

# PROCEEDINGS

## of the 17th Inter-Governmental Meeting (IGM)/ Scientific Planning Group (SPG) Meeting

Jakarta, Indonesia  
14–16 March 2012

**APN**  
Asia-Pacific Network for Global Change Research



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## MESSAGE FROM THE DIRECTOR



It is my pleasure to present you the Proceedings of the APN 17th Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting, which was held from 13 to 16 March 2012 in Jakarta, Indonesia. This Meeting and the associated committee meetings that were held prior to the main IGM/SPG Meeting were hosted by the Ministry of Environment, Indonesia in collaboration with Indonesia National Institute of Aeronautics and Space (LAPAN). APN Member Country representatives, donor representatives, invited experts and observers from the global change community attended the three-day gathering to discuss activities to be undertaken in the upcoming fiscal year 2012/13 and chart new possibilities for future regional collaboration.

Among the major outcomes is the approval of 23 projects, including continuing projects and new proposals, for funding under the Annual Regional Call for Proposals (ARCP) programme and 17 projects under the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) programme. Results of the ARCP/CAPaBLE projects were subsequently announced formally in early April.

The IGM reviewed and approved the Final Financial Report for 2010/11, Interim Financial Report for 2011/12, and Work Programme and Budget Plan for 2012/13. A new reporting style was introduced, whereby the use of resources were categorized into the actual expenditures, committed resources for ongoing projects and uncommitted resources that could be released for new and ongoing activities. The new style, which was welcomed by the IGM, was so designed to better manage and report APN financial resources for research, capacity building and focused activities.

A number of proposed continuing and new activities were also endorsed by the IGM. These include: Southeast Asia Science-Policy Dialogue, and Ecosystem Services Framework; APN Session for PROVIA “Adaptation Futures” Conference in the lead up to Rio+20; UNFCCC/SBSTA and Annual Research Dialogue with the Parties; A series of workshops on “Satoyama, the New Commons” supported by Hyogo Prefectural Government; New focused activities on climate mitigation and low carbon development; New focused activities on climate adaptation; and APN/IGES Symposium on low carbon development. Detailed information regarding these new activities is included in Section II of the present Proceedings.

The Climate Synthesis Team reported to the IGM on the progress of the synthesis activities to date, in particular on the publication of the synthesis report “Climate in Asia and the Pacific: A Synthesis of APN Activities”; the status of the peer-review paper to be published in EOS; and plans for publishing the climate book/special edition and its dissemination. The IGM welcomed the important work carried out to synthesize APN climate-related activities and to distribute such outcomes widely through various channels.

Delegates from South Asia and Southeast Asia gathered in respective subregional groups to review past activities and exchange ideas on furthering subregional cooperation. Both groups acknowledged the importance of Proposal Development Training Workshops (PDTW) and agreed on continuing the activity on a regular basis at the subregional level to raise awareness among young scientists and researchers on the APN and its pro-

grammes. They also provided substantial input on developing further details for the subregional activities to be carried out in 2012/13.

Members from Temperate East Asia agreed to work together to involve more scientists from the subregion in APN activities, initially by establishing a working group to look at relevant issues and organize a PDTW during the coming fiscal year.

Four interactive sessions were organized during the 17th IGM/SPG Meeting, during which APN country representatives shared the latest information on low carbon development and green growth in their countries, invited speakers from the science community presented on their work and its relevance to the policy-making process, while scientists from APN Member Countries presented on their climate change adaptation activities in the Asia-Pacific region in the context of Sustainable Development.

A poster session was organized and eleven young scientists from Indonesia introduced their research work through poster presentations. The winning poster, entitled “Natural Properties of Carbon Stock in Customary Peat Forest at Danau Sentarum National Park, West Kalimantan, Indonesia,” was selected by all participants to the meeting, and the winning scientist, Ms. Evi Gusmayanti from the Centre for Wetlands People and Biodiversity, Universitas Tanjungpura, Indonesia, was presented with the “Mitra Award for Global Change Research”.

Following up on the discussions at the 17th IGM/SPG Meeting about the APN Opportunity Fund (AOF), the Secretariat initiated a process of compiling member suggestions on the effective and efficient use of the AOF. At the guidance and support of national Focal Points and SPG Members, the APN has embarked on further developing the framework for focused activities on low carbon development and climate adaptation, which will be integrated in the Strategic Plan for APN.

Let me take this opportunity to express my heartfelt appreciation for the active involvement of the delegates and representatives from various Global Change Programmes and partner organizations. Your input will contribute to the success of the APN in the years ahead and with that I ask you to continually cooperate and help in promoting APN and its activities at the national, subregional, international, regional and global level when the right opportunity comes.

Your feedback on our progress in implementing the strategies outlined in the Third Strategic Plan (3SP) are very much welcome. I look forward, with pride and optimism, to APN’s fruitful years counting on your collaboration. For those who were involved in making this IGM/SPG Meeting a success, my sincere gratitude goes to you all!

Akio Takemoto



Director, APN Secretariat



#### National Focal Points

Bangladesh – CHOWDHURY (6)  
 Bhutan – CHOPPEL  
 Cambodia – SEM (12)  
 China – SUN (14)  
 Indonesia – ROOSITA (10)  
 Japan – HOSHINO \* (28)  
 Lao PDR – BOUNVILAY  
 Malaysia – ISMAIL \* (19)  
 Nepal – PANT\* (4)  
 Rep. of Korea – KANG\* (3)  
 Russian Federation – LUTAENKO\* (49)  
 Sri Lanka – BASNAYAKE (15)  
 Thailand – KESAVAWONG (33)  
 Viet Nam – NGUYEN (32)

#### Scientific Planning Group Members

Bangladesh – MIAH (5)  
 Cambodia – KUM (24)  
 China – DONG (31)  
 India – BORGAONKAR (25)  
 Indonesia – ADININGSIH (13)  
 Japan – FUKUSHI (38)  
 Lao PDR – PHONGPACHITH\* (23)  
 Malaysia – MOTEN (27)  
 Nepal – SHRESTHA (8)  
 Pakistan – MUHAMMED (7)  
 Philippines – AMARO JR (26)  
 Russian Federation – STERIN (37)  
 Sri Lanka – SAMARASINGHE (16)  
 Thailand – BOONJAWAT (20)  
 Viet Nam – NGO (17)

#### Invited Experts to SC

USA – BROWN (22)  
 New Zealand – MATTEWS (30)  
 Japan – TAKEMOTO

#### Invited Experts to SPG

TEACOM – AILIKUN  
 ANU – HEATH (29)  
 UNU – TAKEMOTO

#### Invited Expert to CDC

UNU – HERATH

#### Observers and Other Delegates

ADB – CHAN (1)  
 BAU – BOER  
 ICSU-ROAP – HASAN (36)  
 ICSU-ROAP – TENGKU DAHLAN (34)  
 LCS-RNet – ISHIKAWA (43)  
 MONASH UNIV. – MANTON (35)  
 NIES – ASAYAMA (44)  
 USGCRP – ALLEN (21)  
 Sri Lanka – HEWAWASAM (18)  
 Indonesia – SANI (39)  
 Indonesia – MARJAKA (46)  
 Indonesia – BRATASIDA (11)  
 Indonesia – POERWAYANTI (42)

#### APN Secretariat

TAKEMOTO (9)  
 IMANARI (40)  
 STEVENSON (2)  
 DENG (50)  
 RADZI (41)  
 KOSWATTA (45)

\* nFP or SPG alternate

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# Section I

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Chairperson's Summary and Appendices



## CHAIRPERSON'S SUMMARY

Delegates (APN Members or their Alternates) from Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Japan, Lao People's Democratic Republic (Lao PDR), Malaysia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea (ROK), Russian Federation, Sri Lanka, Thailand and Viet Nam attended the Meeting. Invited experts from the APN Steering Committee (SC) and invited experts and representatives from the following global change programmes and partners were also represented at the Meeting: International Monsoon Asia Integrated Regional Study (MAIRS); Asian Development Bank (ADB); Australian National University Climate Change Institute (ANU-CCI); Institute for Global Environmental Strategies (IGES); International Council for Science Regional Office in Asia and the Pacific (ICSU-ROAP); National Institute for Environmental Studies (NIES); START International (via video link); United Nations University Institute for Sustainability and Peace (UNU-ISP); and United States Global Change Research Program (USGCRP). The Full Participants List is attached as *Appendix 1*.

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### Session I: Opening Session

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#### **Opening and Welcome Remarks from the National Focal Point for Indonesia**

The APN national Focal Point (nFP) for Indonesia, Ms. Hermien Roosita, was invited by the Master of Ceremonies to provide the opening speech. The nFP for Indonesia expressed her great honour and pleasure in welcoming all of the delegates to Jakarta, a beautiful city with some of the most active business and activities that also have significance in the international environmental arena. She welcomed the delegates with optimism and enthusiasm expressing her hope for a successful dialogue in this very important three-day Meeting, particularly related to global change scientific research, scientific capacity development and science-policy interactions, as well as the alignment of the programmes of the global change community with its stakeholders.

She emphasized that determining effective methods to strengthen the bridge and close the gap between scientists and policymakers was not an easy task, as was also the situation being faced in Indonesia. "We need robust scientific input and knowledge that will strengthen the decision-making process," she said.

Noting the importance of Green Economy for sustainable development, a key theme of the landmark Rio+20 Earth Summit being held in June this year, the nFP for Indonesia explained that scientific societies could significantly contribute to established policy to improve the current status and provide for our future generations, and that this may start here at the 17th IGM/SPG Meeting. She expressed her belief that the APN's Vision and Mission can only be achieved if there is effective ownership of all 22 Member Countries of the network and if there is strong collaboration and cooperation among APN Members.

In conclusion, the nFP for Indonesia noted that the success of the Meeting cannot be sustained without the continuous support of all Members. Before declaring the Meeting officially open she thanked the Members, APN Secretariat and organizers for their contribution to realize the Meeting and wished all participants very fruitful and productive deliberations.

### **Welcome Remarks from the Acting Chair of the Steering Committee**

The SC Acting Chair and nFP for Cambodia, Mr. Sundara Sem, expressed his sincere gratitude to the Government of Indonesia to host the 17th IGM/SPG Meeting here in Jakarta, Indonesia.

The SC Acting Chair provided some background information on the work ahead for the 17th IGM/SPG Meeting as well as the role of the SC in facilitating this. He noted that the SC was designed by the IGM to act on behalf of the IGM during the period between the IGMs, implementing IGM decisions, with assistance from the Secretariat; facilitating administrative and management arrangements necessary to implement the programme of activities of the APN; developing funding for the APN and its programmes and activities by encouraging Member Countries to contribute funds or in-kind support; and liaising with international global change agencies and seeking their support and involvement in the APN activities.

Mr. Sem took the opportunity to inform the Members of the APN's core activities related to science, policy, and institutional activities, which were considered and approved by the 16th IGM/SPG meeting in Colombo, Sri Lanka in April 2011, were carried out successfully based on the action plan and Third Strategic Plan.

Before closing he expressed his hope that the APN 17th IGM/SPG Meeting would serve as an enlightening bridge for the practical collaboration and coordination of APN performance and activities to move forward in the attainment of the goals outlined in the APN's Strategic Plan. He expressed his confidence that the outcomes of the Meeting would pave the way to the betterment of cooperation among the APN Member Countries.

Finally, he expressed his wishes for fruitful discussions during the 17th IGM/SPG Meeting, and for all Members and guests to have a very pleasant stay in Jakarta.

### **Welcome Remarks from the Secretariat Director**

Dr. Akio Takemoto, the Secretariat Director, welcomed all participants to the 17th IGM/SPG Meeting, particularly those new nFPs and SPG Members attending for the first time. He expressed his sincere gratitude to the Government of Indonesia, particularly to the nFP and SPG Member for Indonesia for hosting the Meetings and for extending a warm welcome to the APN. He also shared that this was his first IGM/SPG Meeting as the new Secretariat Director, succeeding Mr. Tetsuro Fujitsuka in July 2011.

Following a brief account of the history of the APN, including funding sources, activities and goals in the current Third Strategic Phase (2010–2015), the Secretariat Director noted the dedicated support of the APN Member Countries allowing scientists in the region to develop collaborative research projects under the Annual Regional Call for Research Proposals (ARCP), and capacity building projects under the capacity development programme, CAPaBLE. He also noted the most challenging of the four APN goals, Goal 2 on facilitating and strengthening science and policy linkages; adding that new activities would be proposed to address this goal. He looked forward to active discussions related to this. Finally, he expressed his hope for continued positive contributions and the cooperation of all Members of the APN family throughout the following three days and beyond.

### **Group Photograph**

All Members, experts, guests and staff gathered for a group photograph.

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## Session II: Institutional Issues and Proposed Activities

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### Participants' Introduction

All participants introduced themselves and their affiliation in response to an invitation from the Secretariat Director.

### Election of Chair and Vice-Chair

Mr. Rasio Ridho Sani, Director, Bureau for Planning and International Cooperation, Ministry of Environment, Indonesia, and nFP Alternate for Indonesia was nominated as Chair of the 17th IGM/SPG Meeting. This was accepted by acclamation.

Mr. Sundara Sem, Head, Department of ASEAN and International Cooperation, Ministry of Environment, Cambodia, and nFP for Cambodia was nominated as Vice-Chair of the 17th IGM/SPG Meeting. This was accepted by acclamation.

### Item 1: Adoption of the Draft Agenda

The elected Chair asked delegates to consider the draft agenda as presented. He then raised items of any other business (AOB) noting that presently, there were two nFP vacancies on the SC. *He asked the IGM Members to consider nominations over the next two days, with a view to electing two nFPs onto the SC under Item 18 on Friday, 16 March.* Following AOB, the agenda was adopted without change.

**Action: national Focal Points**

### Item 2: 2011/12 Activities & Action Points

The SC Acting Chair reported on the major activities of the APN from April 2011 to March 2012, including the research and capacity development projects funded under the ARCP and CAPaBLE programmes as well as the focused activities on Ecosystems, Biodiversity and Land Use (EBLU), and Resources Utilization and Pathways for Sustainable Development (RUSD). In all, he noted that APN was presently supporting 49 projects.

The SC Acting Chair noted that the Annual Calls for Proposals under the CAPaBLE and ARCP programmes had attracted a very high number of summary proposals this year—in total 95, which is a significant increase over previous years. He mentioned that this would be discussed further in the week in a report from the SPG.

The SC Acting Chair reported that the APN Climate Synthesis: Climate in Asia and the Pacific that synthesized 56 APN climate-related projects had been published in September 2011 and had been received well by the international community.

The SC Acting Chair briefly reported on the Subregional Cooperation (SRC) Meetings for South Asia (SA) and Southeast Asia (SEA) and noted that more information would be provided during the course of the Meeting under Items 10 and 11. He further indicated that the APN had been represented at numerous project-related and other Global Change-related conferences, seminars and workshops at national, regional and international lev-

els such as a UNFCCC/SBSTA research dialogue and workshop; a Rio+20-related workshop; an IPBES Science meeting; the WCRP Open Science Conference; and others.

For communications and outreach, he emphasized that the APN continues to produce high-quality in-house publications and information materials as part of the implementation of the APN's communications and outreach strategy. The website continues to be developed and new features include a content management system, a metadata portal (APN E-Lib), and an interactive calendar of events. The APN Secretariat also communicates weekly with the APN Members and subscribers to the APN Electronic Mailing List (EML).

### **Item 3: APN Membership & Framework Document**

#### **APN Membership**

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Mr. Xiaojun Deng, Programme Officer for Communications and Development, briefly reported on the APN Membership and introduced new APN Members, as well as new Secretariat Staff. He reported that three new nFPs and four new SPG Members had been appointed since the 16th IGM/SPG Meeting one year earlier. He also noted that since March 2011, the APN Secretariat had welcomed four new members of staff succeeding the former Director, Communications Officer and two Programme Fellows. He further noted that the Coordinator position had not been renewed.

#### **APN Framework Document**

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Mr. Louis Brown, Invited Expert on the SC, briefly introduced proposed changes to the Framework Document related to procedures for electing a new or Acting Chair of the SC in the event that a Chair is either unavailable for a meeting or has stepped down. Mr. Brown requested the Members to look at the suggested revisions and noted that endorsement would be sought under Item 16 of the agenda on day three. He further offered to discuss the exact wording with interested delegates during the break after the session.

***Action: national Focal Points***

### **Item 4: Financial Reports for 2010/11 & 2011/12**

Mr. Yukihiro Imanari, the Secretariat Executive Manager, presented a Final Financial Report for 2010/11 for approval by the 17th IGM and an Interim Financial Report for 2011/12.

In his presentation, the Executive Manager noted that, in order to provide a detailed explanation of the figures in the spreadsheets provided, he had added some explanatory notes to the Interim Financial Report 2011/12.

Referring delegates to the spreadsheets, he highlighted the new style of financial reporting, stressing that more details were provided, including the actual expenditure, committed resources of funds not yet disbursed, as well as uncommitted funds that could be released for new or ongoing activities. He emphasized that the main objective for introducing the new style of reporting was to improve the management and reporting of APN financial resources, especially for ARCP, CAPaBLE and other projects such as those under focused activities.

The Executive Manager further explained that, for the Final Financial Report 2010/11, all figures were in line with the Interim Report presented the previous year with the exception being the difference in costs for the 16th

## Chairperson's Summary

IGM/SPG Meeting, which had been more expensive than expected. He further noted that the Reports had been reviewed at the 20th SC meeting held the previous day.

Before ending, the Executive Manager thanked the donor countries for their continued support. He also stressed that in-kind contributions from member governments and from the Hyogo Prefectural Government; co-funding/fund matching and in-kind contributions from APN-funded projects and activities were crucial for the APN to fully implement and manage its activities.

The Chair opened the floor for questions, comments and clarification before seeking approval of the Final Financial Report for 2010/11. With no comments from the floor, ***the Final Financial Report for 2010/2011 was approved.***

### **Action: Secretariat**

The Chair then invited comments and questions from the floor on the Interim Financial Report for 2011/12.

Dr. Chengyong Sun, the nFP for China, commented that, especially in the previous year, the Secretariat had carried out very effective and efficient work, which was very much appreciated. He noted, however, that “committed resources” seemed to occupy a significant portion of the financial report and asked for clarification from the Secretariat.

The Executive Manager explained that a large portion of the committed funds was for ongoing ARCP and CAPaBLE projects and, as part of the financial management system, the APN withholds 20% of project budgets until all project activities are completed and satisfactorily reported to the APN. He also stressed that a number of activities that had been budgeted for in the previous year had not yet been carried out for a number of reasons, the main one being the high turnover in Secretariat staff in that previous year.

Dr. Andrew Matthews, Invited Expert on the SC, thanked the nFP for China for his important intervention and additionally explained that, due to the late arrival of stakeholder funds, many principal investigators for project activities only signed their contracts as recently as December 2011. Thus a significant portion of committed funds was still present on the financial sheets.

He commended the Secretariat's efforts in working closely with external auditors in order to provide the APN Members with a better idea of the financial position of the APN. By doing so, not only were Members able to identify clearly both committed and uncommitted resources, but the exercise had also shown that there was a significant amount of accumulated funds that would provide opportunities for new projects. He indicated that he looked forward to discussing how this Opportunities Fund, as reflected in the Budget Plan under Item 5, might be invested based on input of all Members.

With no more questions or comments from the floor, the Vice-Chair sought approval of the Interim Financial Report for 2011/12. ***The Interim Financial Report for 2011/12 was subsequently approved.***

### **Action: Secretariat**

The Chair proposed that the Meeting proceed to the next item where the availability of the Opportunity Fund would be explained and discussed in more detail. This was agreed.

**Item 5: Budget Plan (2012/13)**

The Executive Manager presented documents on 1) the new format of the Budget Plan; and 2) the availability of an Opportunity Fund that had arisen as a result of accumulated financial surplus, which had been identified while working with external auditors. He further provided an explanation on the budget line items and suggested areas where funds might be spent, either under the Core Budget or under the Opportunities Fund.

The total revenue for the next fiscal year is expected to be: Core Funds—US\$3,296,000; and Opportunities Fund—US\$2,393,500. If suggestions that had already been made allocating US\$603,900 were approved, then a balance of US\$1,789,600 would still be available from the AOF for investment in future APN activities. The Executive Manager ended his presentation by informing the Members that the Budget Plan had been discussed at great length during the previous day's SC meeting and that the suggestions for allocation of resources from the Core and Opportunity Funds in the draft Budget Plan presented to the Members was a result of those discussions.

Following the Executive Manager's presentation, the Chair opened the floor for questions and comments.

In response to a question raised by Dr. Amir Muhammed, SPG Member for Pakistan, as to why funds amounting to US\$170,000 had to be returned to the NSF, the Executive Manager explained that undisbursed NSF funds must be returned by US law when an NSF grant expires. He further explained that, when NSF funds had been received for the first time at the APN in 2008, the APN Secretariat was unfortunately unaware of these NSF rules. These rules required that some NSF funds from 2008 and 2009 that had not been disbursed before the NSF Grant expired had to be returned.

The nFP for China thanked the Executive Manager for his explanation on the budget and agreed with a proposal from the floor that the Members consider approval of the budget after the seven continuing and new activities under Item 6 were presented. This was agreed.

**Action: national Focal Points**

Mr. Brown, in his capacity as former nFP for the USA and former NSF Programme Manager provided a brief explanation on NSF Grant requirements. He noted that, when the NSF makes an award or grant, it makes the award for a period of time that is defined in the award letter. When an award is made, the NSF makes it possible for the awardees to ask for additional time to utilize the funds (under a "no-cost extension"). However, if such a no-cost extension is not requested or if one is requested and expires, then any funds not spent in that allotted time must, under US law, be returned to the NSF.

Mr. Brown suggested that ***the Secretariat work closely with the Programme Manager at the NSF so that, when NSF funds are received, the Secretariat makes very clear its arrangements for spending those NSF funds and carefully specifies the period of time over which these funds would be spent.*** He suggested that, since the problem referred to above regarding NSF funding had resulted from the Secretariat's initial unfamiliarity with NSF procedures, he expected it would be very unlikely for this kind of incident to repeat itself in the future, particularly now that the Secretariat was fully aware of NSF Grant procedures and regulations.

**Action: Secretariat**

Before seeking approval of the 2012/13 Budget Plan presented by the Secretariat, the Chair reminded the Members that presentations under Item 6 would be given first, followed by a discussion session not only on the activities outlined in Item 6, but also on the Opportunity Fund. This was agreed.

