change -Associated Vulnerabilities and Coping Mechanisms



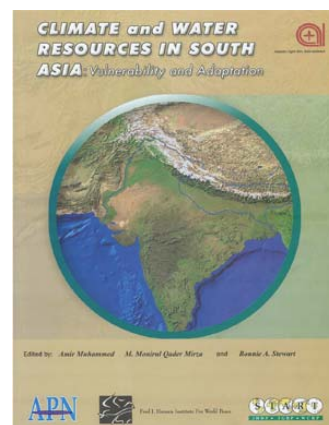
APN-supported project 2004-02-CMY-Muhammed "Water Resources in South Asia: An Assessment of Climate Change-associated Vulnerabilities and Coping Mechanisms" concluded on the basis of extensive analysis of historical climate and water resources data and future projections that the South Asia region would experience a warming trend in its overall climate with significant variability in seasonal temperatures and precipitation, and

an increasing trend in the occurrence of extreme climatic events. The sensitisation of policy-makers in the participating countries (India, Pakistan, Nepal, Bangladesh) by the project resulted in major emphasis of the governments on climate change studies, creation of high-level committees on climate change to oversee policies and development plans to cope with the increasing warming trend and occurrence of floods and droughts. Pakistan established a new research institution-Global Change Impact Studies Centre (GCISC) to study various aspects of this phenomenon while other countries in the region also established similar institutions to focus attention on climate change.

The project concluded that besides increased frequency of extreme events, there will also be increasing trend in melting of the Himalayan glaciers and likelihood of water shortage to meet national needs

especially for the agriculture sector. Pakistan and India have indeed been suffering from acute water shortage in the last few years and relations between the two countries deteriorated mainly because of disputes on sharing of waters of the river Indus and its tributaries. The current massive flood in Pakistan – the worst and most destructive in the history of the country - is mainly due to a major disturbance in the monsoon cycle related to the overall warming trend in the climate.

The APN project also stimulated efforts to train manpower in the participating regional countries through the institution of academic courses in subjects related to climate change and water resources, as well as major emphasis on research on these issues. The project also highlighted the rapid melting of Himalaya-Hindukush glaciers with major adverse consequences for water resources especially of India and Pakistan. This issue has been taken up in a detailed study of glacier recession and its impacts on water resources of the surrounding countries (and on the overall economy of these countries), by the international Centre for Integrated Mountain Development (ICIMOD) and other organisations in collaboration with national institutions.



APN Out and About

APN at the 19th Asia-Pacific Seminar on Climate Change, Kitakyusyu, Japan, 20-22 July 2010



The Ministry of the Environment of Japan (MOEJ), co-sponsored by the Department of Climate Change and Energy Efficiency (DCCEE), Australia, and the Overseas Environmental Cooperation Center, Japan (OECC) held the 19th Asia-Pacific Seminar on Climate Change, in Kitakyushu, Japan on 20-22 July 2010 to exchange views and information on climate

change issues across the Asia-Pacific region. The APN Secretariat Director, Mr. Tetsuro Fujitsuka and Executive Manager, Mr. Yukihiro Imanari attended the Seminar on APN's behalf.

Around 50 experts from 15 Asia-Pacific countries and representatives from 11 international organisations, research institutes and other

relevant entities participated in the Seminar. They discussed Nationally Appropriate Mitigation Actions (NAMAs) in a measurable, reportable and verifiable manner, and science and technology-based adaptation strategies to climate change. The participants also agreed with the possible system of NAMAs and National Communications, the importance of support systems, and mainstreaming the development of adaptation and its required support. It was emphasised that more detailed and continued discussions are necessary to identify the best National Communications that can be duplicated in other countries.

As a joint initiative by the DCCEE, Australia and the MOEJ, the Seminar has been valued both by developing and developed countries inside and outside of the region as a vehicle for countries to promote confidence building by providing opportunities to exchange information, views and experiences on issues of climate change in a practical manner. Please visit the seminar website for more information: <http://www.climateanddevelopment.org/ap-net/seminar/h01.html>.

Selected Outstanding Projects of the APN's 2nd Strategic Phase Evaluation

Integrated Assessment Model (IAM) for Developing Countries and Analysis of Mitigation Options and Sustainable Development Opportunities



The project theme of integrated assessment models for developing countries and analysis of mitigation options and sustainable development emerged from recommendations of various international assessments on long-term global environmental issues, especially by the Intergovernmental Panel on Climate Change (IPCC), which showed gaps in quality and capacity of assessment for developing countries in the area of policy modelling.

Two broad themes were identified as vital in this context. First, the development of tools for policy analysis in order to integrate climate change and sustainable development concerns of developing country policy-makers. Second, the enhancement of capacity in developing countries for integrated assessment of climate change mitigation options in the context of sustainable national development priorities and policies.

The project was jointly implemented by three institutions, namely, Indian Institute of Management, Ahmedabad (IIMA), India; Energy Research Institute (ERI), China and Asian Institute of Technology (AIT), Thailand. The project work was organised around three themes: 1) development of national scenarios with developing country perspective; 2) explicit recognition of developing country dynamics in the modelling, 3) initiation of national modelling exercises and development of national databases in the three participating countries. The project teams carried out activities both jointly and independently.

The joint activities included designing model framework, database and application outlines. Besides, each country team developed national scenarios and policy modelling in the context of national development plans and greenhouse gas mitigation. The dissemination and project level coordination was done via a comprehensive website (www.e2models.com) which displays intellectual resources related to the project domain including an inventory of papers, and presentations. The website has received excellent feedback from researchers and other stakeholders in terms of its design, relevance of materials and comprehensiveness. The website includes the publications and presentations linked to project activities.

Three project workshops were held (AIT, Bangkok in August 2004; ERI, Beijing in September 2005; IIM, Ahmedabad in March 2007) with participation of diverse stakeholders. The project work has led to numerous publications. The project outcomes are interfaced with various international environmental assessments by the project team members participating in the activities such as IPCC Fourth Assessment Report (AR4), Group on Earth Observations 4th Plenary Meeting

(GEO 4), Asia-Pacific Environment Innovation Strategy (APEIS), and Development and Climate project led by United Nations Environment Programme (UNEP) RISO Centre on Energy, Climate and Sustainable Development, Denmark.

The key output of the project is the **CAPaBLE CGE Model**, which is reported in full in the 'Model Report'. This is available from the Project Leader or from the APN Secretariat. The model applications were made for China, India and Thailand, which show the model as a very useful tool. The project identified generic databases, which users from developing countries can access free from the web, and specific databases, which more advanced users, may subscribe. The project paid keen attention to capacity building training more than 15 doctoral and post-doctoral students, disseminating information to diverse stakeholders from several developing countries from Asia-Pacific region.

The project website was used effectively for access to project outputs. Throughout the project implementation, the interfaces were maintained with various international environmental assessments. Project work has led to numerous publications which has helped capacity building of researchers in developing countries. The project partners contributed to the formation of the Asian Energy and Environment Modelling Forum (AEEMF), which was established in July 2004. An important outcome of the project is an extended network among the modelling and climate change mitigation researchers in the Asia-Pacific region and establishment of fresh links with international research networks.

Four key areas for further work are: 1) enhancing the model developed for the present CAPaBLE project comprehensive to a global model which can align global sustainable development and climate change mitigation in an integrated framework for developing roadmap for transition to a future 'Low Carbon Society'; 2) developing strategic technology database for supporting the model for the long-term technology strategy involving innovations and their transfers and deployment in developing countries; 3) disseminating project work through targeted workshops as well as available forums; and 4) sustaining the research network in the Asia-Pacific region and links with international networks. In the context of the last two areas, the project website will be continued beyond the project duration. There are also plans to convert the final outputs from the project to various publications for wider dissemination.



ARCP-Funded Project

Impacts of Global Change on the Dynamics of Snow, Glaciers and Runoff over the Himalayan Mountains and their Consequences for Highland and Downstream Regions (Reference: ARCP2009-04CMY-Shrestha; Project Leader: Dr. Kedar Lal SHRESTHA)



A three-day joint workshop of the project partners was held in Kathmandu, Nepal on 17– 19 February 2010. Participants from the collaborating institutions in India, Nepal and Pakistan, together with other local partner institutions and stakeholders exchanged and shared their research studies' results and experiences.