### Item 6: Proposed Continuing and New Activities

The Chair informed the Members that there would be seven activities for discussion under the present Item and that the first four activities were continuing activities and the final three were new ones. He suggested taking each topic one by one. This was agreed.

The Chair invited Dr. Linda Anne Stevenson, Executive Science Officer of the Secretariat to present the first two activities under Item 6.

#### **1. Southeast Asia Science Policy Dialogue & Ecosystem Services Framework**

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The Executive Science Officer provided an update on the Joint APN/START Science Policy Dialogue that was approved the previous year at the 16th IGM/SPG Meeting. She explained that on two occasions the dialogue preparations had been discussed at length—both at the 4th SEA-SRC Meeting in Viet Nam in July 2011, and then at the 19th SC Meeting in Phnom Penh, Cambodia in October 2011, which had resulted in the development of a comprehensive Terms of Reference to guide the preparations.

She further explained that, following close consultation with START and the SEA-SRC Members, the date and venue of the Dialogue had been fixed and that the Dialogue would convene in Bangkok, Thailand, from 19 to 21 July 2012. She ended her presentation by informing the Meeting that Southeast Asia Member Countries would discuss the content, structure and topics for the Science-Policy Dialogue during their SEA-SRC Ad Hoc Meeting taking place directly after the present item.

Following her presentation on the Science-Policy Dialogue, the Executive Science Officer briefly shared some information on the progress to date of the Ecosystem Services Framework activity, for which a budget for a follow-up workshop of US\$40,000 had been secured at the 16th IGM/SPG Meeting. She explained that the activity had been discussed in detail at the intercessional (19th) SC Meeting in Cambodia and that the SC agreed to make some changes to the document produced following the first workshop in Tokyo in February 2011.

Progress of the activity was also shared at the recent SPG Pre-Meeting. It was agreed that a workshop would take place following the Science-Policy Dialogue in July 2012 to develop the framework for consideration by the APN at its 18th IGM Meeting.

The Chair opened the floor for comments and questions.

In response to the presentation, the nFP for China noted that the term “Ecosystem Services” is very broad and he sought clarification as to whether the framework being developed in this APN activity was for all ecosystems or just natural ecosystems.

Dr. Matthews thanked the nFP for China for the opportunity to respond to his question and noted that the question for the APN was how to ensure the future sustainability of ecosystems in the Asia-Pacific region. He further noted that in this context, it was important to have an understanding of how to reassess the potential importance of ecosystems that is important for, for example, food and water security. The second workshop will look at developing a programme for incorporation in the Science Agenda of the APN Strategic Plan.

Dr. Nordin Hassan, Secretariat Director of ICSU-ROAP shared some useful information with the IGM participants on the progress of IPBES and activities being conducted (for natural ecosystems) by the IUCN related to their Ecosystems Red List of endangered and threatened species. IUCN was in the process of developing the



methodology for this complicated process and, it would be worthwhile for IUCN and APN to collaborate to ensure that their activities were complementary.

## **2. PROVIA Climate Adaptation Futures Conference in the Lead-Up to Rio+20**

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The Executive Science Officer explained the history of the APN's Scientific Capacity Development Programme, CAPABLE, noting that it had been borne at the World Summit for Sustainable Development (WSSD) Conference in Johannesburg in 2002, and subsequently registered with the UNCSD as a "Type II Partnership" with the UNCSD. In this context, she suggested that it would be timely to showcase the results of CAPABLE in the past 10 years, particularly the most recent focused activities on climate vulnerabilities, impacts, and adaptation, both prior to and during the Rio+20 Conference.

She noted in this context that there would be an opportunity to convene a session at the second "Adaptation Futures—Road to Rio+20" PROVIA Conference and that the Secretariat had submitted a session abstract earlier in 2012 (results not released yet). She explained that the aim of the session would be to share results of the CAPABLE Partnerships under Climate Adaptation as well as the results of the recent focused activities on Scientific Capacity Building for Climate Vulnerability, Impacts and Adaptation (SCBCIA), which were completed in 2011.

In closing, she noted that the outcome of the APN session would be a policy brief for Rio+20 that highlights APN's commitment to capacity development under the CAPABLE programme through a partnership approach. She also shared with the IGM that the Ministry of the Environment, Japan, had invited representatives from the APN to speak at a side event that they were organizing during Rio+20 and, in this context, it was requested that US\$20,000 be allocated from the APN budget to make it possible for a member of the Secretariat and a scientific expert from the SPG to participate in the Conference.

The Chair opened the floor for comments and questions.

The nFP for China thanked the speaker for her presentation and *invited the APN to give a presentation at a side event that would be organized by China during the Rio+20 Conference. This was welcomed.*

**Action: Secretariat (to follow up)**

## **3. UNFCCC/SBSTA and Annual Research Dialogue with the Parties**

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Dr. Andrew Matthews summarized the activities that the APN had been engaged in over the years with the UNFCCC/SBSTA and the international global change research programmes.

He noted that, since 2008, the APN had been attending the research dialogues that had been requested by SBSTA under their agenda Item 6: "Research and Systematic Observations" and that Parties to the Convention had become so interested in these dialogues, that a Pre-Dialogue Workshop was also organized in June 2011 (SBSTA 34) to discuss ways to improve the communications between the scientists and the parties and to ensure that the needs of both the international scientific communities and those of the Parties to the UNFCCC were mutually met and understood.

Dr. Matthew explained that the International Research Dialogue at SBSTA 36 was scheduled to take place from 14 to 25 May 2012, in Bonn, Germany, and that the UNFCCC had informed the international research community that the Dialogue would focus on, at a minimum, green house gases from coastal and marine ecosystems. He finished by noting that he himself and the Secretariat Director would represent the APN at the upcoming Dialogue.

## Chairperson's Summary

A budget of US\$30,000 was requested.

The Chair opened the floor for comments and questions and, as no questions or comments were raised, thanked Dr. Matthews for his presentation before moving onto the next item.

### **4. Series of Hyogo Workshops on New Commons**

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The Secretariat Director reported on the project “Satoyama: the New Commons in the Asia-Pacific Region” proposed and endorsed at the 16th IGM/SPG Meeting in Colombo, Sri-Lanka, as a two-year joint initiative of APN, DIVERSITAS, Hyogo Prefecture, IHDP and UNU.

He noted that, in order to describe the content in more detail, the title of the project was later revised as “Building Resilience with Common Capital, Managing Shared Resources: Meeting the Challenges of a Rapidly Modernizing World under Climate and Ecosystem Change.”

He further reported on the outcomes of the first workshop held at UNU headquarters in Tokyo in January 2012, and the objectives of future activities, which were contained in document IGM-SPG/17/06-04.

On the proposed activities for 2012/13 under this activity, he reported that the second workshop was scheduled to be held in Colombo, Sri Lanka, 28–30 May 2012, with a third workshop to be held in Kobe in late 2012.

Regarding expected outcomes of the activity, he indicated that a policy paper providing guidelines for enhancing community resilience through the establishment and/or maintenance of “New Commons” landscapes would be published, and a scientific journal paper was expected to be submitted on methodology/concept based on the outputs of the first workshop, and on results/analysis based on the outputs of the three workshops.

Regarding funding, he reported that, for the second workshop, committed remaining funds of US\$24,000 from the 2011/12 budget would be allocated from the US\$50,000 that was already approved by the 16th IGM/SPG meeting for this activity; for the third workshop, US\$50,000 was funded by the Hyogo Prefectural Government; and in addition to in-kind contributions, matching funds of US\$50,000 for the entire two years had been pledged from UNU-ISP.

The Chair thanked the Secretariat Director for his presentation and invited comments and suggestions. Hearing no comments from the IGM, he moved to the following sub-item.

### **5. New Activities on Low Carbon Development**

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The Secretariat Director presented the proposed new activity on Climate Mitigation to Support Low Carbon Development.

He introduced the background and rationale of the activity, stressing that, while the APN had supported nearly 60 projects so far on climate-related projects, many of the activities had been on adaptation and the number of mitigation-related activities had been relatively small.

Considering that many APN Members had indicated the need to enhance mitigation strategies, he noted that the Secretariat would like to propose activities to support mitigation activities under the APN climate change theme of the Science Agenda. He further shared information on other global change partner organizations that were working on the topic of low carbon development. He noted, in particular, the proposal made by the International Research Network for Low Carbon Societies (LCS-RNet) to establish an Asia Research Network

for Low Carbon Development (ARNLCD), showing the international community's strong will in this regard. Therefore, the Secretariat considered it strategically wise to enhance the APN's collaboration between LCS-RNet and other international organizations.

On proposed activities, he noted that it was critically important to strengthen the capacity of scientists and practitioners in developing countries so that they could be involved in decision-making processes on national strategies for low carbon and green growth. Therefore a Low Carbon Programme was proposed, over a three-year time span from April 2012 to March 2015, to support regional research, capacity development and networking/communication activities.

He indicated that the proportion of funds for regional research activities for low carbon development would be approximately 60%, and funding for communications activities would include communicating with ARNLCD and LCS-RNet.

With regard to expected outcomes, he suggested that APN Member Countries would benefit from the programme through activities to assist in formulating low carbon strategies for green growth, enhancement of the capacity to formulate such strategies, and networking with relevant networks and organizations.

He reiterated that, under this item, the Secretariat would like to invite comments and additional input from Member Countries, particularly on the kinds of priority thematic areas and sectors for APN to implement under such a framework, and the tools and methodologies to be employed to support developing countries under this programme, in addition to the research, capacity building and communication elements proposed by the secretariat. He noted that with input from Member Countries, the secretariat would invite comments and input from Member Countries in April 2012 that would then be compiled to help develop the framework for IGM endorsement.

The Vice-Chair expressed his appreciation on the activity proposed by the Secretariat and opened the floor for comments.

The nFP for China commented that, while low carbon was a very interesting and important topic for the region, in China, the definition of "low carbon development" was still unclear. He noted that, as APN Members were mostly developing countries, APN activities should address the needs of developing countries that were facing multiple challenges of poverty, urbanization, industrialization, among others. As low carbon development might be a positive way forward, he noted it would be interesting to develop the framework further, particularly in light of research, transfer of technology and capacity building.

The nFP for China also expressed some concern at the name "Low Carbon Development Programme" to describe the initiative, which might be inappropriate considering the scale of the activities, and suggested a revision to the terminology be made in this regard.

The Secretariat Director thanked the nFP for China for his important comments on the status of low carbon development in Asia and on the terminology for the new initiative. ***He agreed to change the term "Low Carbon Development Programme" to a more appropriate term that reflects APN's status as a research network, and would welcome IGM suggestions.***

***Action: Secretariat***

Dr. Matthews commented that it was certainly worthwhile to look at some particular niches where APN could find opportunities that were relevant to APN's specific expertise and that were achievable by APN's networking

and scientific research approaches in that particular area, which is related to mitigation. Hence, there was indeed a range of areas where APN could play a role. He also agreed with the Secretariat Director's comment on changing the title and description so that it sits within the area where APN might be able to contribute.

### **6. New Activities on Climate Adaptation in Support of the Cancun Framework**

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The Secretariat Director introduced the item by referring the Members to decisions made and activities needed to support climate adaptation capacity building based on decisions made at UNFCCC COP16 in Cancun and the activities outlined in the Cancun Agreements.

The Secretariat Director highlighted the important role of the APN in supporting action on adaptation in the Asia-Pacific region, particularly through regional cooperation in global change research; scientific and technical capacity building; and interaction between scientists and policymakers. In this context he introduced four new activities under the present theme:

1. Hyogo-Funded Activity: A three-day scoping workshop to enhance the action of APN developing country members on adaptation in the Asia-Pacific region (US\$60,000)
2. Joint activity with UN-CECAR: A training course on adaptation planning and implementation in Asia-Pacific region (US\$50,000)
3. A Proposal Development Training Workshop (PDTW, US\$20,000)
4. Formulation of a draft multi-year programme on adaptation (no additional funds requested)

Before closing, the Secretariat Director stressed that the training workshops could be considered on a trial basis and that ideas for the activities would be welcome from the Members with a view to potentially considering related activities under the Opportunity Fund in the future.

The Chair opened the floor for comments and questions.

The nFP for China stressed that adaptation issues were important especially for developing countries. He expressed his appreciation for the organization of such a scoping workshop as well as the workshops that train scientists on how to develop proposals, like the recent PDTW held in Yantai, China. He expressed his belief that more training and research was needed on this issue and his hope that a similar workshop could be held in China the following year for training young scientists.

Mr. Pavich Kesavawong, the nFP Alternate for Thailand, said that it was very important and useful to plan strategically for these kinds of adaptation needs and agreed that a proposal to hold a scoping workshop to develop an adaptation programme was timely.

Dr. Matthews suggested that, with respect to timing, the Secretariat should work closely with the SC, particularly on seeking guidance for allocation of resources from the Opportunity Fund. He reiterated that opportunities should be made available to all Members to submit their ideas on the kinds of activities that were crucial in the Asia-Pacific region and encouraged nFPs to talk with their SPG Members and submit ideas that could be consolidated and discussed further among the Members.

Dr. Kim Chi Ngo, the SPG Member for Viet Nam, thanked the Secretariat Director for his presentation, noting that these opportunities for Low Carbon Development and Climate Adaptation would be very useful for developing countries.

Following the discussions, it was agreed that *the Opportunity Fund would be considered once again later in the week (day three of the 17th IGM), particularly in considering very carefully a mechanism and timeline for the submission of activities, suggestions, ideas, etc. from the APN Membership.*

*Action: nFPs and SPG Members*

## **7. New Hyogo Activity: APN, Hyogo and IGES Local Symposium**

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The Secretariat Director presented on the present proposed new activities by sharing global change related activities undertaken by Hyogo Prefecture of Japan where the APN Secretariat is based and from which significant financial contribution was provided. He shared that Hyogo Prefecture is keen on implementing mitigation measures at the local scale, including CO<sub>2</sub> emission reduction in public and commercial sectors by way of regulatory, economic and informational measures to encourage energy saving.

With this as the background, it was proposed that a symposium on “Low Carbon Development in Asia” be undertaken as a new activity funded by Hyogo Prefecture at a funding scale of US\$ 40,000. The one-day symposium would be co-organized by APN, IGES/KRC and Hyogo Prefectural Government, in Kobe, Japan, in late 2012 or early 2013.

He stated that the objectives of the symposium would be to deepen mutual understanding on the latest relevant technology, know-how, legal frameworks and lifestyles in Japan and other Asian countries as well as needs, gaps and lessons on implementation of mitigation actions; and to enhance communication between experts of APN and IGES/KRC and the citizens of Hyogo Prefecture on the issue of low carbon development.

He noted that experts from APN Member Countries, researchers from IGES/KRC projects, policymakers and civil society would be invited to the symposium, and the result would be reflected on the APN new focused activity “Climate Mitigation to Support Low Carbon Development.”

Finally he stressed that the activities were seen as a reciprocal effort to the Hyogo Prefectural Government, whereby the latest knowledge as an asset would be shared with the Hyogo public.

The Chair sought comments and clarifications from participants and called for Members' approval on the budget for Financial Year 2012 presented under Item 5 by the Executive Manager. Before seeking approval from the IGM, he reiterated the Secretariat's call for input on the process for proposing new activities under the Opportunity Fund, by 16th April 2012.

*The draft Budget Plan for 2012/13 was conditionally approved pending clarification on minor issues related to two line items of the budget related to salary figures.*

*Action: Steering Committee, Secretariat*

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## Session III: Parallel and Networking Session

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### Item 7: Parallel Sessions: Subregional Cooperation

The Executive Science Officer spoke briefly on the background and history of subregional cooperation noting that the Southeast Asia Subregional Committee (SEA-SRCom) had been formed in August 2006, and the South Asia Subregional Committee (SA-SRCom) had been formed in July 2009. She noted that, while it was expected that SEA and SA Member Countries would convene parallel sessions, the Member Countries of other subregional groups namely, Temperate East Asia (TEA) and Oceania and the Pacific (O&P), were also encouraged to convene together and discuss potential collaborative activities and/or common areas of interest.

The Executive Science Officer provided procedural information and logistical arrangements for the breakout sessions. All Member Countries were invited back to the Plenary at 5 p.m. to take part in the first and second of the four scheduled Interactive Sessions planned throughout the three-day IGM/SPG Meeting. Details of the Interactive Sessions are provided as appendices to the present Chairperson's Summary.

The Chair formally closed the first day of the 17th IGM/SPG Meeting.

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## Session IV: Scientific Affairs

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### Item 8: APN Climate Synthesis Activities

On behalf of the APN Climate Synthesis Team, Dr. Michael Manton, Chair of the APN Climate Synthesis Report and Climate Book, reported to the IGM on the progress and plans ahead.

In his presentation, Dr. Manton introduced the background of the climate synthesis activities, noting all members of the Climate Synthesis Team had been involved in APN activities, either through leading APN-funded projects or through being a Member of the APN. He stated that, of all the publications envisaged, a synthesis report had been published in September 2011 and widely disseminated since its release; a peer-reviewed paper had been submitted to and under review by EOS; and the third publication, a book to be published by Springer under its Advances in Global Change Research Series, was expected to be published by late Autumn 2012. Regarding the book, he briefly introduced its outline and further indicated that authors were in the process of preparing third order drafts for submission to Springer in April 2012.

The Chair opened the floor for comments, questions or clarifications.

The SPG Member for Indonesia thanked Dr. Manton for his presentation and suggested that a summary of APN climate synthesis activities and the book, if published by then, be presented in the Southeast Asia Science-Policy Dialogue scheduled to be held from 19 to 21 July 2012 in Bangkok. ***She also suggested that the synthesis report be translated into local languages, which would be beneficial for policymaking processes for individual Member Countries.***

***Action: Secretariat and Climate Synthesis Team***

Dr. Manton responded that, while according to schedule the book would not be finished in time for the Science-Policy Dialogue, the Climate Synthesis Team should be able to provide an overview of the outcomes and findings of the synthesis activity. He also agreed that translations would enhance distribution and therefore individual countries were encouraged to take initiative in this endeavour.

The SPG Member for Japan, Dr. Kensuke Fukushi, commended the excellent work of the Climate Synthesis Team and suggested that, *in order to provide input effectively to the IPCC Fifth Assessment Report (AR5) process, the synthesis work be communicated to the IPCC as a contribution to Chapter 24 of the IPCC AR5.*

**Action: Secretariat and Climate Synthesis Team**

Dr. Manton responded that it was certainly an aim of the climate synthesis work to have impact in the AR5 process through both the synthesis report and the book, adding that working directly with AR5 lead authors was certainly the approach of the team.

Adding to Dr. Manton's response, the Executive Science Officer informed the IGM that the Secretariat of Working Group II (WGII) of the IPCC AR5 had forwarded the Synthesis Report to all Coordinating and Lead Authors of WGII.

The nFP for China extended his compliments to the Climate Synthesis Team on their excellent work, and observed that the title of one of the sections in the climate book, namely *"Urbanization as a Driver of Climate Change," might lead to the impression that urbanization is the one and only driver of climate change, and therefore suggested that the title be revised to avoid such impression.*

**Action: Secretariat and Climate Synthesis Team**

In response, Dr. Manton noted that the outline was the original one and that changes were being made as the Climate Synthesis Team went through the drafting process, and they were looking at the urbanization chapter in a broader sense as suggested.

Noting the limited time remaining for the following items, the Chair thanked the presenter and the delegates for their comments and closed the item.

**Item 9: Scientific Research and & Capacity Building Activities: A Report from the SPG Co-Chairs**

On behalf of the SPG and Capacity Development Committee (CDC), the SPG Co-Chairs—the SPG Member for Indonesia and the SPG Member for Nepal—reported on activities by the SPG and under the ARCP programme, and activities by the CDC and under the CAPaBLE programme, respectively.

The SPG Member for Indonesia started by sharing information on the current projects being funded under the ARCP and CAPaBLE Programmes, as well as under focused activities. She introduced the recently published Issue 2 of the APN Science Bulletin, which contains five main sections covering 22 ARCP projects, 18 CAPaBLE projects, and all focused activities under the thematic areas of EBLU and RUSD.

She further provided a briefing on the annual calls for proposals process which was launched on 26 May 2011, noting particularly the improvement in the quality of proposals as well as the increased number of letters of intent and summary proposals received.

## Chairperson's Summary

Regarding the discussions at the 7th SPG Pre-Meeting (SPG-PM) held prior to the IGM/SPG Meeting, she stressed the importance of the full commitment of SPG Members in the review process. In this context and as discussed at the 7th SPG-PM, she suggested that a general rule of “no review, no IGM participation,” be implemented and ***reminded all SPG Members of the guidance documents available under the Framework Document and the obligation of the SPG Members to review proposals.***

She also reported that SPG Members agreed that the ARCP Proposal Review process would discontinue the two-tier system at stage 2 of the review process and, that from 2012, ***all full ARCP proposals received, regardless of their score, would be re-reviewed by the SPG following their responses to comments and questions raised by the reviewers.*** This would relieve additional stress felt by the SPG Subcommittee (SPG-SC) to recommend proposals for funding.

**Action: SPG and Secretariat**

She reported further on other items discussed at the SPG Pre-Meeting, including the status of the proposed Southeast Asia Science-Policy Dialogue, the APN Ecosystems Framework, and proposal recommendations to be endorsed by the IGM under Item 14.

Before concluding she announced the results of the SPG-SC election process as well as the election of a new SPG Co-Chair as follows for IGM endorsement:

- **Dr. Alexander Sterin**, SPG Member for Russia, was nominated as new SPG Co-Chair for a two-year term;
- **Dr. Madan Lall Shrestha**, SPG Member for Nepal, would act as Co-Chair for one more year;
- **Drs. Gunavi Samarasinghe**, SPG Member for Sri Lanka, and **Marcial Amaro**, SPG Member for The Philippines, would serve one more year on the SPG-SC;
- **Dr. Kensuke Fukushi**, SPG Member for Japan was nominated as new SPG-SC member.

***The IGM approved the new SPG Co-Chair and SPG-SC nominations by acclamation.***

**Action: SPG Subcommittee**

For the CDC, the following membership structure was reported:

- Ex-Officio Members: SC Chair, two SPG Co-Chairs and a Donor Member;
- Invited Experts: **Professor Roland Fuchs; Dr. Srikantha Herath; Dr. Harini Nagendra;** and **Dr. Andrew Matthews.**

The Chair thanked the SPG Co-Chair for her report and opened the floor for comments and clarifications.

Dr. Matthews provided further clarification on the discussions during the SPG Pre-Meeting on SPG Member obligations, stressing that while it may seem harsh to SPG Members, the consideration behind “no review, no IGM participation” was that it would be very difficult for SPG Members who have not reviewed the assigned number of proposals to offer advice and contribute during the SPG Pre-Meeting. ***He reminded the SPG Members that there is a process by which SPG Members can delegate their work to people who have appropriate expertise in their country. He also noted that the issue had become so significant that it warranted the attention of the IGM.***

**Action: SPG Members**



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## Session V: SRC Developments and Mitra Award for Global Change Research

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### Item 10: Report from South Asia Sub Regional Committee

Dr. Giashuddin Miah, SPG Member for Bangladesh and newly appointed Chair of the SA-SRCom for 2012/13, presented to the Members on the activities undertaken by the SA-SRCom in the previous year as well as the issues discussed at their meeting held on day one of the IGM.

The SPG Member for Bangladesh noted that it was generally agreed that proposal development training workshops were very important for building the scientific capacity among young scientists in the subregion and therefore should be continued into the future. Concerning the main topics of interest, he highlighted the following:

1. Biodiversity and ecosystem services;
2. Climate change and adaptation in relation to agriculture;
3. Awareness raising among the general public and policymakers on the reality of climate change using existing data and evidence, involving both the scientific and policymaking community;
4. Coastal and ocean pollution, acidification, sea water temperature change; and
5. Energy use and energy efficiency;

The SPG Member for Bangladesh further noted that, in considering the APN's focus on biodiversity and ecosystem services and climate adaptation issues in its programme of work for 2012/13, the SA-SRCom agreed to give high priority on topics 1 and 2 above in 2012/13.

Concerning immediate plans for the future, the SA Group stressed that, in order to maximize the outcomes of its activities, a mechanism may be put in place to provide seed funds for inviting experts to collate information on the status and opportunity of the 2012/13 targeted topics in each country, which would help to contribute to the success of the next round of meetings to be held in Nepal in November 2012.

Before closing, the SPG Member for Bangladesh suggested that APN consider inviting two or three Members from South Asia to participate in the SEA Science-Policy Dialogue and workshop to be held in July at Bangkok. This would provide guidance for South Asia in aiding the organization of similar activities in South Asia in the future.

***With regard to the next (4th) SA-SRC Meeting, the SA-SRCom Members agreed to hold the meeting in Nepal but they were also considering Sri Lanka as the backup country. The meeting and related workshops were scheduled for November 2012.***

**Action: South Asia SRCom**

Following the presentation, the Chair opened the floor for comments and questions.

The SPG Member for Pakistan provided additional information related to the organization of PDTW workshops in that the SA-SRCom would like to focus on specific and pressing issues, such as climate adaptation; and to identify trainees, potential project leaders and their collaborators working in a focused theme and bring them

## Chairperson's Summary

to the workshop. This would allow for young scientists to be trained in proposal writing in the thematic areas of priority in the subregion.

The Secretariat Director thanked the SPG Member for Bangladesh and the Members of the SA-SRCom in promoting global change activities in the South Asia Region. In order for the SA group to communicate with the SEA group, which was to be invited to the Science-Policy dialogue in Bangkok this summer, he welcomed the idea suggested by SPG Member for Bangladesh and suggested that the SA-SRCom Members consult with the SEA Science-Policy Dialogue Organizing Committee to promote subregional cooperation by exchanging views on gaps and priorities in the region. He took the opportunity to thank the SA-SRCom for their great contribution in subregional activities.

Following on the previous comments, Dr. Matthews commented that the Science-Policy Dialogue in July would also present an opportunity for interested parties to influence the work plan for the ecosystem services framework workshop that would convene directly following the Dialogue. He emphasized that this was indeed a good opportunity, not only to the general importance of the topic but also to define the issues of regional and subregional significance in order to develop the vital organs of the existing skeletal format to allow the framework to function.

Responding to the comments from the delegates, the SPG Member for Bangladesh noted that the *countries of both South Asia and Southeast Asia would work together on some common issues especially in biodiversity and ecosystem services.*

**Action: Southeast Asia and South Asia**

Mr. G. Karma Chhopel, the nFP for Bhutan, thanked the SPG Member for Bangladesh for his presentation and noted that the issues of biodiversity, ecosystem services and climate change adaptation were very important for Bhutan as well. He shared with the Members that Bhutan, Bangladesh, India and Nepal had convened a summit in November 2011 that looked at very crucial issues for the Himalayan subregion of food, energy and water security, and biodiversity and ecosystems. He noted in this context that a 10-year road map had been developed that would be very useful for the SA-SRCom when convening its next 4th SA-SRC Meeting, to be hosted by Nepal. *He suggested that the 4th SA-SRC Meeting consider this report in the context of discussions on ecosystem services in order to complement future activities. This was welcomed by the SPG Member for Bangladesh.*

**Action: South Asia SRCom**

### **Item 11: Report from Southeast Asia Subregional Committee**

The nFP for Cambodia, on behalf of the SEA-SRCom, reported on the recent activities of the Southeast Asia group as well as its activities and future plans.

He reported on the activities of the 4th SEA-SRC Meeting that was held together with a climate downscaling seminar and PDTW in Hanoi, Viet Nam, in July 2011, noting that the PDTW had resulted in three proposals from young scientists being submitted under the APN's annual calls for proposals.

The nFP for Cambodia reported that most of the discussions during the ad hoc meeting on day one of the IGM had centred on arrangements for the Science-Policy Dialogue to be held in Bangkok from 19 to 21 July, noting that the structure of the dialogue and participation of scientists and policymakers were the main focus of the discussions. In this context, the SEA-SRCom was very enthusiastic about being involved in the dialogue.

The SEA-SRCom Members briefly discussed the summer school proposal that had been submitted to the APN on behalf of the Southeast Asia group, and agreed that as decisions on funding had not been made yet, they would defer further discussion until after the 17th IGM had concluded.

Finally, the nFP for Cambodia highlighted that ***Cambodia would host the 5th SEA-SRC Meeting in Cambodia, probably in October 2012, and that it was important for the group to also have PDTW and a climate downscaling workshop back to back with this meeting.*** It would be very helpful—and necessary—to improve Young Scientists' skill in developing good proposals based on the APN's guidelines. He informed the Members that ***a three-day, rather than a two-day, PDTW meeting would be convened to allow participants sufficient time for discussion and hands-on practice in developing their proposal to submit to the APN during the training workshop.***

**Action: Southeast Asia SRCom**

The Chair opened the floor for discussion.

The SPG Member for Indonesia provided additional information on several issues on the agenda that had been discussed, including to follow up on the previous meeting. The most important issue was to prepare for the Science-Policy Dialogue and to focus on topics that have importance of this SEA subregion, rather than have broad topics of discussion. She expressed too that it was agreed to engage mid-level decision makers for the Science-Policy Dialogue.

The SPG Member for Indonesia welcomed participation of Members from South Asia in the Science-Policy Dialogue in July for mutual and beneficial cooperation, as well as sharing of ideas and expertise. ***She mentioned that the Terms of Reference would be re-addressed and finalized in cooperation with involved parties and that the Organizing Committee would make an effort to accommodate the request from South Asia.***

**Action: Organizing Committee of Science-Policy Dialogue**

The SPG Member for Indonesia also noted the discussion on the proposal submitted by the SEA-SRCom to the APN under the 2011 annual calls for proposals and follow up on various action items and activities in the region as discussed in the previous two years. She indicated that this item would not be discussed further among the SEA-SRCom until approval of the proposals recommended for funding under Item 14 of the 17th IGM/SPG Meeting.

Finally, she cited the issue of modelling and downscaling based on the needs of the subregion. She shared with the delegates that there was significant experience in dealing with this issue in the subregion and that she looked forward to developing a training workshop back to back with the 5th SEA-SRC Meeting to be hosted by Cambodia. She further noted that the PDTW exercise was very beneficial for SEA and had resulted in proposals being submitted to the APN.

The Secretariat Director thanked the nFP for Cambodia for his report, noting that he was very impressed by the active activities conducted recently by Southeast Asia. He raised the issue of summer schools and its links to climate adaptation under the new focused activities presented by the Secretariat under Item 6 on the first day. In this context, he indicated that he looks forward to receiving more information under the Opportunity Fund submission process, procedures for which would be discussed later the same day by the delegates.

## Chairperson's Summary

Dr. Jariya Boonjawat, the SPG Member for Thailand, welcomed the South Asia subregional group's interest in attending the Southeast Asia Science-Policy Dialogue. In this context, she asked the Meeting to consider an additional budget to accommodate Members from South Asia.

The delegates were reminded by the Secretariat that there was presently a budget of US\$90,000 available for the Dialogue and it was perhaps premature to consider increasing this budget, a decision that would be made—as correctly pointed out by the Invited Expert on the SC Dr. Matthews—by the SC and not the Secretariat.

The Chair thanked the delegates for the active discussion.

### **Item 12: Discussion on SRC Development**

The Chair facilitated a discussion on SRC development particularly for other subregions.

Dr. Konstantin Lutaenko, the nFP Alternate for Russia explained the need to establish a working group in Temperate East Asia (TEA) and that it was necessary to involve more scientists from this region that encompasses five very large countries. He stressed, however, that establishing a subcommittee might be premature and that establishment of a working group to discuss potential collaborative activities might be more appropriate at this time. He suggested that a training workshop for young scientists in the region to develop APN proposals was probably the most pressing issue for discussion.

The nFP for China spoke about the suggested meeting and agreed that “working group” might be a good name. He indicated that a meeting in Russia to discuss relevant issues was welcomed by China. He also agreed that the Secretariat could certainly collect information on requests/proposals for activities in the future with budget implications, but such information should be submitted to the IGM or SC for approval, rather than be approved by the Secretariat.

The Secretariat Director thanked the nFP Alternate for Russia for his proposal to establish a TEA working group and to organize a meeting in Russia later in 2012. Concerning the comments from the nFP for China, he reaffirmed that ***the Secretariat is not in a position to allocate additional funds from the APN budget over and above those identified in the approved 2012/13 Budget Plan, and that any request for additional funds from the Members would be subject to consideration and approval by the IGM or the SC, depending on when such a request is made.***

**Action: Secretariat**

Ms. Yuko Hoshino, the nFP Alternate for Japan, sought clarification on the budget available for subregional activities and asked whether there was a budget for subregional cooperation in Temperate East Asia (TEA). The Secretariat confirmed that US\$80,000 was allocated for subregional cooperation with an amount of US\$20,000 allocated for each of the four subregions of SA, SEA, TEA and O&P.

The nFP for China additionally commented on the request from the SPG Member for Thailand for an additional budget for the Science-Policy Dialogue in July 2012 noting that, if it is necessary to increase the budget, then this could very well be considered by the SC and/or the IGM.

**Item 13: Mitra Awardee Presentation**

The Chair introduced the winning poster presenter, Mrs. Evi Gusmayanti, from the Centre for Wetlands People and Biodiversity, Universitas Tanjungpura, West Kalimantan Province, Indonesia, and invited Mr. Gusti Anshari to deliver a presentation on her behalf on her research work described in the winning poster.

Mr. Anshari, presenting on behalf of Mrs. Evi Gusmayanti and as a collaborator in her research, introduced her research on Natural Properties of Carbon Stock in Customary Peat Forest at Danau Sentarum National Park, West Kalimantan, Indonesia.

Considering limited scientific knowledge on carbon complex in tropical peats, the project aimed at analyzing natural properties of variables that affect carbon stock in tropical peats in an un-drained tropical peat dome in Danau Sentarum National Park, which consists of seasonal lakes, inundated forests, peat forests, and limited areas of hill forests. He further explained the methodologies for the research, which include a sample campaign in July 2011; collection of 12 sample cores from four transect lines, and analyses of 431 subsamples were Total Carbon, Total Nitrogen, and Bulk Density. Ensuing laboratory work was explained in detail, and findings and conclusions were summarized as follows:

- Horizontal and vertical variability of peat carbon is influenced by many factors, including peat depths and peat accumulation rates.
- Vertically, the patterns show significant high values in BD, TCD, TN and TND in top 100 cm depth, and significant low values in C:N ratio in top 100 cm depth.
- These findings suggest that an assessment of tropical peat carbon should sufficiently look at natural properties of peats up to 200 cm depth. Samples were adequately analysed at a 25 cm interval, or only had a total of eight samples from every 200 cm peat core.

Before concluding his presentation, he acknowledged that the present research was one of results of the TWIN-CAM Project funded by USAID.

Following his presentation, the Vice-Chair and the Secretariat Director presented the winner representative with "The Mitra Award for Global Change Research." The abstract of the poster and the presentation will be posted on the APN website and appended in the final proceedings of the 17th IGM/SPG Meeting.

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## Session VI: Recommendations for 2012 Projects

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**Item 14: ARCP and CAPaBLE Recommendations for Funding**

On behalf of the SPG and CDC, the SPG Co-Chairs reported to the IGM on those projects and proposals that they would be recommending to the IGM for funding under the ARCP and CAPaBLE programmes.

**ARCP Recommendations**

The SPG Co-Chair and SPG Member for Indonesia, on behalf of the SPG, explained that the total budget available for ARCP activities in FY 2012/13 was US\$1,240,000.

## Chairperson's Summary

Eight multi-year projects were recommended for continuation in 2012/13 following satisfactory progress in their first year activities. She further highlighted that 31 full proposals were considered for funding recommendation, which included a pre-screening of 48 summary proposals by the SPG-SC, and that 15 (13 new and 2 seed grants) of which were recommended to the IGM for funding.

The recommended allocation is outlined in the table below:

### ***ARCP Proposals and Continuing Multi-Year Projects***

8 continuing multi-year projects	US\$ 337,000 (secured from 2011/12)
<b>Budget reserve for 2 of the 8 continuing multi-year projects (noted above) for 2013/14</b>	<b>US\$ 76,550</b> (secured for 2013/14)
15 new projects (13 projects & 2 seed grants)	<b>US\$ 1,148,000</b>
Contingency fund	<b>US\$ 15,250</b>
<b><i>Total from 2012/13 ARCP Budget</i></b>	<b><i>US\$1,240,000</i></b>

*\*\*Budget Allocation from 2012/13 budget is in bold text*

The summaries of continuing multi-year ARCP projects and new ARCP projects are attached as **Appendices 2 and 3**, respectively.

### **CAPaBLE Recommendations**

The SPG Co-Chair and SPG Member for Nepal, on behalf of the CDC, reported that a total of US\$720,000 was available for CAPaBLE activities in FY2012/13. Of this amount, US\$647,000 was available for new capacity development projects and US\$73,000 for continuing multi-year capacity development projects.

Recommendations for two continuing capacity development multi-year projects were presented to the IGM for approval. Of the 19 CAPaBLE full proposals considered, 15 were recommended for funding, 2 of which were seed grants.

### ***CAPaBLE Proposals and Continuing Multi-Year Projects***

2 continuing multi-year projects Capacity Development Projects	US\$73,000
15 new projects (13 projects & 2 seed grants)	US\$ 622,992
Contingency fund	US\$ 24,008
<b><i>Total from 2012/13 CAPaBLE Budget</i></b>	<b><i>US\$720,000</i></b>

The summaries of continuing multi-year CAPaBLE projects and new CAPaBLE projects are attached as **Appendices 4 and 5**, respectively.

Following the presentations by the SPG Co-Chair, the Vice-Chair opened the floor for discussion before seeking approval of the recommendations made for both the research and capacity building proposals.

Dr. Matthews thanked the Vice-Chair for the opportunity to speak and reminded the IGM, particularly new Members, that the final recommendations being made were the result of a rigorous screening process where

a much larger number of proposals were reviewed and assured the membership of the APN that the SPG had made crucial efforts to filter the proposals.

The Vice-Chair thanked all SPG Members for their hard work and extended his appreciation to expert members for their efforts to ensure transparency of the review process.

The SPG Member for Indonesia, in her capacity of SPG Co-Chair, thanked all SPG Members for their support and good teamwork that had helped to fulfil the obligations of the SPG. She assured the IGM that, although she would step down as the SPG Co-Chair, she would continue to actively contribute to APN's scientific work as the SPG Member for Indonesia. She also extended her sincere appreciation to the APN Secretariat for managing the proposal review process and the hard work involved in preparing the supporting documents.

The SPG Member for Nepal took the opportunity to express his appreciation to the SPG Members and to the experts who had contributed greatly in providing guidance to the SPG and SPG-SC.

The Vice-Chair sought IGM endorsement of the continuing and new projects.

***The IGM approved by acclamation the list of recommended continuing projects and new proposals for funding under the ARCP and CAPaBLE programmes.***

***Action: Secretariat***

*(to manage procedures for new and continuing projects)*

Before closing the discussion, the Vice-Chair sincerely thanked the SPG Co-Chairs for their hard work in managing the proposal review process and, in particular, acknowledged the hard work of the SPG Member for Indonesia who, after three years as SPG Co-Chair, would be stepping down. He expressed his sincere gratitude and looked forward to her continuing active participation in the APN in her capacity as SPG Member for Indonesia.

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## APN Opportunity Fund

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Immediately following Interactive Session IV and prior to IGM Session VII, the Chair convened a session on the APN Opportunity Fund. A summary of this session, which outlines the next steps for action by all Members and the Secretariat, is attached as **Appendix 6**.

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## Session VII: 18th IGM, Framework Document, Summary and Closing

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### **Item 15: Hosting of IGMs**

The Government of China through the nFP for China confirmed its willingness to host the 18th IGM/SPG meeting. This was accepted by acclamation. Concerning the host country for the 19th IGM/SPG Meeting, Member Countries were asked to consider this and contact the Secretariat should their respective countries be interested in hosting the 19th IGM/SPG Meeting in 2014.

## Chairperson's Summary

### Item 16: Framework Document

The Chair revisited suggestions for changes to the Framework Document that had been recommended by the SC. The Chair reviewed the discussion that ensued and asked the Secretariat to take note of the suggestions for SC elections. *The amendments to the Framework Document were approved.*

*Action: Secretariat*

### Item 17: Chairperson's Summary

A draft Chairperson's Summary was provided for discussion and approval. Each Member Country was asked to check the contents for clarity and to ensure that what had been written reflected the discussions. While some revisions were noted, all participants were invited to check the document and send editorial comments to the Secretariat. *It was noted that a final summary would be prepared in close consultation with the Chair and Vice-Chair of the 17th IGM and suggested revisions could be submitted prior to the end of April 2012. The final summary will also include a list of action points (as Appendix 7).*

*Action: Secretariat*

### Item 18: AOB, Final Remarks and Closing

AOB: Steering Committee Elections

Recalling the earlier discussions on day one of the 17th IGM/SPG Meeting and the need to formally elect two nFPs to the SC, the Vice-Chair facilitated the process by asking whether there were nominations from the floor. Three nominations were made—Sri Lanka, Indonesia and Republic of Korea. Following a lengthy discussion among nFPs and nFP Alternates, the *Members agreed to elect the nFPs for Indonesia and the Republic of Korea to the SC, with the understanding that the nFP for Sri Lanka would be co-opted as an SC Member at the 21st SC Meeting taking place immediately following the 17th IGM.* This was accepted by acclamation.

*Action: Steering Committee*

### Final Remarks and Closing

The SPG Member for Russia expressed his deep gratitude to the host country for hosting the Meeting. This was echoed by all participants in acclamation. On behalf of the Members, Mr. Brown expressed sincere thanks to the Chair and the Vice-Chair for their leadership, political tact and diplomacy that led to the successful conduct and excellent results of the Meeting.

Speaking on behalf of himself and the Vice-Chair, the Chair thanked the Secretariat for its support and energy during the Meeting and expressed sincere thanks to the Members for their active involvement and cooperation in the past three days. With these final remarks, the Chair formally closed the 17th Joint IGM/SPG Meeting.