The workshop started with an Introductory Session wherein Project Leader Dr. Kedar Lal Shrestha welcomed the participants and briefly presented the workshop objectives. He shared the strategies and activities undertaken in Year 1 to attain the project objectives. This was followed by presentations from the representatives of India, Nepal and Pakistan summarising the activities implemented in respective countries.

In the next Session, supplementary presentations on other relevant project-related work carried out by various institutions provided an opportunity to exchange views and experiences amongst the participants on a broader perspective.

Detailed presentations on completed exercises regards the Regional Climate Model (RCM), Snow and Glacial Melt Runoff and Hydrology in selected study areas in the Himalayan range were given by respective researchers in the three subsequent Technical Sessions. Each presentation was followed by discussions on the comparison of results

and knowledge and experiences gained among the country study teams. Various methods for impact assessment of the hydrological changes on the water availability and food security, on the hydropower generation potentials and on the society and economy in the upland and downstream regions were also discussed.

The workshop concluded with an accord on using similar RCMs in all the selected basins as well as on the methods to be adopted for bias corrections before using the RCM results to project hydrological changes. It was stressed that hydrological projections have to reflect the average of at least a decade so that the projected hydrological changes could be considered as a result of change in climate rather than due to erratic weather variabilities. In addition, concurrence was reached on the selection of methodologies and working procedures to conduct, align with the impact assessment in the second year to attain the project's key objectives.

It was also agreed to prepare and publish joint papers in suitable peer reviewed international journals by integrating the relevant works of all the country study teams carried out in Year 1. For more information, please visit this link: http://www.idi.org.np/joint_workshop.php



Training Workshop on Climate Change and Data Information Management System (DIMS) Development, Kuala Lumpur, Malaysia, 1-3 December 2010

This Training Workshop will be conducted in conjunction with an on-going research project sponsored by the APN on 1-3 December 2010 at Chulan Tower in Kuala Lumpur, Malaysia. Participants will get better understanding and practical familiarity with current methods and modern approaches to climate change models and database creation. At the end of the Training Workshop, they are expected to competently apply current methods for climate prediction and modelling at their work place or basic cases in hydro-meteorology, urban applications, etc. Climate modelling using modern tools and mapping with Geographic Information Systems (GIS) and design and implementation of a data driven website and relational database will be the focus of the Training Workshop.



International Conference on Innovation and Sustainability Transitions in Asia, Kuala Lumpur, Malaysia, 9-11 January 2011

The Conference is organised by International Human Dimensions Programme on Global Environmental Change Industrial Transformation (IHDP IT) in cooperation with APN, The Research Council of Norway (NRC), Jadavpur University India, Technical University Eindhoven and Malaya University, Kuala Lumpur and will mark an official closure of the IHDP IT project. This closure, however, creates opportunities for new networks to emerge. Please pay your attention to a new initiative, the Sustainability Transitions Research Network (STRN). You may log on to the network website to view the guidelines: www.transitionsnetwork.org.

Global Change and Coral Reef Management Capacity in the Pacific: Engaging Scientists and Policy-Makers in Fiji, Tonga, Samoa and Tuvalu

(Reference: CBA2010-15NSY-South; Project Leader: Prof. G. Robin SOUTH)



Healthy coral reefs are vital to the sustainability of the peoples' livelihoods in the Pacific Islands. Global change has increasing impacts on Pacific coral reefs, including sea level rise, increased sea surface temperature, ocean acidification, and natural phenomena like cyclones, leading to increased vulnerability of coastal communities. Integrating this knowledge of global change across various national government sectors, then translating this into policies that lead to sustainable management of coastal ecosystems remains a challenge.

This project aims to bring Pacific Leaders together with scientists and experts on the sustainable management of coral reefs, so that they can be apprised of the impacts of global change and of those factors that are affecting the health of their coral reefs, using the most recent information available. This challenge was addressed through face-to-face dialogue between reef experts familiar with the science of climate change, and government, non-governmental organisations (NGOs) and civil society personnel responsible for the development of appropriate policies focussing on the sustainable management of coral reefs in Fiji, Tonga, Samoa and Tuvalu.

A general overview of coral reef issues in the Pacific was prepared by the Institute of Marine Resources, followed by dossiers on each country, including a gap analysis regarding global change and coral reef governance issues. Input from the countries was sought before the dossiers were distributed to participants. Workshops were held from June – August 2010, during which a total of some 130 senior officials from the four countries attended.

The workshop format comprised presentations on the current status of coral reef and climate change issues and policies given by the project team leaders, government officials, NGOs and civil society representatives. Following open discussions, break-out groups reviewed the gap analysis and recommendations, with provision being made for modifications, additions and comments. The resulting conclusions were then discussed in the Plenary, when a national coral reef action plan was formulated. Follow up on progress with the action plans will take place in the coming year.

The workshops presented a welcome opportunity to engage with the senior government and civil society representatives from the four countries. Time was also available to organise meetings with some stakeholders and to discuss areas of common interest such as how the University of South Pacific (USP) can assist countries with their self-determined plan.

Although there are great differences among the four target countries in terms of size, environment, culture and population, the workshops identified a number of common and recurrent themes. All of the countries are signatory to the relevant United Nations Conventions and Agreements relevant to global change and the environment, although for some reporting presents challenges. All countries have in place and are currently reviewing or updating the necessary policies regarding the conservation and sustainable use of their coral reefs and marine resources, and all recognise the important role of climate change in the long-term sustainability of their marine resources and food security, but climate change issues have not yet been incorporated as a cross-cutting theme among the relevant government departments.

In Tonga, for example, the Ministry of Environment and Climate Change seeks to put things in perspective under one umbrella, but it is evident that this presents challenges for them and the Ministry of Fisheries regarding allocation of funding and responsibilities. In general, the governments recognise the need for integrated planning, but there is a need to improve communications among those line departments responsible for the management of coral reefs: for some this will require a significant change in mind-set and *modus operandi*. There was a universal lack of knowledge of the 2002 Regional Oceans Policy, developed and approved by the forum Leaders and presented at the World Summit on Sustainable Development held in Johannesburg. In discussions, two countries (Tonga and Tuvalu) resolved to examine the possibility of using the Regional Oceans Policy as a template for the development of National Oceans Policies.



The need to raise public awareness about global change and coral reef issues was recognised by all, as was the need to find ways to incorporate marine issues in the school curriculum. Much of the curriculum is currently based on developed country principles. This would require the necessary teacher education. A significant amount of work needs to be done in this area.

There are common threats to coral reefs throughout the region, including unsustainable fishing causing stock depletion, pollution from land-based sources, habitat destruction and global change impacts, including sea level rise, sea temperature rise, ocean acidification and increased strengths of cyclones. Exacerbating all of these is rapid population growth. These threats are evident to greater or lesser extents in the target countries.

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All four countries recognise over-fishing and depletion of reef fish stocks as a major problem and this, coupled with high population growth indicates that there will be serious shortages of fish in the next 20 years, unless some strong conservation measures are put in place. The difficulty in enforcement of fishery regulations is a serious problem throughout, largely because of a lack of capacity. Alternative livelihoods will need to be developed for disenfranchised fishers. The expansion of aquaculture is seen as a possible replacement source for reduced protein supplies; however, the scope for this is limited in Samoa and Tuvalu but has good potential in Fiji and Tonga.

The establishment and management of Marine Protected Areas or MPA (or similarly designated areas) is of high priority in all the countries, as well as the recognition of the important role they play in conservation; but only in Fiji and Samoa has this reached a high level of community engagement through the Fiji Locally Managed Marine Areas programme, and the Village Fish Reserves, accompanied by Village By-Laws in Samoa. Community engagement was seen as crucial to the long-term effectiveness of protected areas. Tonga has a variety of reserves and parks, with policies and community engagement still evolving, whereas in Tuvalu there is only one significant MPA (involving significant community participation), with others in the outer islands under consideration.

All countries have reef monitoring programmes to various degrees of frequency and location; the importance of monitoring from the point of view of providing management advice was recognised, as well as the need to engage more with communities. The lack of monitoring capacity is an issue. Significantly, it is evident that monitoring and recording of biodiversity is in its infancy, with the exception of Fiji. National Biodiversity inventories are thus seriously inadequate and much of the marine biodiversity, with the exception of commercially important species, is unrecorded. The need for incorporation of global change aspects and socio-economic monitoring was also recognised.



A significant number of global change and related projects are underway in all four countries, and with the support of a variety of donors. The participants noted that there is a need for better coordination of projects and donor support to avoid duplication of efforts.

Overall, the workshops were very successful. USP certainly was recognised for the effort to engage the countries in the important area of coral reef management and development.

The challenges faced by the countries are huge and provide opportunities for joint projects with USP. A significant number of initiatives arose during the workshops, including the following:

- The potential for marine biodiversity surveys in Tonga, Samoa and Tuvalu;
- Introduction of Seagrass Watch programmes in Samoa and Tonga;
- The need for coral identification training in Tonga, Samoa and Tuvalu;
- Development of a regional Climate Change Clearing house, preferably at USP;



- The need for assistance with capacity building in all countries (USP can play a pivotal role);
- Facilitation of attachments of USP students with their relevant home Governments;
- Assistance with the new Marine Science programme at the National University of Samoa
- Closer collaboration with the South Pacific Regional Environment Programme (SPREP) in the area of coral reefs and coral reef management;
- Re-activation of the Two Samoas initiative (between American Samoa and Samoa);
- A commitment by two countries (Tonga and Tuvalu) to work towards development of National Ocean Policies, based on the Regional Oceans Policy template approved by the Forum Leaders in 2002. Need to consult within the country, as well as with Traditional Leaders
- Need for improved collaboration between all stakeholders – interaction with Government will lead to securing more political will, e.g. population growth
- Need to harmonise among projects, for better coordination among agencies
- Need to address the disconnection between community (bottom up) and government (top down) resource management systems
- Need for good governance at community level
- Need for continuous monitoring to ensure the availability of consistent statistics on fisheries (subsistence, per capita consumption)

Feedback from APN-Funded Participants on Second DIVERSITAS Open Science Conference (OSC) – Biodiversity and Society: Understanding Connections, Adapting to Change (Ensuring a Strong Scientific Contribution from the Asia-Pacific Region) (Reference: CBA2009-07NSY-Larigauderie, Project Leader: Dr. Anne LARIGAUDERIE)



I had a chance to participate in this important event. My abstract entitled *Impacts of armed conflict on biodiversity in Nepal* was selected for the oral presentation. As Nepal has been suffering from armed conflict in the past ten years, I thought that a presentation on the impacts of insurgency on the biodiversity of Nepal would be timely and interesting.

This was a very appropriate forum to discuss such issue. The audiences of the conference were experts in the field and their comments and suggestions in my presentation greatly helped me to refine my work. Further, it was a great opportunity to meet globally known experts in the field of biodiversity. As a social scientist, it was a unique opportunity to interact with natural scientists and learn from them. In essence, it was also an excellent forum for networking.

The field visit to the conservation area was really beneficial via exposure to South African biodiversity and its management. The materials collected from the conference are valuable resources to

further my research and teaching. I am extensively using the collected resource materials and knowledge gained from the conference in my teaching and research at the Human and Natural Resources Studies Centre of Kathmandu University, and conducting research in the field of social dimensions of natural resources and biodiversity for which participation in this conference aided me significantly.

I indulged with great enthusiasm in conversations with the executive officials (board members and officers) about developing a focal point in Nepal, as the country is not yet part of DIVERSITAS. I talked with two officials and they encouraged me to write formally once back in Nepal. I wrote to the Chair, Vice-chair, and members about my interest to develop a Nepal Focal Point and I am waiting for a response. Meanwhile, I use the knowledge and skills/experiences gained from the conference in my daily life. My ambition is to be a part of this global biodiversity conservation network.

I would like to thank the Asia-Pacific Network for Global Change Research for providing me funding support to participate in this important event and its commitment to support other aspiring young scientists in the region. I sincerely feel that this support from APN has a great contribution in my capacity enhancement.

Bishnu Raj Upreti, Nepal

APN 2010/11 Projects on Key Focus Areas

Following the launch of a call for proposals for two focussed activities and undergoing a rigorous review process, the APN is pleased to announce successful proponents. More importantly, APN thanks all proponents for their continued interest in, and support of, the APN and its activities. The APN Secretariat wishes you the very best of success in your endeavours. The project abstracts will be made available in the next edition of the APN Newsletter and will be uploaded on the APN website in due course. Meantime, if you have any questions or should you be keen on learning more about the project, please do not hesitate to contact the APN Secretariat Executive Science Officer, Dr. Linda Anne Stevenson (l Stevenson@apn-gcr.org).

KEY FOCUS AREA 1

Theme 2: Ecosystems, Biodiversity and Land Use

EBLU2010r-FP11-Takeuchi

Critical Analysis of Effectiveness of Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) for Forest Communities and Shifting Cultivation Based on Lessons Learnt from Conservation Efforts in Lao PDR and Thailand

EBLU2010r-FP03-Scheyvens

Participatory Approaches to Forest Carbon Accounting to Mitigate Climate Change, Conserve Biodiversity, and Promote Sustainable Development

EBLU2010c-FP01-Skole

Developing a Measurable, Reportable and Verifiable (MRV) System for REDD+: Scaling up from Project Level to National Level REDD+ MRV systems for Lao PDR and Viet Nam

EBLU2010c-FP04-Haruyama

Capacity Building of Advanced Land Observing Satellite (ALOS) Data to Support Mapping and Monitoring Deforestation and Degradation in Indonesia

KEY FOCUS AREA 2

Theme 4: Resources Utilisation and Pathways for Sustainable Development

RUSD2010r-FP06-Surjan

Advancing Locally Based Green Practices to Realise Establishment of Sound Material Cycle Society in Asian Cities

RUSD2010c-FP03-Sun

Assessment and Promotion of Strategies and Techniques for Biomass Use in Countryside of China – Concentrating on Agricultural Straw Residue

CAPaBLE - SCBCIA

Feedback from APN-Funded Participants on Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities

(Reference: CIA2009-01-SNIDVONGS; Project Leader: Dr. Anond SNIDVONGS)



The impact of climate change on urban areas is an emerging global change issue. Particularly, Asian coastal cities have been identified as most at risk to climate change impacts and climate disasters. The International Workshop on "Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities," which was organised in August and

supported by the APN, was one of the great events I have attended gathering scientists and researchers of the Southeast Asia region and discussing on the issue.

Being a member of the Ho Chi Minh City Team, I found that it was a great opportunity to participate in that one-week workshop. I gained profound useful information on climate change impacts on Asian coastal cities which are potential risks to coastal flooding and climate-related disasters. Importantly, I grasped comprehensive approaches to climate risk and disaster assessment given by various academic researchers and experts from Ibaraki University, Pacific Disaster Center and UN University-Institute for Environment and Human Security (UNU-EHS).

Interestingly, a number of discussions were stimulated by researchers from East-West Center and START. In addition, I and my team members had a great opportunity to learn from and share experience with other colleagues through their case studies in Bangkok, Manila, Jakarta and Mumbai.

Most importantly, I brought knowledge and information on climate change vulnerability assessments from the Workshop to share with Vietnamese colleagues. Given the context that Ho Chi Minh City (HCMC) is one of the top 10 Asian cities at risk from coastal flooding, it is imperative to conduct research projects related social and economic vulnerability assessments in HCMC. However, there is currently a lack of necessary and relevant tools and approaches to climate change vulnerability assessments in HCMC. I have since taken the opportunity to promote joint research collaborating with colleagues of the Department of Urban Planning – Ho Chi Minh City University of Architecture. Accordingly, a future climate change research project has been proposed for socio-economic vulnerability assessment of riverine and coastal communities which are most vulnerable.