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## APPENDIX 2: CONTINUED MULTI-YEAR ARCP PROJECTS, FINANCIAL YEAR 2012/13

Original Project Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Yearly award (US\$)
ARCP2011-11NMY-Patra/Canadell	ARCP2012-01CMY-Patra/Canadell	Greenhouse Gas Budgets of South and Southeast Asia	Dr. Prabir K. PATRA and Dr. Josep CANADELL Research Institute for Global Change (JAMSTEC) Global Carbon Project (GCP) JAPAN/AUSTRALIA	prabir@jamstec.go.jp	dklee@snu.ac.kr; jptang@nju.edu.cn; gutowski@iastate.edu; shong@yinsei.ac.kr; yuqing@hawaii.edu;	CC&V, CATMD	Aims to undertake the most ambitious synthesis effort to date using global and regional datasets and model outputs to constrain the regional GHG budgets of South and Southeast Asia, where the source/sink balance of GHGs have large uncertainty.	Japan, Australia, Bangladesh, China, Indonesia, India, Singapore, USA, Thailand The Netherlands, UK	3 years	50,000
ARCP2011-12NMY-Fortes	ARCP2012-02CMY-Fortes	Seagrass-Mangrove Ecosystems: Bioshields Against Biodiversity Loss and Impacts of Local and Global Change Along Indo-Pacific Coasts* (The Seagrass-Mangrove Bioshield Project, SMBP)	Prof. Miguel FORTES Marine Science Institute , University of the Philippines PHILIPPINES	miguelfortes@gmail.com	eric.wolanski@jcu.edu.au; yamamuro@k.u-tokyo.ac.jp; mukaih@kais.kyoto-u.ac.jp; asaeda@mail.saitama-u.ac.jp; rramesh_au@yahoo.com; W.Kiswara@nioo.knaw.nl; asaeda@mail.saitama-u.ac.jp	CC&V, EBLU	Investigates and promotes the important role of seagrass and mangroves as natural shields in mitigating and adapting to the impacts of local and global change along Indo-Pacific coasts. Using an 'ecosystem approach', its main product is a science-based tool in decision making to manage the resources in the face of such environmental changes.	Philippines, Australia, Japan, India, Indonesia	3 years	45,000
ARCP2011-13NMY-Herath	ARCP2012-03CMY-Herath	Developing Ecosystem based Adaptation Strategies for Enhancing Resilience of Rice Terrace Farming Systems against Climate Change	Prof. Anura Srikantha HERATH Institute for Sustainability and Peace, United Nation University (UNU), JAPAN	herath@unu.edu	ywang@unu.edu; ymjiao@gmail.com; gqtiit@yahoo.com	CC&V, EBLU	This research will address dual challenges of both extensive runoff and water scarcity by providing eco-system based adaptation measures to strengthen resilience of rice terrace farming system in Hani and Ifugao to cope with climate change.	Japan, Philippines, China	3 years	45,000
ARCP2011-14NMY-Salik	ARCP2012-04CMY-Salik	Impact of Climate Change on Mangroves Ecosystem in South Asia	Mr. Kashif Majeed SALIK Global Change Impact Studies Centre (GCISC) PAKISTAN	kashif.majeed@gcisc.org.pk	shamen.vidanage@iucn.org ; mbh@iwmbd.org; vhrivera@lsu.edu; sray@visva-bharati.ac.in; santanu_5@yahoo.com	CC&V, EBLU	It will examine how climate parameters such as sea level rise, ocean temperature and fresh water flows in the area will affect sustainability of Mangroves forests. Then the impact of future scenarios of mangroves forests development will be assessed and necessary policy and institutional framework intervention for mangroves sustainability and development will be developed for policy and decision makers at local, national and regional level.	Pakistan, USA, India, Sri Lanka, Bangladesh	2 years	31,000
ARCP2011-15NMY-Zhen	ARCP2012-05CMY-Zhen	Holistic Assessment of Land-use Change and Impacts on Ecosystem Services of Wetlands	Dr. Lin ZHEN Institute of Geographic Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences CHINA	zhenl@igsnr.ac.cn	panying@igsnr.ac.cn; kohyama@ees.hokudai.ac.jp; shoyama.kikuko@nies.go.jp; Joenisr@indo.net.id; giash1960@gmail.com	EBLU	This project attempts to investigate the impacts of land-use change on ecosystems services, including provisioning (food, water) and regulating services (water & soil conservation, flood regulation, CO <sub>2</sub> fixation and O <sub>2</sub> release, water purification, and wild species habitat conservation) in two wetlands of international importance in China and Indonesia.	China, Japan, Indonesia, Bangladesh	2 years	37,000

Original Project Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Yearly award (US\$)
ARCP2011-16NMY-IGBP	ARCP2012-06CMY-IGBP	An International Geosphere-Biosphere Programme Synthesis Theme on: Global Environment Change and Sustainable Development: Needs of Least Developed Countries	Prof. João M.F. DE MORAIS International Geosphere-Biosphere Programme (IGBP)	morais@igbp.kva.se	david.smith02@uwimona.edu.jm; weber_e@usp.ac.fj; vtson@fpt.vn; thanhsan.vo@gmail.com; nepalese_am@yahoo.com; shathif@hotmail.com; dean@fmc.edu.mv; miyan@iubat.edu; miah70@yahoo.com; kampongseu@puc.edu.kh; kampongsew@yahoo.com; thdewan@yahoo.com; ar_forest@yahoo.com; souphabk@nuol.edu.la; souphabk@yahoo.com; souphabk@hotmail.com	CCI, SPL	The aim of this synthesis is to facilitate integration of global based scientific findings on GEC with relevant outputs at the local-national to regional level to address pertinent policy needs of LDCs; identify new areas of research; enhance networking between LDCs and global scientists and build capacity in cross-scale fertilization of scientific information.	IGBP, Bangladesh, Nepal, Bhutan, Afghanistan, Yemen, Myanmar, Lao PDR, Cambodia, Nepal, Maldives	2 years	45,000
ARCP2011-17NMY-Mathukumalli	ARCP2012-07CMY-Mathukumalli	Tracing Nitrogen and Carbon Biogeochemical Processes in the Inter-tidal Mangrove Ecosystem (Sundarban) of India and Bangladesh: Implications of the Global Environmental Change	Dr. Bala Krishna Prasad MATHUKUMALLI Earth System Science Interdisciplinary Centre, University of Maryland UNITED STATES OF AMERICA	mbkp@umd.edu	pghosh@caos.iisc.ernet.in; alrjnu@gmail.com; dkd_195709@yahoo.com; skaushal@umd.edu; ragu@essic.umd.edu	CC&V, EBLU	Integrated assessment of ecosystem function with nutrient biogeochemical processes and material accretion rates to delineate driving forces behind coastal environmental changes that helps in designing sustainable management policies to protect mangroves for future generations.	USA, India, Bangladesh	2 years	45,000
ARCP2011-18NMY-Jung	ARCP2012-08CMY-Jung	Impacts of Global Warming on Coastal and Marine Ecosystems in the Northwest Pacific	Dr. Sukgeun JUNG National Fisheries Research and Development Institute REPUBLIC OF KOREA	sukgeun.jung@gmail.com	gennady1@tinro.ru; Xianshi Jin, jin@ysfri.ac.cn; sugisaki@affrc.go.jp ; delaware310@nfrdi.go.kr	CC&V, EBLU, CATMD, RUSD	Comparative studies across NOWPAP countries (China, Japan, Korea and Russia) to evaluate regional differences in the responses of marine ecosystems to the changes in the NOWPAP sea area (33-52°N; 121-143°E) by a working group composed of natural and socioeconomic scientists.	ROK, Russian Federation, Japan, China	2 years	39,000

## APPENDIX 3: NEW ARCP PROJECTS, FINANCIAL YEAR 2012/13

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Total Award (US\$)	2012/2013 Yearly Award (US\$)
ARCP2011-15FP-Meinke	ARCP2012-09NMY-Meinke	Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia	Professor Holger Meinke, University of Tasmania, AUSTRALIA	holger.meinke@utas.edu.au	don.gaydon@csiro.au; thase@affrc.go.jp; masood.awan@wur.nl; masooduaf@yahoo.com; rizaldiboer@gmail.com; akhmadfaqih@gmail.com;	CC&V, EBLU, CCI	The demand for rice is expected to double, a challenging target in the midst of competing demands for land and water, and a changing and variable climate. The project uses in-country RD&E combined with modelling to design more efficient rice systems. Collaboration and training meetings increase the capacity of scientists and organisations, and strengthen a network of researchers.	Australia, Philippines, Thailand, Indonesia, Pakistan	3 years	180,000	60,000
ARCP2011-08FP-Li	ARCP2012-10NMY-Li	Development of an integrated climate change impact assessment tool for urban policy makers (UrbanCLIM)	Dr. Yinpeng Li, International Global Change Institute, Waikato University, NEW ZEALAND	yinpengli@climsystems.com	lcluo@niglas.ac.cn; tlcluo@jnu.edu.cn; danli@tea.ac.cn; khanhnhms@yahoo.com; dvkhanh@monre.gov.vn;	CC&V	This project proposes to develop a co-evolutionary urban climate change decision support tool (UrbanCLIM), to support climate change impact and risk assessment for the major sectors: health, transport, water. A participatory assessment approach will be applied through working with local urban policy makers and planners.	New Zealand, China, Viet Nam, Philippines.	3 years	135,000	45,000
APCP2011-22FP-Quynh	APCP2012-11NMY-Quynh	Carbon fluxes and emission from the Red River (Viet Nam and China): human activities and climate change	Dr LE Thi Phuong Quynh, Institute of Natural Product Chemistry (INPC), Vietnam Academy of Science and Technology (VAST), VIETNAM .	quynh1tp@yahoo.com	duongthuy0712@yahoo.com; hotcuong@gmail.com; bich_nga208@yahoo.com; geoluxx@nus.edu.sg; zhouyue00000@163.com; gilles.billen@upmc.fr; josette.garnier@upmc.fr;	EBLU, RUSD	This work aims to calculate the carbon fluxes and carbon emission from the Red River, which concern to the global warming. The SENEQUE/Riverstrahler model which allows to relate the water quality and carbon transfers in the drainage network to the constraints resulting from human activity and natural conditions in the watershed will be applied for different scenarios of the past, present situations and possible future changes in 2050s horizon for the whole Red River basin.	Viet Nam, Singapore, China, France	3 years	120,000	40,000
ARCP2011-23FP-Roy	ARCP2012-12NMY-Roy	Coastal Ecosystem and Changing Economic Activities: Challenges for Sustainability Transition	PROF. Joyashree ROY, Global Change Programme, Jadavpur University, INDIA	joyashreeju@gmail.com	jratnasiri@sltnet.lk; giash1960@gmail.com; schen@fio.org.cn; qdc@163.com; sandhya.mrigasira@gmail.com; indrilaguha@hotmail.com; rajarshi.banerji@gmail.com,	CATMD, CCI	Proposal is for collaborative research, workshops, guidelines development. Coastal ecosystems' unique ecological functions provide high valued economic and non economic goods and services. Goal is to inventories the changing pattern of economic activities in South Asian and China coast.	India, Sri Lanka, Bangladesh, China	3 years	86,000	44,000



Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Total Award (US\$)	2012/2013 Yearly Award (US\$)
ARCP2011-01FP-DeCosta	ARCP2012-13NMY-DeCosta	A study on, loss of land surface and changes to water resources, resulting from sea level rise and climate change	Dr.G.S.DeCosta, Open Plytechnic of New Zealand, New Zealand	Gregory.decosta@openpolytechnic.ac.nz; shahanedecosat@yahoo.com	samans@civil.mrt.ac.lk; eldhoti@yahoo.com; eldho@civil.iitb.ac.in; subimal@civil.iitb.ac.in; subimal.ghosh@gmail.com; jsujono@tsipil.ugm.ac.id jsujono@yahoo.com; hamaguti@urh.dpri.kyoto-u.ac.jp; mori@oceanwave.jp; tomo@oceanwave.jp	CC&V, EBLU	Seawater level variation in the Asia pacific region caused due to global / climate change would be analyzed using a global circulation (Climate) Model (GCM).The results of which would be then used in conjunction with digital elevation maps, GIS information to predict loss of land surface in coastal zones in the Asia Pacific Region.	New Zealand, Srilanka, India, Indonesia, Japan	2 years	79,000	44,000
ARCP2011-06FP-Carter	ARCP2012-14NMY-Carter	Coral reef and water quality status and community understanding of threats in the eastern Gulf of Thailand	Assoc. Prof. RW (Bill) Carter, Sustainability Research Centre, University of the Sunshine Coast, AUSTRALIA	bcarter@usc.edu.au	ntindale@usc.edu.au; h.beazley@usc.edu.au; suchai.yo@gmail.com; pasinee_ja@hotmail.com	CATMD	The project will assess the status and threats to marine natural resources in the contiguous coastal zones of Thailand, Cambodia and Vietnam through: 1. quantitative measurement of coral, algae and fish assemblages; 2. quantitative measurement of marine and in-flow water quality; 3. use of available secondary data for assessment of commercial and subsistence take; 4. qualitative study of community understanding of threats (including climate change) to the coastal zone and marine resources.	Australia, Thailand, Cambodia, Viet Nam	2 years	60,000	48,000
ARCP2011-20FP-Yoo	ARCP2012-15NMY-Yoo	Toward a Fire and Haze Early Warning System for Southeast Asia	Dr. Jin Ho Yoo,APEC Climate Center,REPUBLIC OF KOREA	jhyoo@apcc21.net	saji@u-aizu.ac.jp; rf2426@columbia.edu; oroswin@indo.net.id; kkf@met.gov.my; antoyo309@yahoo.com.id; chiam_keng_oon@nea.gov.sg; israralbar@gmail.com	CC&V, EB&U, CATMD, RU&P	The project concrete to understanding of the human and climatic causes to forest fires. And It will determine (1) how seasonal forecasts can be used to predict drought conditions triggering forest fires and (2) how this information can be incorporated into the standard operating procedures of local land and fire managers.	Japan,USA,Korea ,Indonesia, Malaysia, Singapore	2 years	73,000	37,000

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Total Award (US\$)	2012/2013 Yearly Award (US\$)
ARCP2011-24FP-Ochiai	ARCP2012-16NMY-Ochiai	GEOSS/Asian Water Cycle Initiative/Water Cycle Integrator GEOSS/AWCI/WCI	Mr. Osamu Ochiai, Associate Senior Administrator, Satellite Applications and Promotion Centre (SAPC), Japan Aerospace Exploration Agency (JAXA), JAPAN	ochiai.osamu@jaxa.jp	tkoike@hydra.t.u-tokyo.ac.jp;	CC&V	Based upon the well coordinated regional cooperative challenge, GEOSS Asian Water Cycle Initiative (AWCI), and the long-term supports by APN, this project aims at implementing convergence and integration of data from earth observation satellites, fields, model cases at Asian major river basins, and researching on the impact assessment and adaptation measures for climate change using these data.	Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Korea, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Uzbekistan, Vietnam	2 years	90,000	45,000
ARCP2011-03FP-Burnett	ARCP2012-17NMY-Burnett	Assessing the Impact of Climate Change and Development Pressures on Nutrient Inputs into the Mekong River and Tonle Sap	Prof. William C. Burnett, Florida State University, USA	wburnett@fsu.edu; william.c.burnett@gmail.com	gullaya.w@chula.ac.th; khamfeuane@fe-nuol.edu.la; khamfeuane@gmail.com; boualins@fe-nuol.edu.la; veasna_kum@yahoo.com	CC&V, CATMD	Investigate the relationships between Mekong River hydrology, the dissolved and particulate phosphorus (P) cycle and aquatic productivity in Thailand, Laos, and Cambodia. Assess and model nutrient and fishery impacts in response to climate change, dam construction or other development activities in the Mekong River basin.	USA, Thailand, Laos, and Cambodia	2 years	74,000	41,000
ARCP2011-02FP-Sase	ARCP2012-18NMY-Sase	Dynamics of sulphur derived from atmospheric deposition and its possible impacts on the East Asian forests	Dr. Hiroyuki Sase, Asia Centre for Air Pollution Research, JAPAN	sase@acap.asia	bopitk@hotmail.com; garivah@deqp.mail.go.th; hathairatana2009@yahoo.com; nik@forn.upm.edu.my; nik@putra.upm.edu.my; ohizumi@acap.asia; tt_b42@yahoo.com; nyamashita@acap.asia	EBLU, CATMD	sulphur dynamics in forest ecosystems will be studied using sulphur isotopic analysis in different climates, in Malaysia, Thailand and Japan.	Malaysia, Thailand and Japan.	2 years	88,000	44,000
ARCP2011-16FP-Kamal	ARCP2012-19NSY-Kamal	Assessing Climate Change Impacts on Salt Marsh and Sea grass Ecosystems in the South and South East Asian Coasts	Dr. Abu Hena Mustafa Kamal, Senior Lecturer, Department of Animal Science and Fishery, University Putra Malaysia, MALAYSIA.	hena@btu.upm.edu.my	migueldfortes@gmail.com; cmdhus@gmail.com; hsukree@bunga.pn.psu.ac.th; hossainms@yahoo.com; prabhusagar@gmail.com; fred.short@unh.edu;	CC&V, CATMD	This project will investigate how these climate change variables, rising sea level, increase in temperature and in CO <sub>2</sub> levels, and their impacts will affect the sustainability of the goods and services of coastal communities derive from salt marsh and sea grass ecosystems.	Malaysia, Philippines, Bangladesh, India, Viet Nam, Thailand, USA, Korea, Japan.	15 months	45,000	45,000

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborators Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2012/2013 Total Award (US\$)	2012/2013 Yearly Award (US\$)
ARCP2011-29FP-Musafer	ARCP2012-20NSY-Musafer	Sustainable biochar systems in developing countries	Mr. Namiz Musafer, Practical Action Sri Lanka, SRI LANKA.	namiz.musafer@practicalaction.org.lk	tapas.neupane@practicalaction.org.np; saijit@dss.go.th; Sohel.jahmed@ed.ac.uk;	RUSD	This project will carry out original (qualitative and quantitative) research in biochar deployment opportunities in rural Sri-Lanka, Nepal and Thailand.	Sri Lanka, Nepal, Thailand, UK	2 years	45,000	45,000
ARCP2011-18FP-Siswanto	ARCP2012-21NSY-Siswanto	Climate change and human impacts on marine biological production in the Asia-Pacific marginal seas	Dr. Eko Siswanto, Institute of Geospatial Science and Technology, University Teknologi Malaysia, MALAYSIA.	ekosiswanto@utm.my; ekosiswanto68@gmail.com	jishizak@hyarc.nagoya-u.ac.jp; katuhi@affrc.go.jp; anukul@buu.ac.th; tongphuochoangson@gmail.com	CATMD, CCI	This project will endeavour to understand climate change and human impact on long-term biological production, which is only feasible by using remote sensing, is fundamental to sound research and informed policy decision-making to address global change and ensure marine sustainable development.	Malaysia, Viet Nam, Thailand, Korea, Japan	1 year	43,000	43,000
ARCP2011-21FP-Prayitno	ARCP2012-22NSG-Prayitno	Impact of Climate Change on Mangroves Biodiversity in Southeast Asia	Dr. Joko Prayitno, Institute for Environmental Technology, Agency for the Assessment and Application of Technology (BPPT), INDONESIA.	joko2812@yahoo.co.id	m_hartuti@lapan.go.id; mhartuti@yahoo.com; htitin@yahoo.com; kkf@met.gov.my; tinbgarcia@gmail.com; kgarcia@uplb.edu.ph;	CC&V, EBLU	This study will address the study of current and future impacts of climate change on mangrove biodiversity and sustainability of fish production in SEA region. Climate factors such as sea level and extreme weather will be examined to assess their impact on the level of biodiversity on important species, and the sustainability of fish production in the region.	Indonesia, Malaysia, Philippines	1 year	15,000	15,000
ARCP2011-31FP-Crawford	ARCP2012-23NSG-Crawford	Human Responses to Catastrophic Monsoon Events in South Asia: Spatially Explicit Modelling in Low-Lying Coastal Bangladesh and India	Dr. Thomas Crawford, East Carolina University, USA.	crawfordt@ecu.edu	ahsan.ua@gmail.com; allenth@ecu.edu; bradleyd@ecu.edu; curtisw@ecu.edu; amishra@agfe.iitkgp.ernet.in; amishra19@yahoo.com; mitchelsonr@ecu.edu; spremalal@yahoo.com; asalahud@coas.oregonstate.edu; mukherjia@ecu.edu;	CC&V	This research proposes to engage in on-site scoping work that hosts a multi-partner planning workshop and field work to support research that models human responses to catastrophic monsoon events and sea level rise in Bangladesh and India.	USA, Bangladesh, India	1 year	15,000	15,000

## APPENDIX 4: CONTINUED MULTI-YEAR CAPABLE PROJECTS, FINANCIAL YEAR 2012/13

Original Project Reference	New Project Reference	Title	Project Leader	Email	Collaborator Emails	Relevance to 3SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Duration	2012/2013 Awarded
CBA2011-07NMY-Abawi	CBA2012-01CMY-Abawi	Building Scientific Capacity in Seasonal Climate Forecasting (SCF) for Improved Risk Management Decisions in a Changing Climate	Prof. Yahya ABAWI National Climate Centre, Bureau of Meteorology AUSTRALIA	y.abawi@bom.gov.au yahya.abawi@usq.edu.au	simon.white@usq.edu.au; rivaldi@bmg.go.id; rivalntb@yahoo.com; suranamsc@gmail.com; atzganub@gmail.com; fibillones2000@yahoo.com; giashbd@hotmail.com; giash1960@gmail.com, giashbd@hotmail.com	CC&V	The proposed activity aims to provide "hands-on" training to develop in-country scientific capacity in the use of Seasonal Climate Forecasting (SCF) and practical skills in the use of SCF software (SCOPIC and FLOWCAST) for operational use in risk management across climate sensitive industries.	Australia, Bangladesh, Indonesia, Philippines	1 year 6 months	38,000
CBA2011-12NMY-Hasson	CBA2012-02CMY-Hasson	Capacity Building in Advanced Remote Sensing (RS) & Geographic Information System (GIS) Techniques for Studying Snow & Ice Dynamics in Hindu Kush-Karakoram-Himalaya (HKH) Region	Mr. Shabeh UI HASSON Global Change Impact Studies Centre PAKISTAN	shabeh.hasson@gcisc.org.pk shabeh@gmail.com	ghazanfar.ali@gcisc.org.pk; chetao@lzb.ac.cn; rasulpmd@gmail.com; dhguan@lzb.ac.cn; zhangsq@lzb.ac.cn; klshresthal@ntc.net.np; rlax@nsidc.org; racovite@colorado.edu	CC&V, CATMD	The purpose of this project is to build/enhance the capacity of relevant HKH regional institutions to make use of advanced Remote Sensing and GIS techniques to assess the snow and ice dynamics in the HKH region for studying the impact of climate change on Pakistan's freshwater resources by analyzing the time series satellite imagery and other information to quantitatively analyze the changes in the physical dimensions and volumes of major HKH glaciers that feed the major rivers.	Pakistan, China, Nepal, USA, UK	2 years	45,000