Vo Le Phu

Ho Chi Minh City University of Technology, VIET NAM



The APN-funded project *Workshop on 'Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities'* was recently organised by the Southeast Asia START Regional Centre in August 2010 in Nakorn Pathom, Thailand. The Workshop, building upon the 'Cities at Risk' theme, brought together urban planners and researchers from Asian coastal cities like

Bangkok, Manila, Ho Chi Minh, Jakarta and Mumbai. The Workshop aimed at capacity building of participants in climate change vulnerability assessment tools and their application to improving urban governance.

I had the opportunity to participate in this Workshop as part of the Mumbai City Team and also presented the City Report providing an overview of general awareness about climate change impacts and current adaptation efforts in the City. The five days of the Workshop were filled with a number of sessions conducted by international experts on varied but interlinked themes of risk and vulnerability mapping, socio-economic vulnerability assessments, Geographic Information

System (GIS)-based hazard assessments, and participatory processes to develop stakeholder partnerships and linking disaster risk reduction and climate change adaptation for adaptive urban governance. The organisers also scheduled a field visit to the nearby Muang District in Samut Sakhon Province to demonstrate how community involvement was successful in developing coping mechanisms against flooding, or for mangrove protection by using traditional adaptation techniques.

This Workshop was a great learning experience for all of us to understand and appreciate the similarity of problems faced by our coastal cities, the current climate change adaptation and mitigation efforts and need to mainstream the climate agenda into long-term development plans for the coastal cities. I have been immensely benefited personally and professionally by developing close contacts with the research community during the Workshop and hope to carry on the interaction that would culminate in joint research endeavours in future.

Archana Patankar

K J Somaiya Institute of Management Studies and Research, INDIA



When I was invited to attend the workshop in Nakorn Pathom, I did not know what to expect. I was hoping to obtain more knowledge in my quest to develop useful indicators of social vulnerability. The topic of impacts of climate change is a relatively new area of knowledge to me and my office. Thus, when I first arrived at the venue, I was expecting a barrage of sophisticated jargon on climate change.

It turned out that I was mostly wrong. The workshop focussed more on the social impacts of climate change, rather than the physical aspects. The workshop enabled me not just to gain new knowledge about the impacts of climate change, but also to obtain additional knowledge on

the purpose of my participation in the workshop. That is to develop a social vulnerability index to climate change that can be adopted by developing countries.

More importantly, my Jakarta Team and I were able to widen our research network because we met new and knowledgeable people on climate change and its impacts. I was particularly excited to meet several experts on the social issues of climate change and the indicators designed to monitor the impacts of climate change on people, because in my view the people affected by climate change are also as important as the physical impacts.

Thus, I can sincerely say that my participation in the workshop was a success in view of the knowledge gained. It allows me to continue my

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CAPaBLE - SCBCIA

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quest to develop social indicators for future use. It is also my hope that the Jakarta Team will continue their collaboration to continuously address the issue of climate change. It would be a shame if the team would be dissolved before putting together new research on the impact

of climate. There are still a lot of materials to study just on the issue of social impacts of climate change.

Indra Murty Surbakti

National Bureau of Statistics, INDONESIA



I am a Vietnamese doctoral student doing research on integrated risk assessment of climate change and urban water management at the Asian Institute of Technology (AIT), Thailand. I had an opportunity to participate in the workshop on "Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities" held in Nakorn Pathom, Thailand.

The workshop was great, it provided me the platform to meet various climate change researchers and interested parties from Asia-Pacific countries. I also had the opportunity to join in the network of Regional and International START, East-West Center, Pacific Disaster Center, United Nation University, and Ibaraki University through APN. This is highly appreciated. I gained new ideas about climate change risk in the context of urbanisation mainly through the field trip and workshop

presentations. I would like to express my sincere gratitude to APN and the organisers of this workshop for the opportunity to attend in this event and for the support they extended to me. While I was discussing with Ms. Perlyn Pulhin of the APN Secretariat and though her presentation, I came to know more about APN's support on research activities in the climate change area.

My studies are focussed on urban water management problem such as sea level rise, flooding, and salt water intrusion. I hope that in the near future, I will get opportunities to work with APN or become a project leader/collaborator. I believe that such training, workshop and conference are very useful for young researchers because we can share our experience and enhance effective communications among academic institutions and participating organisations at the regional and international levels.

Lam Vu Thanh Noi

Asian Institute of Technology, THAILAND



I was fortunate to attend the 'Cities at Risk' Workshop organised in Nakorn, Pathom, Thailand, in August 2010. It was an amazing experience where I got the opportunity to share my work and ideas with some of the most recognised scholars of this field. The workshop covered an extensive range of topics.

The members of the five City Teams from different countries exchanged ideas and discussed the outcomes of the research initiatives in their respective countries and areas of expertise. In the field of disaster studies and climate change, where innumerable people are working in different places at different levels, it is important to share the kind of work others are doing and understand the relations and synergies towards an integrated work and potential partnership.

The workshop provided a platform for teams and researchers to sharpen the focus of their work. Currently, all the teams are working towards preparing a common document and hopefully, we will continue to work in close collaboration with each other. The organisers should be given the credit for systematising the sessions with theory and practice wisely. The resource persons are leading academicians/researchers and they showed immense enthusiasm in every session.

For a young researcher like me, it is imperative that we get enough exposure in order to improve our research skills. I am working on my doctoral proposal and this workshop enabled me to explore the possibilities for carrying out the PhD proposal as well as helped me to improve the quality of my work. I wish all the very best to APN and associates for their upcoming ventures and would be happy to contribute to their initiatives with sincere gratitude.

Vikas Lakhani

Jamselji Tata Centre for Disaster Management, INDIA

Project Reference Number: CIA2009-01-SNIDVONGS
Project Leader: Dr. Anond Snidvongs, (anond@start.or.th) Southeast Asia (SEA) Global Change System for Analysis, Research, and Training (START) Regional Center, Chulalongkorn University, Thailand
Project Title: Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities

Project Reference Number: CIA2009-02-PULHIN
Project Leader: Dr. Juan Pulhin (impulhin@uplb.edu.ph), Department of Forestry and Forest Governance, College of Forestry and Natural Resource, University of the Philippines Los Baños, Philippines
Project Title: Capacity Development on Integration of Science and Local Knowledge for Climate Change Impacts and Vulnerability Assessments

Project Reference Number: CIA2009-03-LUN
Project Leader: Dr. Yin Lun (lun.yin@gmail.com), Centre for Tibetan Regional Sustainable Development, China
Project Title: Climate Change in Eastern Himalayas: Advancing Community-Based Scientific Capacity to Support Climate Change Adaptation

Project Reference Number: CIA2009-04-GAOL
Project Leader: Dr. Jonson Lumban Gaol (jonsonrt@yahoo.com), Department of Marine Science and Technology, Bogor Agricultural University, Indonesia

Project Title: Increasing Capacity of Local Scientists for Climate Change Impact and Vulnerability Assessments in Indonesia Archipelagos: Training in In-Situ/Satellite Sea Level Measurements

Project Reference Number: CIA2009-05-JITPRAPHAI
Project Leader: Dr. Somrudee Jitpraphai (somdeem@yahoo.com), SEA START Regional Center (SEA START RC), Thailand
Project Title: Building Research Capacity on Assessing Community Livelihood Vulnerability to Climate Change Impacts in Central Viet Nam and the Mekong River Delta

Project Reference Number: CIA2009-06-DUC
Project Leader: Dr. Do Minh Duc (ducdm@vnu.edu.vn), Faculty of Geology, Hanoi University of Science, Viet Nam
Project Title: Capacity Development for Adaptation to Climate Change in the Rural Coastal Zone of Viet Nam

Project Reference Number: CIA2009-07-LOTIA
Project Leader: Ms. Hina Lotia (hlotia@lead.org.pk), Programme Development Department, Leadership for Environment and Development (LEAD), Islamabad, Pakistan
Project Title: Capacity Development of the Scientific Community for Assessing the Health Impacts of Climate Change