## APPENDIX 5: NEW CAPABLE PROJECTS, FINANCIAL YEAR 2012/13

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborator Emails	Relevance to 3SP Science Agenda	Project Summary	Regional Collaboration Countries Involved	Duration	2012/2013 Total Award	2012/2013 Yearly Award
CBA2011-14FP-Rasul	CBA2012-03NMY-Rasul	Impact of Climate Change on Glacier Melting and Water Cycle Variability in Asian River Basins	Dr. Ghulam Rasul, Pakistan Meteorological Department, PAKISTAN.	rasulpmd@gmail.com	dr.bashir70@gmail.com; bashirad@hotmail.com; Sergik1961@yahoo.com; rk18p@yahoo.co.in; rakesh@nih.ernet.in	CC&V, SPL	Through this Project, drought related products will be prepared and shared, capacity building activities undertaken focusing on preparation of dry/wet climatology, indices, utility of numerical weather prediction, and drought advisories for planners and policy makers, and an interface between the users and service providers developed. Training of young scientist responsible for sustained continuity is a top priority.	Pakistan, Japan, Mongolia, Bhutan, Nepal, Uzbekistan	2 Years	80,000	40,000
CBA2011-03FP-Kanie	CBA2012-04NSY-Kanie	The Exploring Effective Architecture for Emerging Agencies in International Environmental Governance	Dr. Norichika Kanie, Tokyo Institute of Technology, JAPAN	Kanie@valdes.titech.ac.jp	ueta@econ.kyoto-u.ac.jp; m.betsill@colostate.edu; young@bren.ucsb.edu; haas@polsci.umass.edu; frank.biermann@ivm.vu.nl; Ruben.Zondervan@esg.lu.se; ykame@nies.go.jp; ichikawa.a.ac@m.titech.ac.jp; puppim@ias.unu.edu; jupesta@ias.unu.edu; ahmad@ias.unu.edu	CCI	To make a new and innovative international environmental architecture, the project intends many scholars and policy-makers from APCs to invite the ESG Tokyo conference 2013. This conference will be held along with ESG international conferences launched in 2009 by the international academic body IHDP.	Cambodia, Thailand, Lao PDR, Vietnam	1 Year	50,000	50,000
CBA2011-11FP-Salinger	CBA2012-05NMY-Salinger	Rise Up: Pacific Futures	Dr Jim Salinger, Antarctic, Climate & Ecosystems CRC, University of Tasmania, AUSTRALIA.	jim.salinger@utas.edu.au	angari@met.gov.c; p.fletcher@auckland.ac.nz; nikamatua@gmail.com	CC&V, CCI	The first two workshops in the Cook Island pilot programme will focus on awareness raising of climate issues, the third on music and the fourth will focus on technologies of dissemination. Youth will produce their own media products that emphasize the need for climate adaptation and regional cooperation. The follow up workshop in Vanuatu will focus on extending these regional links through cooperation with students at the Vanuatu Agricultural College.	New Zealand, Australia, Cook Islands, Vanuatu	2 Years	40,400	22,000
CBA2011-13FP-Zhang	CBA2012-06NMY-Zhang	International Workshop: Needs Assessment for Capacity Development for Integrated Marine Biogeochemistry and Ecosystem Research in the Asia-Pacific Region	Professor Jing Zhang, East China Normal University (ECNU), CHINA.	jzhang@sklec.ecnu.edu.cn	clange@udec.cl; Ed.Urban@scor-int.org; hogawa@aori.u-tokyo.ac.jp; J.hall@niwa.co.nz; Juliet@saeon.ac.za; johnm@uow.edu.au; skidwaipk@gmail.com; sjyoo@kordi.re.kr; naqvi@nio.org; oguz@ims.metu.edu.tr; lobanov@poi.dvo.ru; w.zhu@unesco.org	CATMD, CCI	Marine research requires expensive infrastructure and training which many developing countries cannot afford. This activity will provide a cost-effective and efficient opportunity to synthesise current capacity building efforts, analyse successes or lessons learned and identify whether they meet the requirements for IMBER-related research in the different countries of the Asia Pacific region.	China, Australia, India, Pakistan, Philippines, Korea, Thailand, USA, Chile, South Africa, Turkey	1 Year 7 Months	27,275	27,275

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborator Emails	Relevance to 3SP Science Agenda	Project Summary	Regional Collaboration Countries Involved	Duration	2012/2013 Total Award	2012/2013 Yearly Award
CBA2011-16FP-Fuentes	CBA2012-07NSY-Fuentes	ASEAN Training Workshop on Building Capacity on ABS	Mr. Rodrigo U. Fuentes, Executive Director, ASEAN Centre for Biodiversity (ACB), UPLB, PHILIPPINES.	rufuentes2@aseanbiodiversity.org	-	EBLU	The proposed project aims to address the present pressing need in the ASEAN for capacity building of ABS implementation-related stakeholders specifically to be informed in-depth of the many aspects, e.g. bioprospecting, prior informed consent, mutually agreed terms, fair and equitable benefit sharing, and issues, e.g. scope of genetic resources, ownership, and valuation of the mandated ABS	Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Vietnam and Timor Leste	1 Year	40,000	40,000
CBA2011-05FP-Shang	CBA2012-08NSY-Shang	International workshop on MIS problems in Northwest Pacific region	Mr. Shang Hongbo, NOWPAP DINRAC, Policy Research Center for Environment and Economy, CHINA.	shang.hongbo@prcee.org	lutaenko@mail.primorye.ru; yshira@jamstec.go.jp; hdjeong@nfrdi.go.kr	EBLU, SPL	The international workshop will mainly discuss such issues as the current situation of MIS problem in the NOWPAP region, experiences and good practices on the prevention and control of MIS problems, challenges in prevention and control of MIS problems, and the needs for policies and measures on MIS problems in NOWPAP member states, the necessity and ways of cooperation among NOWPAP member states for the prevention and control of MIS problems in NOWPAP region, etc.	China, Russia, Japan, Korea	1 Year	32,250	32,250
CBA2011-06FP-Hashim	CBA2012-09NMY-Hashim	Global Environmental Change and Human Health: Extreme Events and Urbanization in the APN Region	Dr. Jamal Hisham Hashim, UKM Medical Centre, MALAYSIA.	jamal@unu.edu; jamalhas@hotmail.com	spinil@inweh.unu.edu; 8906ritesh.kumar@wi-sa.org; mfinlayson@csu.edu.au; wangwy@igsnr.ac.cn	CC&V	The proposed UNU-GECHH-APN-EEU is a framework project fostering research and awareness of the impact of global environmental change on human health, and in particular the impact of extreme events (e.g., floods, cyclones) on human health in the urban environment (e.g., via water), within the APN region.	Malaysia, Australia, China, India	2 Years	53,573	53,573
CBA2011-18FP-Zondervan	CBA2012-10NSY-Zondervan	Governing Critical Uncertainties: Climate Change and Decision-Making in Transboundary River Basins	Dr. Ruben Zondervan, Executive Director, Earth System Governance Core Project of IHDP.	ruben.zondervan@esg.lu.se	llebel@loxinfo.co.th, louis@sea-user.org	CC&V, SPL	The proposed project will organize a workshop as means for capacity building of early-career researchers from the Asia-Pacific region to discuss the issues and opportunities for governing critical uncertainties related to climate change and decision-making in transboundary river basins in the region.	All APN countries	1 Year	40,000	40,000
CBA2011-20FP-Sangmanee	CBA2012-11NSY-Sangmanee	Capacity building in terms of using simulated climate scenario and climate change impact assessment on hydrological regime in Se Done Basin, Lao PDR	Mr Chalermrat Sangmanee, Southeast Asia START Regional Center (SEA START RC), THAILAND.	chalermrat@start.or.th	suppakorn@start.or.th	CC&V, CCI	This project will develop capacity of the young scientists from Lao PDR to implement future climate scenarios at local scale by incorporating measured data in the impact assessment on hydrological regime.	Thailand, Lao PDR	1 Year	36,000	36,000

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborator Emails	Relevance to 3SP Science Agenda	Project Summary	Regional Collaboration Countries Involved	Duration	2012/2013 Total Award	2012/2013 Yearly Award
CBA2011-07FP-Cruz	CBA2012-12NSY-Cruz	Enhancing the LGU capacity for implementing conservationa farming village and a strategy for climate change adaptation and upland environment	Prof. Rex Victor O. Cruz, Dean and Professor, College of Forestry and Natural Resources, UP Los Banos, PHILIPPINES.	rexacruz@yahoo.com	wmcarandang@gmail.com	EBLU, RUSD, SPL	The project will capacitate 135 LGU executives (governors, mayors, barangay captains) and their technical personnel (provincial environment and natural resources, provincial agricultural officer, municipal agricultural officer, municipal environment and natural resources officer) and 135 farmers to implement land management technologies that will reduce the vulnerability of cultivated sloping lands to human-induced erosion and extreme rainfall events and enhance the resiliency of the farm-based livelihoods of upland communities amid climate change and variability.	None	1 Year	45,000	45,000
CBA2011-08FP-Bora	CBA2012-13NSG-Bora	Capacity Building in Climate Change Mitigation through Precision Agriculture	Dr. Ganesh C. Bora, Assistant Professor and Interim Director, Agriculture and Biosystems Engineering, North Dakota State University, USA.	ganesh.bora@ndsu.edu	manzul@ait.asia; baruahd@tezu.ernet.in; ksingh@ciae.res.in	CC&V, RUSD, SPL	Precision Agriculture in the USA has greatly contributed in reducing the use of chemicals and fertilizer with positive economic impact and without affecting the productivity. Similar technology with adaptive modifications/customization can be used in developing countries and the policy makers and professionals of these countries could be trained to influence the farmers for such adoption.	USA, Thailand, India	1 Year	15,000	15,000
CBA2011-04FP-Virji/Adingsih	CBA2012-14NSG-Adiningsih	Capacity Building of Climate Change Adaptation on Urban Planning in the Southeast Asia	Dr. Erna Sri Adiningsih, Aeronautics Institute of Indonesia (LAPAN), Indonesia	ernasri@yahoo.com; ernasri@lapan.go.id	FuchsR@eastwestcenter.org	CC&V, CI, SPL	The proposed project is aimed to establish summer schools in SEA region at initial steps to enhance the capacity of lecturers and practitioners (planners) in planning schools to incorporate the issues of climate change adaptation for urban planning, and to develop curricula in planning schools for urban climate adaptation. The topic is very relevant with APN science agenda, particularly Climate Change and Variability, Land Use, and Sustainable Development. Since the project is aimed to develop capacity among lecturers and practitioners in adapting to climate change for urban planning, it is relevant with APN scientific capacity development. It is also relevant with one of the APN Policy Agenda which is to strengthen Science-Policy linkages in addressing global change issues.	All APN Member Countries	3 Year	15,000	15,000
CBA2011-10FP-Hiwasaki	CBA2012-15NSY-Hiwasaki	Capacity-building to strengthen resilience of coastal and small island communities against impacts of hydro-meteorological hazards and climate change	Dr. Lisa Hiwasaki, UNESCO Jakarta Office, Regional Science Bureau for Asia and the Pacific, INDONESIA.	l.hiwasaki@unesco.org	faisal.djalal@gmail.com; shaw@global.mbox.media.kyoto-u.ac.jp; jessica-mercer@hotmail.com	CC&V, CATMD	The proposed activity will facilitate cooperation among scientists and non-scientists in Indonesia, Japan, the Philippines and Timor Leste to develop educational and awareness-raising materials on disaster risk reduction and climate change adaptation by integrating scientific knowledge with local & indigenous knowledge.	Indonesia, Philippines, Japan	1 Year	49,000	49,000

Original Proposal Reference	New Project Reference	Title	Project Leader	Email	Collaborator Emails	Relevance to 3SP Science Agenda	Project Summary	Regional Collaboration Countries Involved	Duration	2012/2013 Total Award	2012/2013 Yearly Award
CBA2011-02FP-Gordov	CBA2012-16NSY-Gordov	Capacity building to study and address climate change induced extremes in Northern Asia	Prof. Evgeny Gordov, Siberian Center for Environmental Research and Training/Institute of Monitoring of Climatic and Ecological Systems SB RAS, RUSSIA.	gordov@scert.ru	aili@mairs-essp.org; Pasha.Groisman@noaa.gov	CC&V, RUSD	The activity includes workshop organization with enlarged young scientists' participation from the targeted region devoted to the study of climate change induced extremes with special emphasize on their manifestations in Northern Asia and role in region sustainable development.	Russia, USA, and China	1 Year	40,000	40,000
CBA2011-17FP-Pradhananga	CBA2012-17NSY-Pradhananga	Preparation of Next Generation Leadership in Sustainability: An Approach in the Asia Pacific Region	Mr. Dhiraj Pradhananga, President, The Small Earth Nepal (SEN), NEPAL,	info@smallearth.org.np; dhirajmet@hotmail.com	mickeyglantz@hotmail.com; dboom@icimod.org; tmahat@icimod.org	CCI	The project aims to capacitate youth through a scientific workshop, facilitate discussions among them on Rio+20 and UNFCCC CoP priority areas; synthesize their responses; take their message to the CoP and Rio+20 meetings through their representatives and supporting organisations; and at the end engage them in developing responses of APY to Rio+20 outcomes.	Nepal, USA	1 Year	44,994	44,994



## **APPENDIX 6: SUMMARY OF SESSION ON APN OPPORTUNITY FUND (AOF)**

The Secretariat Director presented on the Process for Developing Allocation from Opportunity Fund and informed the IGM of the need to exchange views on the process and timeline on how to develop this project. He also requested that the IGM keep in mind the workload of the nFPs and the Secretariat when suggesting activities and consider subregional balance. He further noted that a suggested activity could cover all APN countries.

Dr. Matthews cautioned the IGM about the use of the funds and suggested that a small portion of the funds be used first for two to three activities as an indicator. He also noted that the timeline presented by the Secretariat Director is not realistic as the Secretariat needs time to disseminate this information. He commented that suggested proposal development workshops are core activities and therefore should not be funded by the Opportunity Fund. Regarding the process of selecting activities for the APN Opportunity Fund (AOF), Dr. Matthews suggested that the Steering Committee (SC) meet during the IGM intersessional period in a special session on behalf of the Members and discuss and decide on the allocation of resources on behalf of the IGM as a possible mechanism for the appropriation of the AOF.

He further suggested an ad hoc SC meeting and the possibility of the SC ranking proposals and sending them to nFPs for approval or the IGM allowing the SC to decide on the activities suggested by APN members.

The nFP for China noted Dr. Matthews's proposal of an ad hoc meeting and asked whether the SC is the most appropriate organ to decide on the use of these funds. He also enquired as to whether the AOF must be spent within the present fiscal year and, if not, then whether the issue could be discussed at the following IGM in 2013. The nFP for China also suggested that unsuccessful proponents of ARCP or CAPaBLE projects could be asked to enhance their proposals for reconsideration of funding using the AOF. He also noted that if some activities must be funded before the next IGM, China agreed with the proposed timeline but disagreed with the need for an ad hoc meeting.

Dr. Matthews noted that because the knowledge of the funds arose suddenly in February, the SC felt it best to provide all Member Countries with the information on the AOF so a portion of funds could be utilized immediately if needed, and for the following year, suggestions would be included in the normal timeline. He further clarified that the funds did not need to be spent in a single year.

The SPG Member for Indonesia informed the IGM that the topics of activities that should be proposed under the AOF had been discussed at the SPG Pre-Meeting and presented earlier under Scientific Activities. She noted that these discussions can be used as a guideline by Member Countries that would like to submit a proposal. She also commented that during the IGM, important issues in the region were discussed and any proposals should be consistent with APN's Strategic Plan.

The Secretariat Director noted that, at this stage of the discussions, the Meeting was yet to reach consensus on the timeline for allocation of the AOF.

Dr. Matthews suggested that a subset of the SC could assemble on the 22 July after the Science-Policy Dialogue or the Ecosystems and Biodiversity workshop to look at and create a list of recommendations to disseminate to the membership and additionally with reasons for ranking, which would be sent to nFPs for their approval.

## Appendix 6: Summary of Session on APN Opportunity Fund (AOF)

Mr. Brown clarified that the Secretariat were not requesting formal proposals, just suggestions.

The SPG Member for Japan requested the SC to be more strategic when considering the new activities.

The nFP for China enquired regarding the format of this meeting. The Vice-Chair clarified that this was not an item meeting and assured the nFP for China the meeting was only to discuss the possible activities.

Dr. Matthews commented that it was important to note that the 20th SC meeting discussions on the new funds were still evolving. The SC wanted to ensure that all nFPs were comfortable with the AOF and had the opportunity to provide ideas on important issues in their respective subregions and submit suggestions accordingly. The process detailed in the proposed timeline indicates each member has the opportunity to suggest a strategy and share with the membership and decide on how the funds should be utilized in the first year and in the future.

The Chair further responded to the nFP for China detailing the differences between the US and Japanese funding system. In regard to the proposed timeline, the Chair suggested that ***all Member Countries submit their suggestions after receiving information from the Secretariat. He suggested that the Secretariat disseminate this information as soon as possible.*** The Chair also agreed that the ad hoc meeting should be a regular SC meeting following the Science-Policy Dialogue in Thailand. He further noted that suggestions should fit the APN Strategic Plan; however, suggestions for new activities were welcome. He also suggested that ideas should be sent initially to the Secretariat, who would compile the suggestions and send them for review by the SPG. Any proposals approved by the SPG should be sent to the SC to be reviewed.

### Action: Secretariat

The nFP for China agreed with the Chair's suggestions.

The SPG member for the Philippines suggested that the deadline be extended to May 16 to allow more discussion among Member Countries.

The Secretariat Director assured the IGM that suggestions will be reviewed by Member Countries and not the Secretariat. He also agreed with the suggestion from the Philippines to extend the deadline. The Director informed the IGM that the Secretariat would send the call for suggestions to be submitted to the SC. The Secretariat had no objection to organizing a SC meeting after the Science-Policy Dialogue.

Dr. Matthews clarified that this was based on the recommendation of the nFPs, not the SPG, as it was related to the spending of resources.

Mr. Brown further stressed that everyone involved in the APN had the opportunity to make suggestions regarding new areas, activities, and programmes that the APN could get involved with.

The SPG member for Thailand suggested the creation of an education package with holistic integration such as the one suggested by ICSU. She also noted that, unlike existing APN projects, the suggested project is not research or capacity building but an education package for both young scientists and mid-/senior-level scientists.

The Secretariat Director requested all Member Countries to decide on the general framework of this process. He noted that it was not necessary to decide any concrete projects in the following fiscal year (2012/13); however, concrete ideas on the projects should be decided to submit the suggestion for the following fiscal year. He would like to ask the Member Countries which process they would prefer.

Mr. Brown clarified to the IGM that this was not an either/or scenario. He suggested that the APN should be open to specific programmes or a wide-range of programmes.

The nFP for China expressed his understanding that there was some urgency to utilize some of the AOF and that the APN would like to explore new areas. However, he expressed his doubts that these new activities would be undertaken as there are many suggestions—how would the APN decide which to fund? He agreed that the proposed process is acceptable but limited to following the scope of APN.

Mr. Brown agreed with the nFP for China and assured him that the suggestions could fall within the APN Strategic Plan as it is broad and encompasses many areas. He also commented that there are still new activities that could be undertaken within the scope of APN's mandate and Strategic Plan.

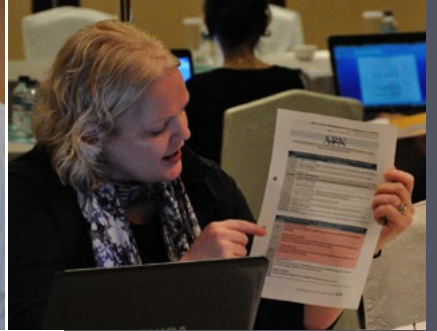
The Chair reiterated that ideas were suggested for this fiscal year and will be submitted to the SC and held in this year. The invited experts were also invited to submit their ideas. The final decision could be submitted to the next IGM.

Dr. Matthews clarified that while suggestions could be for the next IGM, there could also be activities within the present fiscal year.

The SPG Member for Russia suggested the proposed mechanism be tried and see what ideas are submitted. If the process was not successful, then it could still be discussed at the next IGM/SPG Meeting.

The Secretariat Director commented that both the content and the process should be developed further. He suggested that *there be a call for suggestions on the process of choosing the activities as well as the call for suggestions for new activities*. This was agreed.

Action: Secretariat



# Section II

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Opening and Welcome Remarks



# **OPENING REMARKS**

## **BY MS. HERMIEN ROOSITA, EXECUTIVE SECRETARY, THE MINISTRY OF ENVIRONMENT, INDONESIA**

Honourable Dr. Takemoto, APN Secretariat Director,  
Honourable Mr. Sundara Sem, Acting Chair of APN Steering Committee,  
Honourable representatives of the APN Inter-Governmental Meeting and Scientific Planning Group,  
Distinguished guests, ladies and gentlemen,

Assalamu'alaikum wr. wb. A very good morning to you all. It is indeed a great honour and pleasure to welcome you all in Jakarta, a city with beautiful places, most active business and activities which always moves forward for a better future for the people, but also for its significance in the international environmental fora.

I welcome you all with optimism and enthusiasm as about the deliberations and the outcome of this important Meeting. I hope that this Meeting will result in significant outcome for our global efforts to address scientific research, scientific capacity development, science-policy interactions and the alignment of the programmes to the global change community and stakeholders.

Distinguished participants, ladies and gentlemen, it is well understood that it is not easy to determine the bridge and the way to closer the gap between scientist and policy-makers as we are facing in Indonesia. We must explore opportunities to establish connection between the polar. However, for us the importance to fulfil the public need is significant for every policy to be decided. For instance we are putting the future destiny on critical situations when we are not aware to the significant climate changes which influence many aspect of people's life. On these conditions, we need robust scientific input and knowledge which will strengthen the decision-making process, which will ensure that each policy, once decided, is beneficiary to the people and stakeholders.

Distinguished participants, ladies and gentlemen, taking this opportunity, I would like to underline the issues which may be discussed in the APN meeting. One of the important issues is green economy and technology development, which is connected to sustainable development which may be discussed in Rio de Janeiro in June this year. Indonesia has prepared some meetings and produced some important modalities such as solo messages, Bandung Youth Declaration on Sustainable Development and Green Economy.

Our President, H.E. Dr. Susilo Bambang Yudoyono has also announced an emission reduction policy which will voluntarily cut emissions by 26 per cent by 2020 from "business as usual" levels. With international support, Indonesia is ready to reduce as much as 41 per cent by the year of 2020, while at the same time maintaining an annual economic growth of seven per cent. Indonesia has shown its unswerving tread to protect the environment. We take the challenge to do so with the help of scientific and technology approaches in parallel with the decided policies.

We are also looking into the distinct possibility of committing to one billion tons of CO<sub>2</sub> reduction by 2050. We are committed to change the status of our forests from that of a net emitter to a net carbon sink by 2030. As a result, all sectors of development in Indonesia must take into account their adherence to such policies. Of course, every country has different situations. But given the environment threat we face, we are all here having similarities, and hence opportunities to remedy the problems from integrating scientific approaches.

We believe the scientific community can significantly contribute to the establishment of policies which will ensure a better life of our future generations, and this may start from this APN meeting.

Distinguished participants, ladies and gentlemen, from the important goals above, we have to find ways to strengthen the APN vision and mission in all Asia-Pacific countries that may have diverse capacity and modalities. The Network will not be effective if the ownership of the Member Countries were not strongly linked and attached to this vision. This can be generated by the benefit sharing from the fruitful cooperation among Members.

New ideas of global change issues have to be explored from research and development approaches linked directly to the policy- and decision-making system will be important to the future development for APN Network as well as the development in our country. The new idea of research and development also need to be further enriched in order to raise the capacity in every Member Country especially developing ones. As we are well aware, global change issues are different and specific in each region.

However we are also aware that, is not to say that we do not have tasks at hand. Some challenges still remain and need to be addressed properly by scientist and researchers to ensure that our goal to protect human health and the environment against adverse effects resulting from environment changes can be attained in a sustainable manner.

Distinguished participants, ladies and gentlemen, today, we gather here for this meeting to challenge ourselves on tackling many serious problems of our future well-being, and we are confident that this meeting will be enhance our network and cooperation.

In light of this, it is in my view, this meeting can be a turning point for synergy and cooperation of APN members and partners, to enable them to achieve their objectives in a mutually supportive manner.

To conclude, I would like to note that success of this meeting cannot be sustained without continuous support from all of you. My heartfelt thanks, therefore, go to the all distinguished participants, the APN Secretariat, and the organizers, for their contributions in the organization of this meeting. I wish the participants a very fruitful and productive meeting.

I also would like to invite you to explore the uniqueness of the Jakarta city during your stay here.

With this, I would like to declare the 17th Inter-Governmental Meeting and Scientific Planning Group Meeting of the APN officially open.

Wassalamu'alaikum wr. wb.

**WELCOME REMARKS**  
**BY MR. SUNDARA SEM, APN nFP FOR CAMBODIA,**  
**ACTING CHAIR OF APN STEERING COMMITTEE,**  
**HEAD OF DEPARTMENT OF INTERNATIONAL COOPERATION**  
**AND ASEAN, MINISTRY OF ENVIRONMENT, CAMBODIA**

Honourable Ms. Hermien Roosita, APN nFP for Indonesia and Executive Secretary,  
Ministry of Environment, Indonesia;  
Honourable Dr. Akio Takemoto, Director of APN Secretariat;  
Honourable APN delegates;  
Distinguished guests, ladies and gentlemen,

It is a great honour and privilege in my capacity as the APN national Focal Point for Cambodia, and on behalf of the APN Steering Committee, to deliver the welcome remarks on this special occasion of the APN 17th Inter-Government Meeting and Scientific Planning Group Meeting being held here in Jakarta, the beautiful capital city at the heart of Indonesia.

I would like to express my sincere appreciation for the warm welcome and impressive opening remarks by H. E. Ms. Hermien Roosita.

On behalf of the APN Steering Committee, I would also like to take this opportunity to express my sincere gratitude and special thanks to the Ministry of Environment of Indonesia for supporting and hosting the 17th IGM/SPG Meeting which is very important for reviewing and approval the annual financial report and budget for the APN, and reviewing and approval the projects and activities to be undertaken by the APN based on recommendations made by the SPG, with a view to supporting regional cooperation in global change research on issues particularly relevant to the region.

I would also like to take this opportunity to express my deep thanks to all the APN's donors, which include the Government of Japan (through the Ministry of the Environment and Hyogo Prefectural Government) , the Government of USA (through the National Science Foundation and United States Global Change Research Program), the Government of New Zealand (through the Ministry of Environment), and the Government of the Republic of Korea (through the Ministry of Environment), for supporting APN's activities on global change research in the region related to climate, ecosystems, biodiversity and land use, change in atmospheric, terrestrial and marine domains, use of resources pathways for sustainable development as well as crosscutting issues and science-policy linkages. Without them, the APN will not be able to complete and fulfil its duties.

And please allow me to take this opportunity to express my sincere appreciation to nFP and SPG members from all APN Member Countries, members of the Steering Committee and the Capacity Development Committee, as well as all APN Partners and Stakeholders, and of course the APN Secretariat, and all APN colleagues who have worked very hard for the APN and done very well in cooperation with all nFP and SPG members of the APN in information exchange and project implementation. Without them, the APN will not be able to implement activities outlined in its Strategic Plan.



Distinguished delegates, ladies and gentlemen, taking this opportunity, I would like to highlight some of the priorities and key activities of the APN Steering Committee:

The Steering Committee is designed by the IGM to act on behalf of the IGM during the period between the IGMs, to implement IGM decisions, with assistance from the Secretariat, facilitates administrative and management arrangements necessary to implement the programme of activities of the APN, develop funding for the APN and its programmes and activities by encouraging Member Countries to contribute funds or in-kind support, explore potential funding from other sources, and liaise with international global change agencies seeking their support and involvement in the APN activities.

As you are aware, the APN 19th Steering Committee meeting was successfully held from 6 to 7 October 2011 in Phnom Penh, Cambodia, and the 20th Steering Committee meeting was successfully held on 13 March in Jakarta Indonesia, delivering new momentum for the APN to move along more clearly defined scientific and institutional pathway in its achievement of the goals set forth in the Third Strategic Plan, especially in the lead-up to the APN's 17th IGM/SPG Meeting today.

Meanwhile, I am pleased to highlight that the APN Calls for Proposals process in 2011 included the voluntary Advisory Service designed to facilitate prospective project leaders in developing proposal and implementing in line with APN proposal requirements.

The APN found a healthy trend as the number of summary proposal submitted in 2011 has increased notably. The proposal review process was completed with active input from the reviewers, and all the results have been submitted to this IGM/SPG Meeting for consideration and approval, which is an important agenda item of the 17th IGM/SPG Meeting.

Now, at the end of fiscal year 2011/2012, I am delighted to share with you the great news related to the APN Opportunity Fund, which has arisen as a result of accumulated financial surplus. In the light of the expected change of the legal status of IGES (under which administrative management APN Secretariat is operating) to a "Public Interest Incorporated Foundation" under the New Japanese Civil Law from April 2012, MOEJ and IGES Headquarters, as well as the external auditor, in particular, have strongly recommended the Secretariat to consider ways to carefully, effectively and strategically use the resources from such accumulated surplus, as the new law does not approve any surplus that are considered turnovers or profit. Responding to this, the Steering Committee would like to request the IGM/SPG Meeting to provide guidance and recommendations on how to use this accumulated surplus fund effectively.

Taking this opportunity, let me honestly inform you about the APN's core activities related to science, policy, and institutional activities which was considered and approved by the 16th IGM/SPG Meeting in Colombo, Sri Lanka last year in March 2011 were completed successfully based on the action plan and Third Strategic Plan. I myself will present on more details of these activities and report to you later on under Items 2 of the Agenda for this meeting.

I hope that the 17th IGM/SPG Meeting will serves as an enlightened bridge for the practical collaboration and coordination of APN performance and activities to move towards the attainment of APN's Strategic Plan. I am very confident that the outcomes of this meeting will pave the way to the betterment of our cooperation among the APN Member Countries.

Finally, I take this opportunity to wish you all great success and fruitful discussion in this meeting, and to have the very pleasant and joyful stay in Jakarta, Indonesia.

Thank you!

**OPENING REMARKS**  
**BY DR. AKIO TAKEMOTO,**  
**APN SECRETARIAT DIRECTOR**

Honourable Ms. Hermien Roostia, Executive Secretary, Ministry of Environment of Indonesia;  
Honourable Mr. Sundara Sem, Director, Department of ASEAN and International Cooperation, Ministry of Environment, Kingdom of Cambodia,  
Distinguished national Focal Points and Scientific Planning Group members of the APN,  
Invited experts, ladies and gentlemen;

Good morning. My name is Akio Takemoto and I was officially appointed Director of APN Secretariat in July 2011.

At the opening of the APN's 17th Joint Inter-Governmental Meeting and Scientific Planning Group (SPG) Meeting, I would like to express my special thanks to all participants who have travelled far and wide to join this meeting in Jakarta. Second, I would like to express my sincerest appreciation to the Ministry of Environment, Government of Indonesia that hosts this important Meeting here in Indonesia.

I also express my gratitude to Ms. Hermien Roosita, National Focal Point (nFP) for Indonesia, Dr. Erma Sri Adiningsih, SPG member for Indonesia, and the staff of Ministry of Environment of Indonesia and National Institute of Aeronautics and Space (LAPAN) for their excellent and warm-hearted arrangements for this Meeting.

Today reminds me of my first overseas mission trip in 1993 which was to Jakarta. I clearly remember what Jakarta was like and how this beautiful city achieved tremendous economic development while maintaining its valuable nature and culture.

Ladies and gentlemen, just as in most past IGM/SPG Meetings, we have the honour to have many new members here with us today; and I would like to welcome all of you to the APN family.

For those new to the APN, let me briefly explain what the APN is and the objectives of the 17th IGM/SPG Meeting.

Responding to a proposal by the USA in 1990 to create regional networks for North-South scientific cooperation at the inter-governmental level for global environmental change research, the APN was established in 1996 for the Asia-Pacific region, which supports more than half of the world's population.

Since 1999, the APN Secretariat has been relocated to Kobe, hosted by Hyogo Prefectural Government. Today, the APN has 22 Member Countries in total. With the financial contributions from Japan, the USA, the Republic of Korea and New Zealand, we have financially supported numerous scientific research and capacity building projects and activities since 1996.

APN is now implementing global change research activities under the Third Strategic Plan which sets out research priorities for the period between 2010 and 2015. The Third Strategic Plan also sets four goals for the attainment of our mission. Goal 1 is regarding "regional cooperation in global change research". Goal 3 is regarding "scientific and technical capacity development. And Goal 4 is regarding networking with other international

and regional organizations. We, the APN Member Countries, have been making great efforts to achieve these goals by implementing the ARCP and CAPaBLE programmes and other programmes.

I think that among the most challenging is Goal 2, “enhancement of linkage between science and policy”. Based on this recognition, the Secretariat will propose in this meeting several new activities to facilitate the achievement of our goals. I am very much looking forward to discussing these issues.

For example, we are proposing new programmes on low carbon development and on climate change adaptation in the region, both of which are following important decisions made in Cancun, Mexico and Durban, South Africa by the Parties to the United Nations Framework Convention on Climate Change. I believe that these programmes will contribute to the post-Rio+20 process.

Now, the Asia-Pacific region as a whole is undergoing very fast economic growth, at a pace we had never experienced before. However, I feel how vulnerable we are in the face of global change.

Last October, Southeast Asian countries including Thailand and Cambodia were struck by widespread flood, which caused serious impacts on the life of people in these countries but also caused damage to the global economy. Here in Indonesia, we know that forests and peatlands are frequently damaged by fire.

Japan, the host country of the Secretariat, also experienced a lot of severe natural disasters in 2011. A series of strong typhoons hit Japan and caused floods and landslides. And we recall March 11 almost one year ago, when the Great East Japan Earthquake and Tsunami struck large area of Japan. Japan is still facing major challenges of reconstructing the damaged area.

So, there is no doubt that we, all APN Member Countries, must overcome the challenge by enhancing resilience to such global change. I hope this Meeting will work towards a stronger outcome that will better address global change in the region.

Ladies and gentlemen, finally, I would like to conclude by expressing sincere thanks again to the Ministry of Environment, Government of Indonesia for hosting this Meeting.

Thank you very much.



# Section III

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Main Item Papers of the 17<sup>th</sup> APN IGM/SPG Meeting





**DRAFT AGENDA**  
**APN Joint 17<sup>th</sup> Inter-Governmental Meeting (IGM)/**  
**Scientific Planning Group (SPG) Meeting**  
**Jakarta, Indonesia, 14-16 March 2012**

**Day One: Wednesday 14<sup>th</sup> March**

<b>Session One: Opening Session</b>		<i>Document Reference</i> (action)
<i>09:00-09:20</i> (IGM/SPG)	<b>Opening Address by Guest of Honour</b>	
<i>09:20-09:30</i> (IGM/SPG)	<b>Welcome Remarks</b> The APN national Focal Point (nFP) for Indonesia, Ms. Hermien Roosita, will provide welcome remarks and welcome the participants.	
<i>09:30-09:40</i> (IGM/SPG)	<b>Welcome Remarks</b> The Steering Committee Acting Chair, Mr. Sundara Sem, and the APN Secretariat Director, Mr. Akio Takemoto, will welcome participants.	
<i>09:40-10:00</i> (IGM/SPG)	<b>Group Photograph</b> All members, experts, guests and staff have a group photograph taken.	
<i>10:00-10:20</i>	<i>TEA/COFFEE BREAK (20 minutes)</i>	
<b>Session Two: Institutional Issues and Proposed Activities</b>		
<i>10:20-10:40</i> (IGM/SPG)	<b>Participants' Introduction</b> All participants, via a <i>tour de table</i> , will introduce themselves and their affiliation.	
<i>10:40-10:50</i> (SPG observes)	<b>Election of Chair and Vice-Chair</b> IGM delegates will elect a Chair and a Vice-Chair. <u>SPG members, experts and guests observe this session.</u>	
<i>10:50-11:00</i> (IGM/SPG)	<b>Item 1: Adoption of the Draft Agenda</b> The elected Chair of the meeting will seek adoption of the agenda. Items of Any Other Business (AOB) may be raised.	<b>Item 1:</b> <b>IGM-SPG/17/01</b> (for adoption)
<i>11:00-11:20</i> (IGM/SPG)	<b>Item 2: 2011/12 Activities &amp; Action Points</b> The APN Steering Committee (SC) Acting Chair and nFP for Cambodia, Mr. Sundara Sem, with support from the APN Secretariat will report the main highlights and activities of the APN from April 2011 to March 2012.	<b>Item 2:</b> <b>IGM-SPG/17/02</b> <b>IGM-SPG/17/02-App1</b> <b>IGM-SPG/17/02-App2</b> <b>IGM-SPG/17/02-App3</b> (for information)

11:20-11:40  
(IGM/SPG)

**Item 3: APN Membership & Framework  
Framework Document**

Mr. Xiaojun Deng, Programme Officer for Communications & Development will briefly report on APN Membership and introduce new APN Members. The SC will introduce an item related to the Framework Document for further discussion and approval on Friday 16<sup>th</sup> March

**Item 3:**  
**IGM/17/03-01**  
(for information)  
**IGM/17/03-02**  
(for approval on day 3 16<sup>th</sup>  
March 2011)

11:40-12:00  
(SPG observes)

**Item 4: Financial Reports for 2010/11 &  
2011/12**

Mr. Yukihiko Imanari, Executive Manager, will present a final financial report for 2010/11 for approval by the IGM and a draft financial report for 2011/12. SPG members, experts and guests observe this session.

**Item 4:**  
**IGM-SPG/17/04-01**  
**IGM-SPG/17/04-02**  
(for approval)

1200-13:00

**LUNCH (60 minutes)**

13:00-13:20  
(SPG observes)

**Item 5: Budget Plan (2012/13)**

Mr. Imanari will propose the APN 2012/13 budget plan for discussion and approval. SPG members, experts and guests observe this session.

**Item 5:**  
**IGM-SPG/17/05**  
(for discussion and  
approval)

13:20-14:40  
(IGM/SPG)

**Item 6: Proposed Continuing and New  
Activities**

A number of proposed continuing and new activities for 2012/13 will be presented for discussion and approval.

**Item 6:**  
**IGM-SPG/17/06-01**  
**IGM-SPG/17/06-02**  
**IGM-SPG/17/06-03**  
**IGM-SPG/17/06-04**  
**IGM-SPG/17/06-05**  
**IGM-SPG/17/06-06**  
**IGM-SPG/17/06-07**  
(for discussion and  
approval)

1. Progress Report on APN/START Science-Policy Dialogue and the APN Ecosystem Services Framework  
– Dr. Linda Anne Stevenson, Executive Science Officer (10min)
2. Progress Report on Activities in Lead up to Rio+20  
– Dr. Linda Anne Stevenson, Executive Science Officer (10min)
3. Progress Report on UNFCCC SBSTA and Annual Research Dialogues  
– Dr. Andrew Matthews, Invited Expert to the SC (10min)
4. Progress Report on Hyogo-supported New Commons Workshop Series  
– Dr. Akio Takemoto, Secretariat Director (10min)
5. New Focussed Activities: Low Carbon Development  
– Dr. Akio Takemoto, Secretariat Director (15min)
6. New Focussed Activities: Climate Adaptation & Networking  
– Dr. Akio Takemoto, Secretariat Director (15min)
7. New Hyogo Activity: APN/IGES/Hyogo Joint Symposium for Public  
– Dr. Akio Takemoto, Secretariat Director (10min)

14:40–15:00

**TEA/COFFEE BREAK (20 minutes)**



**Session Four: Parallel and Networking Session**

15:10-16:40  
(IGM/SPG)

**Item 7: Parallel Sessions: SRC**

Following a brief introduction on the background of the SRC development, the members will group into their respective sub-regions to discuss issues of mutual importance, action and development from recent sub-regional meetings. The Chairs of the Southeast Asia and South Asia regional committees will report back to the IGM on Friday 16<sup>th</sup> March under Items 10 and 11.

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**Item 7:**  
**IGM-SPG/17/07**  
(for information)

*(Agendas for the Southeast Asia and Southeast Asia SRC Meetings will be provided separately.)*

**17:00-18:00**

**Interactive Session I: Science & Policy**

*(see information provided separately)*

**18:00-19:30**

**Interactive Session II: Networking**

*(see information provided separately)*

19:30

*Free time*

20:00

*APN-hosted Dinner*

----- END OF DAY ONE -----

**DRAFT AGENDA**  
**APN Joint 17<sup>th</sup> Inter-Governmental Meeting (IGM)/**  
**Scientific Planning Group (SPG) Meeting**  
**Jakarta, Indonesia, 14-16 March 2012**

**Day Two: Thursday 15<sup>th</sup> March**

<b>Session IV: Scientific Affairs</b>		<i>Document Reference</i> (action)  <i>Item 8:</i> <b>IGM-SPG/17/08</b> (for information and discussion)  <i>Item 9:</i> <b>IGM-SPG/17/09</b> (for information and discussion)
<i>09:00-9:20</i> <i>(IGM/SPG)</i>	<b>Item 8: APN Climate Synthesis Activities</b> On behalf of the APN Climate Synthesis Team, Dr. Michael Manton, Chair of the APN Climate Synthesis Report and Climate Book, will report to the IGM the progress and plans ahead.	
<i>09:20-10:00</i> <i>(IGM/SPG)</i>	<b>Item 9: Scientific Research and &amp; Capacity Building Priorities</b> On behalf of the SPG and the Capacity Development Committee (CDC), the SPG Co-Chairs, Dr. Erna Adiningsih (SPG Member for Indonesia), and Dr. Madan Lall Shrestha (SPG Member for Nepal), will report to the IGM on scientific research and capacity building priorities for 2012/13 and beyond. They will also announce the results of the SPG-SC election process as well as the election of a new SPG Co-Chair.	
<i>10:00—10:30</i>	<i>TEA/COFFEE BREAK (20 minutes)</i>	
<i>10:30-12:25</i>	<b>Interactive Session III:</b> <b>International Science Community</b> <i>(see information provided separately)</i>	
<i>12:25-12:30</i>	<b>Announcement of Best Poster</b> The IGM Chair or Vice-Chair will announce the Winning Young Scientist. On Day 3 (Item 13), he/she will receive his/her award and have the opportunity to provide a 20-minute plenary presentation.	
<i>12:30—13:30</i>	<i>LUNCH (60 minutes)</i>	
<i>13:30-Late</i>	<i>Field Trip to Bogor and Dinner hosted by the Indonesian Government</i>	

----- END OF DAY TWO -----

**DRAFT AGENDA**  
**APN Joint 17<sup>th</sup> Inter-Governmental Meeting (IGM)/**  
**Scientific Planning Group (SPG) Meeting**  
**Jakarta, Indonesia, 14-16 March 2012**

**Day Three: Friday 16<sup>th</sup> March**

<b>Session V: SRC and Mitra Award for Global Change Research</b>		<i>Document Reference (action)</i>
09:00-9:20 (IGM/SPG)	<b>Item 10: Report from South Asia SRCOM</b> Representative(s) of the South Asia Sub-Regional Committee (SA-SRCOM) will report to the IGM the SA-SRC activities and plans.	<b>Item 10:</b> <b>IGM-SPG/17/10</b> (for information and discussion)
09:20-9:40 (IGM/SPG)	<b>Item 11: Report from Southeast Asia SRCOM</b> Representative(s) of the SEA Sub-Regional Committee (SRCOM) will report to the IGM the SEA-SRC activities and plans.	<b>Item 11:</b> <b>IGM-SPG/17/11</b> (for information and discussion)
09:40-10:00 (IGM/SPG)	<b>Item 12: Discussion on SRC Development</b> The Chair and Vice-Chair will facilitate the discussion on SRC development particularly for other sub-regions.	<b>Item 12:</b> <b>IGM-SPG/17/12</b> (for discussion)
10:00-10:20 (IGM/SPG guests/observers)	<b>Item 13: Mitra Awardee Presentation</b> The IGM will present the award for Best Poster and the Winning Young Scientist will deliver a presentation about his research/work.	<b>Item 13:</b> <b>IGM-SPG/17/13</b> (for information)
<b>10:20–10:40</b>	<b>TEA/COFFEE BREAK (20 minutes)</b>	
<b>Session VI: Recommendations for 2012 Projects</b>		
10:40-12:00 (SPG Observes)	<b>Item 14: ARCP and CAPaBLE Recommendations for Funding</b> On behalf of the SPG and CDC, the SPG Co-Chairs, will recommend ARCP and CAPaBLE Continuing Multi-Year Projects and New Projects for approval by the IGM. <u>SPG members, experts and guests observe this session.</u>	<b>Item 14:</b> <b>IGM-SPG/17/14-01</b> <b>IGM-SPG/17/14-02</b> (for discussion and approval)
<b>12:00–13:30</b>	<b>LUNCH (90 minutes)</b>	
<b>13:30-15:30</b>	<b>Interactive Session IV: Strengthening Engagement with the International Community</b> (see information provided separately)	
<b>15:30–15:50</b>	<b>TEA/COFFEE BREAK (20 minutes)</b>	

**Session VII: 18<sup>th</sup> IGM, Summary and Closing**

<p>15:50-16:00 (IGM/SPG)</p>	<p><b>Item 15: Hosting of IGMs</b> Dr. Takemoto will announce/discuss hosts for the 18<sup>th</sup> and 19<sup>th</sup> IGMs.</p>
<p>15:50-16:00 (IGM/SPG)</p>	<p><b>Item 16: Framework Document</b> The Chair will revisit the Framework Document regards suggested changes by the SC.</p>
<p>16:10-16:50 (IGM/SPG)</p>	<p><b>Item 17: Chairperson’s Summary</b> Members will review and discuss the draft Chairperson’s Summary.</p>
<p>16:50-17:00 (IGM/SPG)</p>	<p><b>AOB, Final Remarks and Closing</b> Chair and Secretariat Director will make closing remarks. Secretariat will provide logistical details, if any.</p>

<p><b>Document Reference</b> (action)</p> <p><b>Item 15:</b> <i>IGM-SPG/17/15</i> (for information)</p> <p><b>Item 16:</b> <i>IGM-SPG/17/16</i> (for discussion and adoption)</p> <p><b>Item 17:</b> <i>IGM-SPG/17/17</i> (for discussion and adoption)</p>
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----- END OF DAY THREE -----

## Summary of Activities since 16<sup>th</sup> IGM/SPG Meeting

This paper summarizes major highlights on the work undertaken by the APN since the 16<sup>th</sup> IGM/SPG Meeting in Colombo, Sri Lanka.