ARCP 2010/11 Projects

Project Reference: ARCP2010-01CMY-Sthiannopkao

Project Title: Collaborative Research on Sustainable Urban Water Quality Management in Southeast Asian Countries: Analysis of Current Status (comparative study) and Development of a Strategic Plan for Sustainable Development

Project Leader: Dr. Suthipong STHIANNOPKAO, Gwangju Institute of Science and Technology (GIST), REPUBLIC OF KOREA; Email: suthi@gist.ac.kr; suthisuthi@hotmail.com

Project Reference: ARCP2010-02CMY-Phua

Project Title: Integrated Prediction of Dipterocarp Species Distribution in Borneo for Supporting Sustainable Use and Conservation Policy Adaptation

Project Leader: Dr. Mui How PHUA, School of International Tropical Forestry, Universiti Malaysia, MALAYSIA; Email: pmh@ums.edu.my

Project Reference: ARCP2010-03CMY-Marambe

Project Title: Vulnerability of Home Garden Systems to Climate Change and its Impacts on Food Security in South Asia

Project Leader: Prof. Buddhi MARAMBE, Faculty of Agriculture, University of Peradeniya, SRI LANKA; Email: bmarambe@pdn.ac.lk

Project Reference: ARCP2010-04CMY-Wang

Project Title: Building Asian Climate Change Scenarios by Multi-Regional Climate Models Ensemble

Project Leader: Dr. Shuyu WANG, Institute of Atmospheric Physics, Chinese Academy of Sciences, CHINA; Email: wsy@tea.ac.cn

Project Reference: ARCP2010-05CMY-Luck

Project Title: The Effects of Climate Change on Pests and Diseases of Major Food Crops in the Asia Pacific Region

Project Leader: Dr. Joanne Elizabeth LUCK, Cooperative Research Centre for National Plant Biosecurity, AUSTRALIA; Email: jo.luck@dpi.vic.gov.au

Project Reference: ARCP2010-06CMY-Schaefer

Project Title: Quantifying the Role of Dead Wood in Carbon Sequestration

Project Leader: Dr. Douglas SCHAEFER, Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, CHINA; Email: xiedaoan@xtbg.ac.cn

Project Reference: ARCP2010-07CMY-Bai

Project Title: Asian Coastal Ecosystems: An Integrated Database and Information Management System (DIMS) for Assessing Impact of Climate Change and its Appraisal

Project Leader: Dr. V. Ramani BAI, University of Nottingham Malaysia Campus, MALAYSIA; Email: Ramani-Bai.V@nottingham.edu.my

Project Reference: ARCP2010-08NSY-Freeman

Project Title: Impact of Climate Change on Food Security and Biosecurity of Crop Production Systems in Small Pacific Nations

Project Leader: Dr. Angela FREEMAN, Department of Primary Industries, AUSTRALIA; Email: angela.freeman@dpi.vic.gov.au

Project Reference: ARCP2010-09NSY-Patwardhan

Project Title: Enhancing Adaptation to Climate Change by Integrating Climate Risk into Long-Term Development Plans and Disaster Management

Project Leader: Prof. Anand PATWARDHAN, Indian Institute of Technology, INDIA; Email: anand@iitb.ac.in

Project Reference: ARCP2010-10NMY-Koike

Project Title: River Management System Development in Asia Based on Data Integration and Analysis System (DIAS) under the GEOSS

Project Leader: Prof. Toshio KOIKE, The University of Tokyo, JAPAN; Email: tkoike@hydra.t.u-tokyo.ac.jp

Project Reference: ARCP2010-11NMY-Asanuma

Project Title: Intercomparison of Landsurface Process Modelling at Asian Drylands

Project Leader: Dr. Jun ASANUMA, Terrestrial Environment Research Center, University of Tsukuba, JAPAN; Email: asanuma@suiri.tsukuba.ac.jp

Project Reference: ARCP2010-12NMY-Uprety

Project Title: Community Based Forestry and Livelihoods in the Context of Climate Change Adaptation

Project Leader: Dr. Dharam Raj UPRETY, International Forestry Resources and Institutions (IFRI) and Forest Action, NEPAL; Email: forestaction@wlink.com.np; dharam.uprety@gmail.com

Project Reference: ARCP2010-13NMY-Bae

Project Title: Climate Change Impact Assessment on the Asia-Pacific Water Resources under AWCI/GEOSS

Project Leader: Prof. Deg-Hyo BAE, Sejong University, REPUBLIC OF KOREA; Email: dhbae@sejong.ac.kr

Project Reference: ARCP2010-14NMY-Li

Project Title: Analysis on Urban Land-Use Changes and its Impacts on Food Security in Different Asian Cities of Four Developing Countries using Modified Cellular Automata (CA)

Project Leader: Prof. Jianlong LI, The Global Change Research Institute, College of Life Science, Nanjing University, CHINA; Email: jlli2008@nju.edu.cn; jianlongli@sina.com.cn

Project Reference: ARCP2010-15NMY-Han

Project Title: The Impact of Spatial Parameters on Greenhouse Gas Emissions: A Comparative Study between Cities in China and India

Project Leader: Dr. Sun Sheng HAN, The University of Melbourne, AUSTRALIA; Email: sshan@unimelb.edu.au

Project Reference: ARCP2010-16NMY-Huda

Project Title: Food Security and Climate Change in the Asia-Pacific Region: Evaluating Mismatch between Crop Development and Water Availability

Project Leader: Prof. Samsul HUDA, University of Western Sydney, AUSTRALIA; Email: s.huda@uws.edu.au

Project Reference: ARCP2010-17NMY-Towprayoon

Project Title: Strategic Rice Cultivation for Sustainable Low Carbon Society Development in Southeast Asia

Project Leader: Assoc. Prof. Dr. Sirintornthep TOWPRAYOON, King Mongkut's University of Technology, THAILAND; Email: sirin@jgsee.kmutt.ac.th

Project Reference: ARCP2010-18NMY-Lutaenko

Project Title: Coastal Marine Biodiversity of Viet Nam: Regional and Local Challenges and Coastal Zone Management for Sustainable Development

Project Leader: Dr. Konstantin LUTANEKO, Institute of Marine Biology, RUSSIAN FEDERATION; Email: lutaenko@mail.primorye.ru; lutaenko@mail.ru

CAPaBLE 2010/11 Projects

Project Reference: CBA2010-01CMY-Sang-arun

Project Title: Promoting Sustainable Use of Waste Biomass in Cambodia, Lao People's Democratic Republic and Thailand: Combining Food Security, Bio-energy and Climate Protection Benefits

Project Leader: Dr. Janya SANG-ARUN, Institute for Global Environmental Strategies, JAPAN; Email: sang-arun@iges.or.jp

Project Reference: CBA2010-02CMY-Togtohyn

Project Title: Dryland Development Paradigm (DDP) Application for the Most Vulnerable to Climate and Land Use Change of Pastoral Systems in the Southern Khangai Mountains of Mongolia (DDPPaS)

Project Leader: Dr. Chuluun TOGTOHYN, Institute for Dryland Sustainability (IDS), National University of Mongolia, MONGOLIA; Email: chuluun@nrel.colostate.edu

Project Reference: CBA2010-03NSY-Indrawan

Project Title: Developing the Capacity for Teaching Biodiversity and Conservation in the Asia-Pacific Region

Project Leader: Dr. Mochamad INDRAWAN, University of Indonesia, INDONESIA; Email: jamblang@cbn.net.id

Project Reference: CBA2010-04NSY-Dhakal

Project Title: Carbon Governance in Asia: Bridging Scales and Disciplines

Project Leader: Dr. Shobhakar DHAKAL, Global Carbon Project (GCP), National Institute for Environmental Studies (NIES), JAPAN; Email: shobhakar.dhakal@nies.go.jp

Project Reference: CBA2010-05NSY-Lorrey

Project Title: Improving Pacific Island Meteorological Data Rescue and Data Visualisation Capabilities through Involvement in Emerging Climate Research Programmes