### Project Management

1. Annual Regional Call for Research Proposals (ARCP) Programme: supporting/managing 22 projects (12 new and 10 continuing)
2. Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries Programme (CAPaBLE): supporting/managing 16 new and 2 continuing capacity building (CBAs) projects, 1 continuing comprehensive research projects (CRPs)

*To be discussed under **Item 9***

### Annual Calls for Proposals

3. Launched the 2011 APN Annual Calls for Proposals under ARCP and CAPaBLE Programmes (received 72 Letters of Intent and 95 Summary Proposals)

*To be discussed under **Item 9***

### Synthesis Activity

4. A synthesis report entitled “Climate in Asia and the Pacific: A Synthesis of APN Activities” was published synthesising the work of 56 APN-funded climate projects
5. Following up on the climate synthesis, a climate publication author’s workshop was held in Kobe, Japan from 17–20 October 2011, which brought together main authors for a book/special edition to be published in late 2012.

*To be discussed under **Item 8***

### Sub-Regional Cooperation

6. Organized the Fourth Southeast Asia Sub-Regional Cooperation (SEA-SRC) Meeting and a Climate Downscaling workshop back-to-back with the Proposal Development Training Workshop (PDTW), from 25–29 July 2011, in Hanoi, Viet Nam.
7. Organized the APN Third South Asia (SA) SRC Meeting back-to-back with a Climate Downscaling workshop and a back-to-back PDTW from 16–19 January 2012, in Paro, Bhutan.

*To be discussed under **Item 7***

### Proposal Development Training Workshops (PDTWs)

8. Three PDTWs were organized during 2011/12, including one in Hanoi, Viet Nam, back-to-back with the SEA-SRC meeting; one in Yantai, China, as part of the Young LOICZ Forum that was held in parallel to the LOICZ OSC; and one held back-to-back with the SA-SRC Meeting in Paro, Bhutan.

### Communications and Outreach

9. Continue to produce high quality publications and information materials to raise awareness of APN's activities and achievements as part of the implementation of APN Communications strategy.
10. New features were added to the new APN website; they include:
  - 1) a new content management system that streamlines website maintenance (completed);
  - 2) a database on APN project metadata, as part of the APN Information System (ongoing);
  - 3) a new calendar of events (completed);
  - 4) A new automated email list application (completed).
11. Strengthened APN's social media presence with a view to engage more young/early career scientists and to align with the communication practices of other organizations in the community.
12. Outreach activities: The APN was represented by Members and the Secretariat in various national and international events and showcased APN activities and outputs through presentations and/or booth exhibit. Details are provided below.

*Details provided in IGM-SPG/17/02-02*

*Details provided in IGM-SPG/17/02-04*

### Strengthening APN Institutional Mechanisms

13. Maintaining and enhancing close communication among the APN organs and members and providing the APN Members with useful materials and updates for information and dissemination to their own networks.

### Representation at Selected National and International Events

14. Rio+20 Regional Workshop for Asia and the Pacific, Kuala Lumpur, Malaysia, 16-18 April 2011: Dr. Andrew Matthews and Mr. Yukihiro Imanari.
15. Workshop on Research & Systematic Observations to discuss Policy-Science Interactions, 2-3 June 2011: Dr. Andrew Matthews and Dr. Linda Stevenson
16. 34th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA), Bonn, Germany, 6-16 June 2011: Dr. Andrew Matthews and Dr. Linda Stevenson
17. Science Meeting on IPBES, UNESCO headquarters, Paris, France, 10 June 2011 Dr. Andrew Matthews
18. International Forum for Sustainable Asia and the Pacific (ISAP 2011), Yokohama, Japan, 26-27 July 2011  
Dr. Akio Takemoto (representing IGES), Ms. Lizhier Coralde and Ms. Ratisya Radzi represented the APN at the ISAP 2011 Meeting. APN information materials were displayed and disseminated in a designated exhibition booth.

Full list of events provided in IGM-SPG/17/02-03

Details in APN Newsletter (September 2011)

- |  |   |
|--|---|
| <p>19. <u>EMECS 9 Conference</u>, Baltimore, U.S.A, 28-31 August 2011<br/>                 Dr. Linda Stevenson and Mr. Yuki Imanari organised a special session at the EMECS 9 Conference. Invited experts from China, Japan, Thailand and the United Kingdom (LOICZ) shared information on emerging issues, science-policy gaps, as well as challenges and opportunities faced by several Asian enclosed coastal seas home to megacities. Proceedings is in draft format. A new brochure was produced to showcase APN’s activities related to coastal issues. APN set up an exhibition booth at the conference to further increase our visibility.</p>  | <p>Details in APN Newsletter (September 2011)</p> |
| <p>20. <u>HEAA Symposium and Training Workshop on Forest Restoration</u>, Ulaanbaatar, Mongolia, 12-14 September 2011<br/>                 Dr. Akio Takemoto attended the Training Workshop which brought together more than 50 participants, mainly young students. Dr. Takemoto made a presentation to introduce the APN framework, raising the awareness of the Network among participants of the workshop.</p>   | <p>Details in APN Newsletter (February 2012)</p>  |
| <p>21. <u>LOICZ Young Scientist Forum and Open Science Forum</u>, Yantai, China, 8-15 September 2011<br/>                 A Proposal Development Training Workshop was organized by APN in Yantai, China from 8–9 September 2011, as part of the Young LOICZ Forum which was jointly organized by the Land-Ocean Interactions in the Coastal Zone (LOICZ) and Yantai Institute of Coastal Zone Research (YIC) under the CAPaBLE programme. Attended as resource persons for the 2-day workshop: Xiaojun Deng, Akio Takemoto, Ratisya Radzi as well as SPG Member for China.<br/>                 Twenty-five young scientists/policy makers from different parts of the world participated in the workshop. Speakers and mentors included the Secretariat, APN SPG Member for China, and APN current and past project leaders.</p> | <p>Details in APN Newsletter (September 2011)</p> |
| <p>22. <u>International Symposium on Costs and benefits of REDD+: What, Who, How and When?</u>, Kuala Lumpur, Malaysia, 19-20 September<br/>                 Dr. Akio Takemoto attended the Symposium and presented on “Promoting scientific inputs into REDD plus activities in the Asia Pacific region”. In his presentation, Dr. Takemoto explained APN’s efforts in enhancing the robustness of science and inter-linkages among different disciplines, and stakeholders at different levels. He also provided a summary on APN’s support for collaborative research and capacity building projects related to forests.</p>  |   |
| <p>23. <u>UNFCCC Workshop to Identify Challenges and Gaps in the Implementation of Risk Management Approaches to the Adverse Effect of Climate Change</u>, Lima, Peru, 10-12 October, 2011<br/>                 Dr. Akio Takemoto participated in the workshop and introduced the activities of APN including its Climate Synthesis report. He pointed out that the APN can contribute to improving Disaster Risk Management through research and scientific capacity development on climate changes issues in the Asia-Pacific region</p>   | <p>Details in APN Newsletter (September 2011)</p> |
| <p>24. <u>WCRP Open Science Conference</u>, Denver, Colorado, USA, 24-28 October,</p>  | <p>Details in APN</p>                             |

2011

Dr. Subramaniam Moten and Mr. Xiaojun Deng represented the APN in this conference. An exhibition booth was set up to disseminate APN's new publication, "Climate in Asia and the Pacific".

Newsletter  
(February 2012)

25. 17th UNFCCC COP/MOP7 and related meetings and side events, Durban, South Africa, 28 November to 9 December, 2011

Dr. Akio Takemoto and Mr. Xiaojun Deng represented the APN in this conference. Exhibition was organized in collaboration with the Climate Change Institute, Australian National University, to showcase APN activities, especially climate related activities

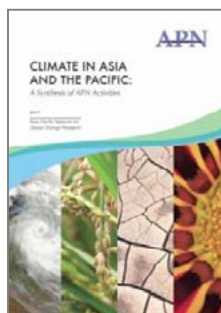
Details in APN  
Newsletter  
(February 2012)



## APN Publications produced/completed since 16<sup>th</sup> IGM/SPG Meeting



**Proceedings of the 16th IGM/ SPG Meeting**



**Climate in Asia and the Pacific: A Synthesis of APN Activities**

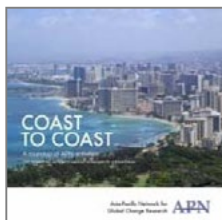


**APN Science Bulletin, March 2012**



**APN Newsletter**  
June 2011  
September 2011  
February 2012

### Information Materials:



**Coast to Coast: A Roundup of APN Activities on Marine and Coastal Research Priorities**  
(Brochure produced for EMECS9 Conference in Baltimore, USA)



**Climate in Asia and the Pacific: A Synthesis of APN Activities**  
(Pullup Banner)

**Press releases**

<b>Month</b>	<b>Title/Topic</b>
July	Akio Takemoto to Join APN Secretariat as New Director APN Fourth Southeast Asia Sub-Regional Cooperation Meeting Kicks Off in Hanoi
August	APN Organizes Special Session at EMECS9 APN at the 3 <sup>rd</sup> ISAP Meeting
September	APN Organizes PDTW in Yantai, China
October	APN Publishes its Climate Synthesis Report for the UNFCCC COP17 in Durban
November	APN Hosts Authors' Workshop for Upcoming Climate Publication
December	APN highlights Climate Synthesis Report in UNFCCC COP17/MOP7 in Durban APN Secretariat Director meets with Secretary of NEC Bhutan during Durban climate talks Venue and dates for APN 17th IGM/SPG Meetings announced
January	Bhutan hosts APN South Asia sub-regional talks New publication: APN Science Bulletin, Issue 2, March 2012

**Work in Progress**

- Annual report 2010/11;
- Brochures/information materials on SCBCIA and APN REDD+ projects;
- Posters/banners for exhibition.

## **APN Representation at Various National/International Fora and Events Organised from April 2011 to March 2012**

1. **GREENHOUSE 2011 Conference**  
Cairns, Australia
2. **Rio+20 Regional Workshop for Asia and the Pacific**  
Kuala Lumpur, Malaysia, 16-18 April, 2011
3. **Workshop on Research & Systematic Observations to discuss Policy-Science Interactions**  
Bonn, Germany, 2-3 June, 2011
4. **34th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA)**  
Bonn, Germany, 6-16 June 2011
5. **Science Meeting on IPBES**  
Paris, France, 10 June, 2011
6. **APN Fourth Southeast Asia Sub-Regional Cooperation Meeting**  
Hanoi, Viet Nam, 25-29 July 2011
7. **International Forum for Sustainable Asia and the Pacific (ISAP 2011)**  
Yokohama, Japan, 26-27 July, 2011
8. **EMECS 9 Conference**  
Baltimore, U.S.A, 28-31 August, 2011
9. **HEAA Symposium and Training Workshop on Forest Restoration**  
Ulaanbaatar, Mongolia, 12-14 September, 2011
10. **LOICZ Young Scientist Forum and Open Science Forum**  
Yantai, China, 8-15 September, 2011
11. **International Symposium on Costs and benefits of REDD+: What, Who, How and When?**  
Kuala Lumpur, Malaysia, 19-20 September, 2011
12. **APN 19<sup>th</sup> Steering Committee Meeting**  
Phnom Penh, Cambodia, 6-7 October, 2011
13. **UNFCCC Workshop to Identify Challenges and Gaps in the Implementation of Risk Management Approaches to the Adverse Effect of Climate Change**  
Lima, Peru, 10-12 October, 2011

14. **APN Authors Workshop for new publication “Climate in Asia and the Pacific: Society, Security, and Sustainability”**  
Kobe, Japan, 16-17 October, 2011
15. **WCRP Open Science Conference**  
Denver, USA, 24-28 October, 2011
16. **LCS-Rnet Workshop on “Low Carbon Asia Research Project”**  
Johor Bahru, Malaysia, 31 October 2012
17. **UNFCCC COP17/MOP7 and related meetings and side events**  
Durban, South Africa, 28 November – 9 December, 2011
18. **APN 3<sup>rd</sup> South Asia Sub-Regional Cooperation Meeting**  
Paro, Bhutan, 16-19 January, 2012
19. **Fifth Belmont Forum Meeting**  
Kyoto, Japan, 16-18 January 2012
20. **APN/DIVERSITAS/IHDP/UNU workshop “Building Resilience with Common Capital: Managing Shared Resources, Meeting the challenges of a rapidly modernizing world under climate and ecosystem change”**  
Tokyo Japan, 23-25 January, 2012
21. **Daejeong Symposium on Apdatation**  
Daejeong, Republic of Korea, 2 February, 2012

## Updates on APN Website

### Background

The APN Communications Strategy endorsed at its 14<sup>th</sup> Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting held in Kuala Lumpur, Malaysia in March 2009 outlines an ambitious roadmap that is necessary to effectively communicate its work within and outside the region, to disseminate the outcomes of APN-supported projects, and to enhance the interactions among the global change (GC) community actors, as well as APN organs.

Among these strategies, improvement of the APN website is considered an important tool not only for promoting APN, its projects and activities, but also for ensuring maximized accessibility to information, which in turn will serve to raise APN's profile in the GC community. ([APN 2005–2010 Evaluation Report](#), p40)

As APN entered its Third Strategic Phase, there was a pressing need for standardized and universally accessible descriptive data on APN-funded projects. In 2011, a draft Data Sharing and Data Management Policy was presented and considered at the 16<sup>th</sup> IGM/SPG Meeting held in Colombo, Sri Lanka in April 2011. Part of the goal of the Data Sharing and Data Management Policy was to ensure open accessibility of the APN project data. Draft Version One of the policy was finalized and implemented in the 2011 Annual Calls for Proposals. ([Proceedings of the 16<sup>th</sup> IGM/SPG Meetings](#), pp147–149)

With the above as the background, the APN Secretariat embarked on the development of a dynamic website that seeks to address the above information and data sharing needs. Work on the APN website is ongoing. At the time of writing, one component, i.e. a dynamic website, was developed and at the final stage of testing. The website was launched on 29 September, 2011. Other components will be addressed in detailed below.

### Current status

**Content Management System.** A dynamic content management system (CMS) has been developed using WordPress, a dynamic and secured open source CMS used by many organizations in the community. The new website features more intuitive navigation structure, higher readability and streamlined management. The url for the new website remains unchanged (<http://www.apn-gcr.org>).

**Events Calendar.** Google Calendar is integrated in the website, and can be viewed directly from the home page as a list of events, or from the Upcoming Events page where more user controls are available. All upcoming APN project events and major activities in the GC community are included in the calendar. The calendar can be accessed through <http://www.apn-gcr.org/google-calendar/>.

**Publications/Project Portal.** A newly developed publication/project portal named “APN E-Lib” was linked to the new website. It provides up-to-date structured metadata on APN projects. The portal was designed to provide a user-friendly interface for visitors to search for publications/projects using

different search criteria, including by topic, publication year, project reference number, and countries involved, among others. It is expected that this portal will be further developed towards becoming part of the APN Information System (APNIS) envisaged in the Data Sharing and Data Management Policy. The E-lib portal can be accessed through <http://www.apn-gcr.org/resources/>

**New EML System.** A new email list application was installed and customized for the easy management of the APN Email List (EML). Online subscription form is provided to automate the subscription/unsubscription process. The database for the EML system can be further customized to handle more targeted messages, such as country-specific messages or group specific messages. The subscription page can be accessed through <http://www.apn-gcr.org/eml/lists/?p=subscribe&id=4>

### Appendix: New features on the APN website

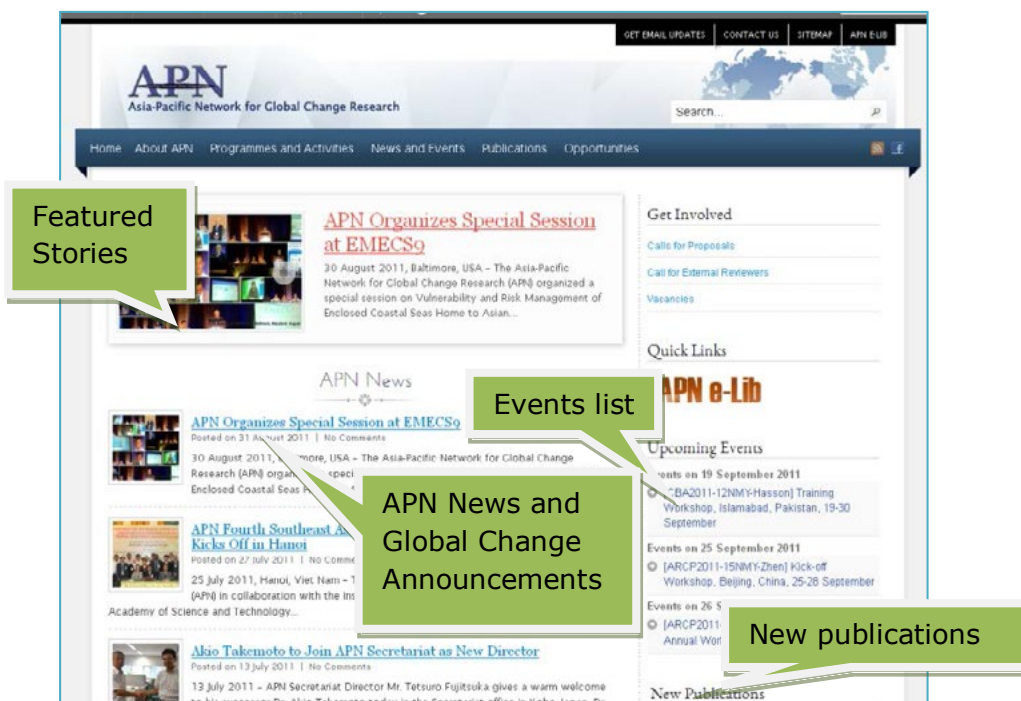


Figure 1. The new home page

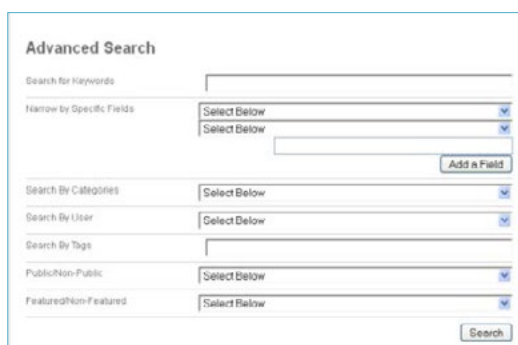


Figure 2. The E-lib portal (<http://www.apn-gcr.org/resources/items/advanced-search>)

## APN Membership

### New APN Members

Following the 16th Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting in Colombo, Sri Lanka, new national Focal Points (nFP) and SPG Members for Cambodia, Indonesia, New Zealand, Republic of Korea, Sri Lanka and Viet Nam were appointed. The following positions remain vacant: nFP and SPG Member for Australia, Fiji, and the United States.

### National Focal Points

#### New

#### Former

#### Indonesia



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**R.H.S. SAMARATUNGA**

Secretary  
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#### Australia, Fiji, United States of America

Identifying nominees is in progress

**SPG Members**

**New**

**Former**

**Cambodia**



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**Australia, Fiji, United States of America**

**Identifying nominees is in progress**



Secretariat Changes

**New**



**Akio TAKEMOTO**  
 Director  
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**Xiaojun DENG**  
 Programme Officer for  
 Communications and Development  
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**Coordinator**

**Position not renewed -  
 new programme fellowship created**



**Ratisya RADZI**  
 Programme Fellow for Science and  
 Institutional Affairs  
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**Taniya KOSWATTA**  
 Programme Fellow for Science and  
 Institutional Affairs  
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**Programme Fellow  
 for Communications and Development  
 Position not renewed**

**Former**



**Tetsuro Fujitsuka**  
 Director



**Perlyn Pulhin**  
 Programme Officer for  
 Communications and Development



**Kristine Garcia**  
 Coordinator



**Erdenesaikan Nyamjav**  
 Programme Fellow for Science and  
 Institutional Affairs



**Lizhier CORALDE**  
 Programme Fellow for  
 Communications and Development

## Proposed Amendments to the Framework Document

On 17<sup>th</sup> January an email was circulated among the national Focal Points (carbon copied to SPG Members) drawing attention to pages 7 and 17 of the Framework Document that provides procedures and guidelines for the Steering Committee (SC).

The entire Framework Document is available as:

**IGM-SPG/17/03-02-App1.Framework Document**

The SC feels that the present wording of certain text highlighted in yellow on pages 7 and 17 does not provide sufficient information on the procedures (p7) and guidelines (p17) in the event that the elected Chair of the SC is unable to attend an SC meeting.

With this in mind and following consultation with some members of the SC, Mr. Louis Brown, Expert Member of the SC, has submitted to the APN Secretariat proposed revisions for your kind consideration.

**On pages 7 (procedures for the SC) and 17 (guidelines for SC members), the original text is highlighted in yellow and struck through and the new proposed text is directly below, shaded in gray.**

Suggested changes to p7 and p17 of the Framework Document are shown in the paper: **IGM-SPG/17/03-02-App2: Suggested Amendments**

Your consideration of these changes is requested, and there will be an opportunity for discussion on the proposed changes with a view to approving the changes in the afternoon of Day 3 of the 17<sup>th</sup> IGM-SPG Meeting under **Item 16**.

## APN Framework Document

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## Framework of the Asia-Pacific Network for Global Change Research

### Rationale

Countries within the Asia-Pacific region support more than half of the world's population, and changes in the Earth's bio-geophysical system are clearly impacting the societies and economies of these countries.

Recent research and supporting observations have provided new insights into some of these changes and their impacts but have, at the same time, opened a number of new and challenging scientific issues and questions. APN seeks to identify these scientific issues to promote, as well as encourage, regional cooperative global change research.

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. APN strives to enable the developing countries of the region to participate increasingly in, and to benefit fully from, cooperative research in the region. APN assures that the research results contribute to the development of sound science-based response strategies and measures, policy- and decision-making processes, and scientific capacity development to address these important issues.

Finally, recognising the interactive role of regional processes in the overall Earth system, the APN also aims to link the initiatives it sponsors with related projects conducted in other regions and under the aegis of global-scale programmes.