Project Leader: Dr. Andrew LORREY, National Institute of Water and Atmospheric Research, Ltd., NEW ZEALAND; Email: a.lorrey@niwa.co.nz

Project Reference: CBA2010-06NSY-Kench

Project Title: Improving Understanding of Local-Scale Vulnerability in Atoll Island Countries: Developing Capacity to Improve In-Country Approaches and Research

Project Leader: Assoc. Prof. Paul KENCH, The University of Auckland, NEW ZEALAND; Email: p.kench@auckland.ac.nz

Project Reference: CBA2010-07NSY-Stone

Project Title: Web-based 'Discussion-support' Agricultural-Climate Information for Regional India

Project Leader: Prof. Roger STONE, University of Southern Queensland, AUSTRALIA; Email: stone@usq.edu.au

Project Reference: CBA2010-08NSY-Salinger

Project Title: Addressing the Livelihood Crisis for Farmers: Weather and Climate Services for Sustainable Agriculture – Development of Tools

Project Leader: Dr. Jim SALINGER, University of Auckland, NEW ZEALAND; Email: j.salinger@auckland.ac.nz

Project Reference: CBA2010-09NSY-Okayama

Project Title: Scientific Capacity Development of the Trainers and Policy Makers for Climate Change Adaptation Planning in Asia and the Pacific

Project Leader: Dr. Toshinao OKAYAMA, UNEP Regional Resource Centre for Asia and the Pacific, THAILAND;

Email: Toshinao.Okayama@rrcap.unep.org

Project Reference: CBA2010-10NSY-Chen

Project Title: Promoting a Data Sharing Environment within the Earth Observation System of Systems: The Asia-Pacific Perspective

Project Leader: Dr. Robert S. Chen, CODATA/CIESIN, Columbia University, USA; Email: bchen@ciesin.columbia.edu

Project Reference: CBA2010-11NSY-De Guzman

Project Title: Capacity Building for Research and Monitoring of Marine Protected Areas: An Adaptive Mechanism for Climate Change in the Asia-Pacific Region

Project Leader: Dr. Asuncion DE GUZMAN, Mindanao State University, PHILIPPINES; Email: sony_deguzman@yahoo.com

Project Reference: CBA2010-12NSY-Pradhananga

Project Title: Graduate Conference on Climate Change and People

Project Leader: Mr. Dhiraj PRADHANANGA, The Small Earth Nepal (SEN), NEPAL;

Email: dhirajmet@hotmail.com; smallearth@wlink.com.np

Project Reference: CBA2010-13NMY-Kawai

Project Title: Capacity Building of Biodiversity Research in the Coastal Zones of the Asia Pacific Region: Phycology Taxonomy Analysis Training Using Genetic Marker

Project Leader: Prof. Hiroshi Kawai, Environmental Management of Enclosed Coastal Seas (EMECS) Secretariat, JAPAN; Email: kawai@kobe-u.ac.jp; furukawa@emecs.or.jp

Project Reference: CBA2010-14NMY-Kaihotsu

Project Title: Drought Monitoring System Development by Integrating In-situ Data, Satellite Data and Numerical Model Output

Project Leader: Prof. Ichiro KAIHOTSU, Hiroshima University, JAPAN; Email: kaihotu@hiroshima-u.ac.jp

Project Reference: CBA2010-15NSY-South

Project Title: Global Change and Coral Reef Management Capacity in the Pacific: Engaging Scientists and Policy Makers in Fiji, Samoa, Tuvalu and Tonga

Project Leader: Prof G. Robin SOUTH, Institute of Marine Resources, University of the South Pacific, FIJI; Email: robin.south@orda.com.au; south_g@usp.ac.fj

Project Reference: CRP2010-01CMY-Weber

Project Title: Vulnerability Mapping as a Policy Tool in Developing Countries

Project Leader: Dr. Eberhard WEBER, The University of the South Pacific, FIJI; Email: weber_e@usp.ac.fj

Project Reference: CRP2010-02CMY-Pereira

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

Project Leader: Dr. Joy Jacqueline PEREIRA, Institute for Environment and Development (LESTAR), Universiti Kebangsaan Malaysia (UKM), MALAYSIA; Email: joy@ukm.my



APN COUNTRY REPRESENTATIVES

National Focal Points (nFP) and Scientific Planning Group (SPG) Members

AUSTRALIA

(FP) *VACANT*
(SPG) *VACANT*

BANGLADESH

A.N.Shamsuddin Azad Chowdhury (FP)
Joint Secretary Administration
Ministry of Environment and Forests
Tel: +880-2-7167240
Email: jsadmin@moe.gov.bd;
chowdhuryanasim@yahoo.com

Md. Giashuddin MIAH (SPG)
Professor, Department of Agroforestry
and Environment - Bangabandhu
Seikh, Mijibur Rahman Agricultural
University
Tel: +880-2-9205327
Email: giash1960@gmail.com

BHUTAN

G. Karma CHHOPEL (FP)
Head, Water Resources
National Environment Commission
Tel: + 975-2-323384
Email: gkchhopel@hotmail.com

Peldon TSHERING (SPG)
Head, Policy Coordination Services
National Environment Commission
Tel: + 975-2-323384
Email: Peldon@nec.gov.bt

CAMBODIA

Sundara SEM (FP)
Director, Department of ASEAN and
International Cooperation
Ministry of Environment
Tel: +855-23-213-462
Email: semsundara@yahoo.com;
moe_dic@yahoo.com

Khieu HOURS (SPG)
Senior Management Officer, Ministry
of Agriculture, Forestry and Fishery
Tel: +855-23-220-897
Email: hourt-2010@hotmail.com

CHINA

Sun CHENGYONG (FP)
Deputy Director General
Department of Social Development
Ministry of Science and Technology
Fuxing Road 15 B, Beijing 100862
Tel: +86-10-5888-1437
Email: suncy@most.cn

Wenjie DONG (SPG)
Executive Associative Dean
State Key Laboratory of Earth
Surface Processes and Resource
Ecology, College of Global Change
and Earth System Science, Beijing
Normal University
Tel: +86-10-5880-2219
Email: dongwj@bnu.edu.cn

FIJI

(FP) *VACANT*

Rajendra PRASAD (SPG)
Director, Fiji Meteorological Service
Tel: +679-6724888
Email: Rajendra.Prasad@met.gov.fj

INDIA

Subodh SHARMA (FP)
Adviser
Ministry of Environment and Forests
Tel: +91-11-2436-0861
Email: subodh.kumar@nic.in;
subodh14@yahoo.com

B.N. GOSWAMI (SPG)
Director, Indian Institute of Tropical
Meteorology
Tel: +91-020-2589-3924
Email: goswami@tropmet.res.in

INDONESIA

Liana BRATASIDA (FP)
Assistant Minister
The State Ministry of Environment
Tel: +62-21-8580112
Email: dokie@cbn.net.id;
lianabratasida@gmail.com

Erna Sri ADININGSIH (SPG)
Director, Aerospace Analysis and
Information Center, National Institute
of Aeronautics and Space
Tel: +62-21-31927982
Email: ernas@lapan.go.id;
ernasri@yahoo.com

JAPAN

Yutaka MATSUZAWA (FP)
Director
Global Environment Research Office
Ministry of the Environment
Tel: +81-3-5521-8247
Email: yutaka_matsuzawa@env.go.jp

Kensuke FUKUSHI (SPG)
Associate Professor
University of Tokyo
Tel: +81-3-5841-1542
Email: fukushi@ir3s.u-tokyo.ac.jp

**LAO PEOPLE'S DEMOCRATIC
RREPUBLIC**

Bountanh BOUNVILAY (FP)
Deputy Director General
Water Resources and Environment
Research Institute
Tel: +856-21-219-003
Email: boun28@yahoo.com

Oulaphone ONGKEO (SPG)
Deputy Chief of Division
Water Resources and Environment
Research Institute
Tel: +856-21-219-003
Email: oulaphone75@yahoo.com;
oulaphone@wrea.gov.la

MALAYSIA

Kok Seng YAP (FP)
Director-General
Malaysian Meteorological Department
Tel: +60-3-7967-8046
Email: yks@met.gov.my

Subramaniam MOTEN (SPG)
Head of Research Division,
Malaysian Meteorological Department
Tel: +60-3-8787-2161
Email: subra@met.gov.my

MONGOLIA

Bayarbat DASHZEVEG (FP)
Secretary for National Committee to
Combat Desertification, Ministry of

Nature, Environment and Tourism
Tel: +976-51-264627
Email: bayarbt@yahoo.com

Tsogtbaatar JAMSRAN (SPG)
Director of GeoEcology
Institute of Mongolian Academy of
Sciences
Tel: +976-11-325487
Email: geoeco@magicnet.mn

NEPAL

Meena KHANAL (FP)
Joint Secretary
Ministry of Environment, Science
and Technology
Tel: +977-1-4211996
Email: meenakhanal@most.gov.np;
meenakhanal@hotmail.com

Madan Lal SHRESTHA (SPG)
Academician, Nepal Academy of
Science and Technology
Tel: +977-1-4241403
Email: madanls@hotmail.com;
malashre@gmail.com

NEW ZEALAND

Andrew MATTHEWS (FP) (SPG)
Commissioner
New Zealand National Commission
for UNESCO
Tel: +64-4-9761741
Email: wa.matthews@gmail.com

PAKISTAN

Momin AGHA (FP)
Deputy Secretary (Climate Change)
Ministry of Environment
Tel: +92-51-924-5529
Email: momin_gha@hotmail.com

Amir MUHAMMED (SPG)
Rector
National University of Computer and
Emerging Sciences
Tel: +92-51-285-5032
Email: amir.muhammed@nu.edu.pk;
amir.muhammed@gmail.com

PHILIPPINES

Eriberto C. ARGETE (FP)
Director
Planning and Policy Studies Office
Department of Environment and
Natural Resources
Tel: +63-2-925-2328
Email: ecappodir@yahoo.com

Marcial AMARO Jr (SPG)
Director, Ecosystems Research and
Development Bureau (ERDB)
Tel: +63-49-536-3628
Email: erdb@denr.gov.ph

REPUBLIC OF KOREA

Suho SEONG (FP)
Director
Global Environmental Office
Ministry of Environment
Tel: +82-2-2110-6557
Email: seong@korea.kr

Chang-keun SONG (SPG)
Senior Researcher
National Institute of Environmental
Research
Tel: +82-32-560-7910
Email: cksong@me.go.kr

RUSSIAN FEDERATION

Andrey V. ADRIANOV (FP)
Institute of Marine Biology
Far East Branch, Russian Academy
of Sciences
Email: inmarbio@mail.primorye.ru

Alexander STERIN (SPG)
Deputy Director, Russian Research
Institute for Hydrometeorological
Information, World Data Center
(RIHMI-WDC)
Tel: +7-499-795-2467
Email: sterin@mete.ru

SRI LANKA

R.H.S. SAMARATUNGA (FP)
Secretary
Ministry of Environment
Tel: +94-11-2877290
Email: secoffice@menr.lk

G.B. SAMARASINGHE (SPG)
Director General of Meteorology
Department of Meteorology
Tel: +94-11-2694104
Email: sbaladev_24@yahoo.com;
meteo1@sltnet.lk

THAILAND

Chote TRACHU (FP)
Permanent Secretary
Ministry of Natural Resources and
Environment
Tel: +662-278- 8544
Email: chote.t@mnre.mail.go.th

Jariya BOONJAWAT (SPG)
Associate Professor
Southeast Asia START Regional
Centre
Chulalongkorn University
Tel: +662-218-9466
Email: jariya@start.or.th

UNITED STATES OF AMERICA

Louis BROWN (FP)
Chair, USGCRP Working Group on
International Research and
Cooperation
Directorate for Geosciences
National Science Foundation
Tel: +1-703-292-7856
Email: lbrown@nsf.gov

Luis TUPAS (SPG)
National Program Leader, Global
Change and Climate, National
Institute of Food and Agriculture
U.S. Department of Agriculture
Tel: +1-202-401-4926
Email: ltupas@nifa.usda.gov

VIET NAM

Xuan Bao Tam NGUYEN (FP)
Deputy Director General
International Cooperation Department
Ministry of Natural Resources and
Environment
Tel: +84-4-7734263
Email: baotam@monre.gov.vn

Nga MAI NGOC (SPG)
Deputy Head, Environmental and
Social Studies Department, Centre
for Support of Social Development
Programmes
Tel: +84-3-9412025
Email: mnga@nea.gov.vn;
ngamaingoc@yahoo.com

APN Steering Committee (SC) Members

Elected members

1. Republic of Korea: Mr. Suho SEONG (Chair)
2. Malaysia: Dr. Kok Seng YAP (Vice-Chair)
3. Mongolia: Mr. Bayarbat DASHZEVEG
4. Sri Lanka: Mr. R.H.S. SAMARATUNGA (Host of the 16th IGM/SPG Meeting)

Ex-officio (SPG Co-Chairs)

5. Indonesia: Dr. Erna Sri ADININGSIH
6. USA: Dr. Luis TUPAS

Co-opted members

7. USA: Mr. Louis BROWN (Donor Member)
8. Prof. Roland FUCHS of East-West Center (Invited Expert)
9. Dr. W. Andrew MATTHEWS (Invited Expert)
10. Japan: Mr. Yukata MATSUZAWA (Donor Member)
11. Japan: Mr. Kazu TAKEMOTO (Invited Expert)

Invited Experts to the APN Scientific Planning Group

Congbin FU

Director, START Regional Committee for Temperate East Asia
CHINA
Email: fcb@tea.ac.cn

Kanayathu Chacko KOSHY

Professor, Centre for Global Sustainability Studies,
Universiti Sains Malaysia
MALAYSIA
Email: kanayathu.koshy@gmail.com

Chao Han LIU

Chairman, Southeast Asia START Regional Committee
CHINESE TAIPEI
Email: chliu@cc.ncu.edu.tw

APN Capacity Development (CDC) Committee Members

Erna Sri ADININGSIH, *SPG Co-Chair*

Luis M. TUPAS, *SPG Co-Chair*

Roland FUCHS, *invited expert (Senior Fellow, East-West Center) Email: Fuchsr@EastWestCenter.org*

Srikantha HERATH, *invited expert (Senior Academic Programme Officer, United Nations University) Email: Herath@unu.edu*

Andrew MATTHEWS, *nFP/SPG Member for New Zealand*

Harini NAGENDRA, *invited expert (Faculty Fellow, Ashoka Trust for Research in Ecology and the Environment) Email: nagendra@atree.org; nagendra@indiana.edu*

Yutaka MATSUZAWA, *nFP-Japan/Donor Member*

Suho SEONG, *SC Chair*

APN SPG Sub-Committee

Erna Sri ADININGSIH,
SPG Co-Chair, Indonesia

Luis M. TUPAS,
SPG Co-Chair, USA

Giashuddin MIAH,
SPG Member, Bangladesh

Madan Lal SHRESTHA,
SPG Member, Nepal

Alexander STERIN,
SPG Member, Russian Federation

Newsletter Questionnaire

We want to hear from you! Please help us improve the APN Newsletter by filling out this [questionnaire](#) and returning it by fax to the APN Secretariat at: +81-78-230-8017. Alternatively, you can download this form at <http://www.apn-gcr.org/newAPN/resources/newsletter/FeedbackForm.doc> and send it as an attachment to ppulhin@apn-gcr.org. Thank you for your cooperation.

1. How do you rate the APN Newsletter overall?
___ poor ___ fair ___ good ___ very good
2. How would you describe the APN Newsletter as a source for information?
___ not so informative ___ informative ___ very informative
3. Do you still want to continue receiving an electronic copy of the APN Newsletter?
___ yes ___ no
4. If you know other people or institutions who are interested in receiving a copy of the APN Newsletter, please provide us with their contact details:
Name: _____
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Province/Region: _____ Country: _____
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Email: _____ Website: _____
5. We look forward to receiving any additional remarks or suggestions about what you would like to see in the APN Newsletter.

Announcements from Key Partners

WCRP OSC Climate Research in Service to Society 24-28 October 2011, Denver, CO, USA

Goals and Vision

A better understanding of the behavior of the climate system and its interactions with other Earth system components is critical to predict its future evolution, reduce vulnerability to high impact weather and climate events, and sustain life.

This need is perhaps greater than ever before given that humans have emerged as the dominant agent of future change. Progress will require, moreover, an increasingly holistic approach across scientific disciplines, as well as an unprecedented commitment to the development of a diverse and talented future workforce.

To advance its attack on such challenges, the World Climate Research Programme (WCRP) will assemble for the first time ever its entire research community, and engage other key international research programmes, in a major Open Science Conference (OSC) in October 2011.

Through a unique synthesis of presented research findings, the OSC will assess our current state of knowledge on climate variability and change, identify the most urgent scientific issues and research challenges, and ascertain how the WCRP can best facilitate research and develop partnerships critical for progress.

Anticipated Outcomes

The WCRP OSC represents an exclusive opportunity to assemble the international scientific community working to advance understanding and prediction of variability and change of the Earth's physical climate system on all space and time scales. The OSC will facilitate cross-fertilization across the diverse research communities within the WCRP, as well as with other international research programmes, including the International Geosphere-Biosphere

Programme (IGBP), the World Weather Research Programme (WWRP) and the Earth System Science Partnership (ESSP).

The OSC will appraise the current state of climate science, thereby making a measurable contribution on the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC). It will identify key opportunities and challenges in observations, modeling, analysis and process research required to understand and predict responses of the Earth as a system.

By entraining as many young scientists and students as possible from across the world, including less-developed and developing countries, the OSC will facilitate growth of the diverse future workforce needed to meet the increasingly complex scientific challenges of the future.

Please visit this link for more information: <http://www.wcrp-climate.org/conference2011/>



Search for Biodiversity Champions in Southeast Asia

The ASEAN Centre for Biodiversity (ACB), the ASEAN Foundation (AF), United Nations Educational, Scientific and Cultural Organisation (UNESCO), the ASEAN-Japan Solidarity Fund, the Secretariat of the Convention on Biological Diversity (SCBD), and the European Union (EU), have launched the search for the ASEAN Champions of Biodiversity at the Tenth Conference of the Parties to the Convention on Biological Diversity on Nagoya.

The ASEAN Champions of Biodiversity is a recognition programme for ongoing projects on biodiversity conservation and advocacy in Southeast Asia. Deadline for submission of nominations is on 28

February 2011. For more information, log on to www.aseanbiodiversity.org or www.aseanfoundation.org. The Secretariat may be contacted via e-mail at champions@aseanbiodiversity.org.

International Conference on Planet Under Pressure: New Knowledge Toward Solutions, 26-29 March 2012, London, UK

A major global change open science conference will be held on 26-29 March 2012 in London. It aims to attract 2500 of the world's leading thinkers on global change research. The four-day conference is sponsored by the International Council for Science's (ICSU) global environmental change research programmes. It will bring together natural, physical and social scientists, economists and will also involve engineers, health specialists and many others disciplines, with national and international policy-makers, industry representatives, technologists, non-governmental organisations (NGOs) and development experts.

The conference will take two months prior to the next UN Earth Summit in Rio de Janeiro, scheduled for May 2012. Presenting the latest research findings, the London Conference is anticipated to provide a solid scientific foundation for the summit. The conference has been initiated by ICSU's International Geosphere-Biosphere Programme (IGBP).

Calendar of Global Change Events

Events in **bold** are APN or APN co-sponsored events

2010

NOVEMBER

1-3 NOV. Capacity Building Workshop on Carbon Governance in Asia: Bridging Scales and Disciplines, Yokohama, Japan. Please visit: <http://www.gcp-urcm.org/CG/HomePage>

1-5 NOV. Training Workshop on Downscaling of South Asian Climate Projections back-to-back with the Proposal Development Training Workshop and APN South Asia Sub-Regional Cooperation Meeting, Indian Institute of Tropical Meteorology (IITM), Pune, India. Contact: info@apn-gcr.org

5 NOV. 2010 GEO Beijing Ministerial Summit, Beijing, China. Please visit: www.earthobservations.org

7-8 NOV. ISIE Asia-Pacific Meeting, National Museum of Emerging Science and Innovation, Tokyo, Japan. Please visit: www.isieapmf.info/

8-12 NOV. APN Southeast Asia Sub-Regional Cooperation Meeting back-to-back with the Proposal Development Training Workshop, Manila, Philippines. Contact: info@apn-gcr.org

10-11 NOV. 22nd APEC Ministerial Meeting, Yokohama, Japan

15-16 NOV. IAIA Climate Symposium DC: Climate Change and Impact Assessment, Washington, D.C. Please visit: <http://iaia.org/iaia-climate-symposium-dc/>

15-16 NOV. GIST and APN Joint Meeting Program on Sustainable Urban Water Quality Management in South East Asian Countries, University of the Philippines in Diliman, Quezon City, Philippines

15-19 NOV. International Graduate Conference on Climate Change and People, Kathmandu, NEPAL. Contact Michael Glantz at michael.glantz@colorado.edu or Dhiraj Pradhananga at smallerth@wink.com.np

23-25 NOV. International Conference on Forestry Education and Research for the Asia-Pacific Region, Manila, Philippines

29 NOV-10 DEC. UNFCCC 16th Conference of the Parties (COP 16), Mexico

DECEMBER

1-3 DEC. Training Workshop on Climate Change and Data Information Management System (DIMS) Development, Chulan Tower, Kuala Lumpur. Contact: Dr. Ramani Bai V. at vramanibai@gmail.com

3-7 DEC. 5th International Nitrogen Conference-N2010, New Delhi, India. Please visit: <http://www.n2010.org/>

6-7 DEC. Marine Biodiversity of East Asian Seas: Status, Challenges and Sustainable Development, Nha Trang, Viet Nam.

11-12 DEC. SustaiN' 2010, Sustainable Future for Human Security 2010, Kyoto, Japan. Please visit: <http://ppi-kyoto.org/call-for-paper>

13-17 DEC. 2010 AGU (American Geosciences Union) Fall Meeting, Moscone Convention Centre, San Francisco, USA. Please visit: <http://www.agu.org/meetings/fm10/>

2011

JANUARY

9-11 JAN. International Conference: Innovation and Sustainability Transitions in Asia, Malaya University, Kuala Lumpur, Malaysia. Please visit: <http://umconference.um.edu.my/it-apn2011> or Contact: it-apn2010@ivm.vu.nl

MARCH

11-16 MAR. Resilience, Innovation and Sustainability Conference: Navigating the Complexities of Global Change, Arizona State University, USA. Please visit: www.resilience2011.org/

APRIL

3-8 APRIL. GREENHOUSE 2011, Cairns Convention Centre. Contact: Paul.Holper@csiro.au

4-8 APR. 16th APN Inter-Governmental Meeting/Scientific Planning Group Meeting and associated committee meetings, Colombo, Sri Lanka

Visit our website for a more extensive list of events:
<http://www.apn-gcr.org/newAPN/news/news.htm>



APN Secretariat

East Building, 4F, 1-5-2 Wakonohama Kaigan Dori, Chuo-Ku, Kobe 651-0073, Japan

Tel: +81-78-230-8017, Fax: +81-78-230-8018

Email: info@apn-gcr.org

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

Views expressed in this newsletter do not necessarily represent those of the APN.

Newsletter Editors: Linda Anne STEVENSON (Executive Editor), Perlyn PULHIN (Managing Editor)

Contributors (this issue): Vikas, LAKHANI, Holger MEINKE, Amir MUHAMMED, Lam Vu Thank NOI, Archana PATANKAR, Vo Le PHU, Kedar, Lal SHRESTHA, P.R. SHUKLA, G. Robin SOUTH, Indra Murty SURBAKTI, Bishnu Raj UPRETI

Design and Layout: Natsuki NIIMI with support from Perlyn PULHIN and Lizhier CORALDE