### 1. Vision

Enable countries in the Asia-Pacific region to successfully address global change challenges through science-based response strategies and measures, effective science and policy linkages, and scientific capacity development.

### 2. Mission

The mission of the Asia-Pacific Network for Global Change Research (APN) is to enable investigation of change in the Earth's life support systems as it occurs in the Asia-Pacific region. The APN, therefore, supports investigations that will:

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

### 3. Goals

In order to achieve its mission, the APN has identified five goals. Each goal will be achieved as outlined below, particularly through APN-funded activities; these activities are selected from the Annual Regional Call for Proposals (ARCP) process, as well as the APN's capacity development programme, CAPaBLE.

- Goal 1. Supporting regional cooperation in global change research on issues particularly relevant to the region
- Goal 2. Strengthening appropriate interactions among scientists and policy-makers, and providing scientific input to policy decision-making and scientific knowledge to the public
- Goal 3. Improving the scientific and technical capabilities of nations in the region, including the transfer of know-how and technology
- Goal 4. Cooperating with other global change networks and organisations

### 4. Core Strategies

The core strategies of the APN are to:

- i. Promote and encourage research that can improve understanding of global change and its implications for the region, and contribute to sound scientific basis for policy formulation and decision-making;
- ii. Promote and encourage activities that will develop scientific capacity and improve the level of awareness on global change issues specific to the region; and
- iii. Identify and help address, in consultation with policy-makers and other end-users, present and future needs and emerging challenges.

### 5. Membership

- i. Membership is open to all countries in the Asia-Pacific region. The current APN member countries are listed in Appendix 1 (page 12).
- ii. Each member country appoints:
  - a. a national Focal Point; responsible for coordinating national activities and participating in the annual Inter-Governmental Meeting (IGM)
  - b. a global change research expert, who acts as the scientific contact in the respective country and participates in the annual Scientific Planning Group (SPG) meeting
- iii. Following an official governmental written request from a country in the region, this country may become a member subject to the approval of the IGM. A member country may withdraw from the membership of the APN at any time by submitting written notice to the Secretariat.

### 6. Organs

The Organs of the APN are:

- i. the Inter-Governmental Meeting (IGM); a meeting wherein national Focal Points serve as the APN's general policy and decision-making body and approve the operational arrangements and activities for the year
- ii. the Steering Committee (SC); acts on behalf of the IGM between the IGMs
- iii. the Scientific Planning Group (SPG); reviews and recommends, to the IGM, scientific proposals for APN support and provides scientific advice to the IGM
- iv. the Secretariat; maintains the daily operations of the APN and staffs the IGM, the Steering Committee and the SPG

The operations of the APN are subject to the Organisational Arrangements and Procedures formulated by the Inter-Governmental Meeting.

## **Organisational Arrangements and Procedures**

### **A. The Inter-Governmental Meeting**

#### **1. Mandate**

The Inter-Governmental Meeting (IGM), as the APN's general policy and decision-making body:

- i. sets policy for the programmes, finances and other activities of the APN, etc.
- ii. adopts rules and procedures for the APN
- iii. oversees the development and production of the APN's annual operating plan
- iv. reviews and approves the annual financial report and budget for the APN
- v. reviews and approves projects and activities to be undertaken or supported by the APN, based on recommendations made by the Scientific Planning Group
- vi. provides thematic guidance to the Scientific Planning Group, the Steering Committee and the Secretariat
- vii. identifies, approves and keeps under review the implementation of long-term plans, including the APN's Strategic Plan
- viii. carries out regular evaluations and reviews of the Strategic Plan
- ix. performs other functions, as necessary, to achieve the mission and goals of the APN

#### **2. Participation**

- i. National Focal Points, of each member country, may participate in the IGM and may be accompanied by their SPG Members.
- ii. Pacific Island States may be invited to participate in IGM and SPG Meetings and other activities, as appropriate.
- iii. Any non-APN member country that wishes to attend an IGM must indicate its interests to and receive an invitation from the Steering Committee, following consultation with national Focal Points.
- iv. International global change organisations and national and international funding organisations engaged in supporting global change research may be invited by the Steering Committee to send observers to the IGM.

### **3. Meeting Procedures**

- i. The IGM convenes annually/biennially.
- ii. The IGM elects a Chair, usually from the host country, and one Vice-Chair from among the member country delegates.
- iii. The Chair facilitates all sessions of the IGM. He/She may delegate this role to the Vice-Chair, with the agreement of the IGM.
- iv. The Chair (Vice-Chair) ensures orderly and timely conduct of the IGM and that issues are decided by consensus.
- v. All participants may take part in discussions at the IGM; however only member country Focal Points may approve APN policies and programmes.
- vi. The Secretariat maintains a record of the IGM and the Chair's Summary is adopted by the IGM.

## **B. The Steering Committee**

### **1. Mandate**

The Steering Committee (SC) as designated by the IGM:

- i. acts on behalf of the IGM during the period between the IGMs, implementing IGM decisions, with assistance from the Secretariat
- ii. facilitates administrative and management arrangements necessary to implement the programme of activities of the APN. This includes thorough consideration of the APN budget
- iii. consults the national Focal Points regarding the potential attendance of observers as referred to in section A.
- iv. (The following section on "Participation" got messed up somehow while converting the Document for editing. No changes are proposed here) - iii

In particular, the SC guides the Secretariat in:

2. developing funding for the APN and its programmes and activities by encouraging member countries to contribute funds or in-kind support
3. exploring potential funding from other sources, e.g., international agencies and the private sector
4. liaising with international global change agencies and seeking their support and involvement in APN activities.



## 2. Membership

- i. The SC includes:
  - a. three Focal Points elected by the IGM, in addition to one Focal Point from the country to host the next IGM
  - b. the Focal Point from the country to host the next IGM has a one-year term on the SC while the other three Focal Points are elected for a two-year term
  - c. the two SPG Co-Chairs
  - d. if an SPG Co-Chair is also a Focal Point, then another Focal Point will be included
- ii. The SC may co-opt experts as members to participate in SC activities for a term of one-year (renewable).

## 3. Procedures

- i. The SC elects from among its national Focal Points a Chair and Vice-Chair.  
The Chair is responsible, with the assistance of the Secretariat, for managing SC activities.

## C. The Scientific Planning Group

### 1. Mandate

The Scientific Planning Group (SPG):

- i. reviews research proposals received by the APN, especially those in response to the APN annual calls for proposals, and on the basis of this review, recommends to the IGMs approval proposals for APN funding
- ii. recommends themes to be included in the Science Agenda
- iii. works with the Steering Committee and the Secretariat in arranging other scientific activities
- iv. interacts on the APN's behalf with other international research programmes on global change
- v. responds to scientific requests from the IGM or the Steering Committee

### 2. Membership

- i. Each member country of the APN may appoint one member to the SPG.
- ii. Members should be selected for their ability to contribute to development and implementation of APN scientific activities through:
  - a. relevant knowledge of high priority APN science issues;

- b. participation in research or programmes directly related to APN activities;
  - c. capacity to initiate and strengthen science-policy links; and
  - d. availability to participate in the annual SPG meeting.
- iii. A member country may appoint an alternate to participate in SPG activities, including meetings, when the regular SPG Member is unavoidably unavailable.
  - iv. International organisations (such as DIVERSITAS, IAI, IGBP, IHDP, START, WCRP, etc.) and research institutions, involved in global change research activities, may be invited to attend the SPG meeting as observers and to participate in SPG activities.

### **3. Meeting Procedures**

- i. The SPG convenes annually, in conjunction with the IGM.
- ii. The SPG elects two Co-Chairs from among its members. The election is held at the end of the SPG meeting. It is usual for one Co-Chair to be elected from a developing member country and the other Co-Chair to be elected from a developed member country.
- iii. The Co-Chairs are elected for a term of two years; the terms are offset to provide continuity. A Co-Chair whose term is ending remains in office until the end of the IGM.
- iv. A Co-Chair may be re-elected at the expiry of his/her term.
- v. A Co-Chair participates in all SPG relevant meetings, as agreed upon between the two Co-Chairs. If both are absent or otherwise unavailable, another SPG Member participates, at the request of the two Co-Chairs, or with the agreement of the SPG.
- vi. The Co-Chairs are responsible, with assistance from the Secretariat, for the orderly and timely conduct of meetings. The Co-Chairs ensure that SPG issues are decided by consensus.
- vii. The SPG agrees on the processes for the conduct of its activities, including meetings. Observers may participate in SPG discussions and activities.
- viii. The SPG prepares and submits reports of its meetings and activities to the IGM.

### **4. The SPG Sub-Committee**

- i. convenes prior to the SPG meeting
- ii. reviews and prioritises, with the cooperation of the Secretariat, ARCP proposals received for APN funding, for consideration by the SPG
- iii. the SPG Sub-Committee Members are:
  - a. two SPG Co-Chairs (ex officio)
  - b. three other SPG Members, elected by the SPG at its meeting in the previous year

- iv. the SPG Sub-Committee may invite additional representatives to attend its meeting as observers

## **5. The Capacity Development Committee (CDC)**

- i. convenes prior to the SPG meeting
- ii. reviews and prioritises, with the cooperation of the Secretariat, CAPaBLE proposals received for APN funding, for consideration by the SPG
- iii. the CDC members are:
  - a. Steering Committee Chair (ex officio)
  - b. two SPG Co-Chairs (ex officio)
  - c. one donor representative
- iv. the CDC may co-opt up to four experts as members to participate in CDC activities for a term of one-year (renewable) among members with strong link to the International Organisations (such as DIVERSITAS, IAI, IGBP, IHDP, START, WCRP, etc.) and regional programmes that are involved in capacity development activities
- v. the CDC may invite additional representatives to attend its meeting as observers.

## **D. The Secretariat**

### **1. Mandate**

- i. Resources and support for the Secretariat are provided by the host country, including the Central and Local Governments. In addition, the host country provides the services of a senior expert in global change issues, seconded as the Director of the Secretariat.
- ii. The Secretariat:
  - a. facilitates the day-to-day operations of the network;
  - b. provides secretarial support to the organs of the APN; and
  - c. implements IGM, SC and SPG decisions on behalf of these organs.
- iii. The Secretariat operates under the administrative arrangement of the Institute for Global Environmental Strategies (IGES). For further information, refer to Appendix 2 (page 13).

## **7. Financial Arrangements**

- i. The APN maintains a special funding/financial account within the IGES administration. The purpose of this account is to independently administer contributions pledged by member countries and other sources.
- ii. The APN special account is subjected annually to external audit.

- iii. As described in the Secretariat section, D.1.ii., resources and support for the Secretariat are provided by the host country; however this does not exclude other member countries from providing support to the Secretariat.
- iv. Member countries are strongly encouraged to contribute to the budget on a regular and/or project basis.
- v. In-kind support from governments and/or institutions of the member countries is also encouraged. This includes providing human resources, supporting workshops and meetings, particularly the IGM, SPG and SC meetings, and providing equipment.
- vi. APN funds are administered in a transparent and cost-effective manner.
- vii. The Secretariat manages the APN account and presents annual financial reports to the IGM.
- viii. The fiscal year is from April 1 to March 31, the following year.

## **8. Additional Arrangements**

- i. The APN may appoint APN representatives to encourage and promote cooperation between the APN and specific geographic regions/sub-regions in Asia and the Pacific.
- ii. The IGM, SC and SPG may establish small ad-hoc groups for specific tasks such as planning or provision of specialised advice.
- iii. Expected roles of the nFPs, SC Members, SPG Members and the Secretariat are specifically elaborated in the Appendix 3 (pages 14-17) as guidance.

## **9. Language and Records**

- i. English is the official and working language for all IGM, SPG and SC papers and discussions.
- ii. A member country delegate, an observer, or an invited expert may speak at a meeting in a language other than English; however he/she is responsible for providing interpretation in English.
- iii. The Secretariat is responsible for keeping APN records and official papers, and for distributing them to members and interested parties, as appropriate.

## **10. Date and Effect of Amendments**

- i. Amendments to the Framework must be proposed by a member country or the SC and approved by the IGM.
- ii. Proposed amendments and supporting documentation must be distributed to member countries no later than two months prior to the IGM, for consideration.
- iii. Each approved amendment will take effect on the day following the IGM, unless the IGM decides on another date.

## **Appendix 1.**

### **Current APN member countries are:**

Australia  
Bangladesh  
Bhutan  
Cambodia  
China  
Fiji  
India  
Indonesia  
Japan  
Lao People's Democratic Republic  
Malaysia  
Mongolia  
Nepal  
New Zealand  
Pakistan  
Philippines  
Republic of Korea  
Russian Federation  
Sri Lanka  
Thailand  
United States of America  
Viet Nam

### **Note: APN Approved Countries:**

Individuals and organisations in Pacific Island States and Singapore are able to participate in all APN programme activities and are considered to be from an APN Approved Country under the programme membership participation criterion.

## **Appendix 2.**

As of 1 April, 2004, the APN transferred from its former administrative body and now operates under the administrative arrangement of the Institute for Global Environmental Strategies (IGES).

IGES is an independent, non-profit research institute, established in Kanagawa, Japan, in 1998 under the support of the Japanese government. It aims to conduct research on practical ways to protect the earth's environment and to realise greater sustainability and equity in the global community.

The APN's decision-making is independent from IGES. The APN maintains, and separately manages, a special account within the IGES administration. The purpose of this APN special account is to independently administer contributions pledged by member countries and other sources.

The APN's financial report is submitted for external audit by an independent body with an international reputation. Thus, the APN's status will become more robust with the aforementioned financial, legal and administrative arrangements.

### Appendix 3.

#### **Guidance for APN national Focal Points (nFPs)**

National Focal Points (nFP's) are responsible for representing their countries in the activities of the APN, especially their countries' programs and interests in global change research and related activities, e.g., observing systems, data policy and management, and science-driven capacity building. These APN activities include especially the annual Inter-Governmental Meetings (IGMs).

NFPs are looked to prepare effectively for and to participate actively in these meetings/activities and their follow-up. Each nFP is expected to arrange for an annual update on his/her country's APN-relevant global change research and related programs to be presented at the annual IGM.

NFPs are called upon to participate in IGM efforts to identify important issues, evaluate these, consider options for resolving them, and assist the IGM to take decisions to implement them. Such issues could, but are not limited to, setting policy for APN programmes and finances; approval of APN rules and procedures; development and production of the APN's annual operating plan; review and approval of the APN's annual financial report and budget; review and approval of projects and activities to be undertaken or supported by the APN, based on recommendations made by the Scientific Planning Group; providing thematic guidance to the Scientific Planning Group, the Steering Committee and the Secretariat; implementation of long-term plans, including the APN's Strategic Plan, and regular evaluation and review of these. NFPs are the only IGM participants authorised to formally approve or otherwise vote on actions to be taken and are expected to do so.

Each nFP is expected to work closely with his/her country's Scientific Planning Group (SPG) Member to assure consistent participation in both groups.

NFPs are expected to bring to APN activities their experience as scientists, science managers, and government officials. They are expected to maintain close communications with their national scientific communities, scientific institutions, and interested government agencies and to bring the benefits of these communications to the APN meetings/activities in which they participate.

NFPs should be prepared, when called upon, to represent the APN at meetings, workshops and other APN-relevant events and activities.

NFPs are expected to respond to queries and requests from the APN Secretariat on a timely basis.

If an nFP is not able to participate in an APN meeting/activity in which the nFP is representing his/her country, the nFP is expected to designate an appropriate alternate and to do so on a timely basis.

If an nFP is no longer able to serve in such a capacity on a long-term basis, he/she should notify his/her appropriate national authorities and arrange for a successor to be designated and should so notify the APN Secretariat.

An nFP may offer or may be asked to arrange for his/her country to host either the annual IGM/SPG Meetings or other APN activities/meetings.

The nFP from the country that hosts an IGM is normally expected to offer to Chair the IGM. NFPs from other APN member countries may be asked to serve as Vice-Chairs for IGMs and are encouraged to accept such responsibilities when offered.

The Chair is expected to manage the IGM on an effective and timely basis, keeping in mind the need to do so on a fair and open-minded basis; to seek an appropriate balance among the wide variety of interests among the nFPs, SPG Members, and other IGM participants; and, when appropriate, set aside his/her personal scientific, managerial, and/or national official interests. The Chair is strongly encouraged to seek solutions to issues based on consensus.

If the Chair finds it necessary to be absent or is otherwise unavailable (e.g., because of a conflict of interest), a Vice-Chair may be asked to serve as a Co-Chair on an interim basis and, in doing so, to act in accordance with the above guidance.

NFPs from developed countries are expected to seek and to obtain funding from their programs, institutions and/or governments to participate in IGMs and other APN meetings/activities. Other nFPs are encouraged to similarly seek such national funding, but may receive reimbursement for travel, accommodation and daily subsistence, as appropriate, for their participation in IGMs and other APN meetings/activities. However, honoraria are not provided to nFPs for their service in IGM's and other APN meetings/activities.

When representing the APN in a meeting/activity, nFPs are expected to submit a mission report to the APN Secretariat, normally within a few weeks of the completion of the activity.

### **Guidance for Members of the APN Scientific Planning Group (SPG)**

SPG Members are expected to participate actively in the annual meetings and other activities of the SPG. SPG Members should bear in mind that, in this participation, they are expected to bring to bear their personal scientific and scientific management, irrespective of how they were nominated for SPG membership. SPG Members are, of course, welcome and encouraged to share with the SPG information regarding national and/or international science programs and issues that may be relevant to the work of the SPG, but should not advocate in the SPG and its deliberations official positions of the member's program, institution, country, and/or international organisations. Each SPG member is expected to work closely with the national Focal Point (nFP) from his/her country and, in particular, to make sure that the nFP is kept up-to-date on activities and views of the SPG.

SPG activities in which members are expected to participate include, but are not limited to:

- review and evaluation of research proposals received by the APN and the preparation of recommendations to the APN Inter-Governmental Meeting (IGM) for APN funding of appropriate proposals; this could involve serving on various small ad hoc groups that support these activities;
- evaluation and review of the APN Strategic Plan and of themes that the APN may consider appropriate and may select for emphasis in the implementation of this Plan;
- consideration and identification of research-driven capacity building of value to the APN; and
- when called upon, to represent the SPG in other APN activities or with national and/or international programs and organisations with which the APN interacts,



e.g., in meetings, workshops and other APN-relevant events.

If an SPG Member is not able to participate in an SPG meeting, he/she should so notify the APN Secretariat as soon as possible. If an SPG Member is not able to fulfil his/her responsibilities on a long-term basis, for any reason, then he/she should step down and so notify the APN Secretariat immediately so that a new member may be proposed.

The SPG calls upon two of its members to serve as Co-Chairs of the SPG for two-year periods. SPG Members are encouraged to serve in this capacity if asked.

The Co-Chairs are expected to manage the meetings of the SPG on an effective and timely basis, keeping in mind the need to do so on a fair and open-minded basis and to seek an appropriate balance among the wide variety of interests among SPG Members and, when appropriate, set aside their personal scientific interests.

If both Co-Chairs are absent or otherwise unavailable, another SPG Member may be asked to serve as a Co-Chair on an interim basis and, in doing so, to act in accordance with the above guidance.

SPG Members from developed countries are expected to seek funding from their programs, institutions and/or governments for their participation in SPG meetings and other SPG activities. Other SPG Members may receive reimbursement for travel, accommodation and daily subsistence, as appropriate, but honoraria are not provided to SPG Members for their service on the SPG.

When representing the APN in an activity, SPG Members are expected to submit a mission report to the APN Secretariat, normally within a few weeks of the completion of the activity.

### **Guidance for Steering Committee (SC) Members**

Steering Committee (SC) Members, after being selected by the Inter-Governmental Meeting (IGM), are expected to work very closely together and in close interaction with the APN Secretariat to guide the APN in the intercessional period between the IGMs, especially to promote and encourage effective implementation of IGM decisions. SC members are expected to be very proactive and to initiate action to improve the APN program, planning and operations, especially via electronic communications.

SC members may be called upon to participate in SC efforts to identify important issues, evaluate these, consider options for resolving them, and take decisions to implement them. Such issues could include, but are not limited to: administrative and financial management arrangements to implement the APN program; development of funding for the APN and its programs from member countries, international agencies and the private sector, either on a cash or in-kind basis; interacting with the international global change research programs and international intergovernmental and non-governmental organisations; preparation, in cooperation with the APN Secretariat, of an annual operating plan; keeping under review the roles, responsibilities, performance and achievements of the APN using appropriate metrics; and reporting to the IGM and keeping the APN Secretariat informed regarding SC activities.

NFPs are encouraged to serve on the SC when called upon to do so (Note: the two SPG Co-chairs are automatically SC Members). An SC Member who is not able to fulfil his/her responsibilities for any reason should step down so that a new member may be appointed. If an nFP serving on the SC no longer serves as his/her country's nFP,

then the newly appointed nFP for that country is expected to take his/her place on the SC in the capacity of an observer, until the next IGM at which a new SC Member will be selected.

The SC Chair, who is elected by the SC from among its national Focal Points, is expected to manage the IGM on an effective and timely basis, keeping in mind the need to do so on a fair and open-minded basis and to seek appropriate balance among the APN's scientific, scientific management, administrative and financial management interests and, when appropriate, set aside his/her personal scientific, managerial, and/or national official interests. The Chair is strongly encouraged to seek solutions to issues based on consensus.

The SC Chair and other SC Members as well are expected to work closely with the APN Secretariat to represent the APN in a wide range of international meetings and related activities, carrying to these audiences information regarding the APN program, planning and operations; inviting input to the APN program, planning and operations within and from these fora; and encouraging, when appropriate, improved interaction with the APN.

If the Chair finds it necessary to be absent or is otherwise unavailable (e.g., because of a conflict of interest), another SC Member may be asked to serve as an Acting Chair on an interim basis and, in doing so, to act in accordance with the above guidance.

SC Members from developed countries are expected to seek and obtain funding from their programs, institutions and/or governments to participate in SC meetings and related activities. Travel support may be provided for SC Members from developing countries

### **Guidance for the APN Secretariat**

The Secretariat performs the daily operations of the APN and, in particular, assists the IGM, the Steering Committee and the SPG in implementation of the APN's Strategic and Operational Plans; program; budget; and other activities, as appropriate.

The Secretariat is expected to manage as a very high priority the Annual Regional Call for Proposals and CAPaBLE Call for Proposals processes.

The Secretariat is expected to organise and support staff APN Meetings, including the IGM and SPG and SC Meetings. This support should include, but may not be limited to, planning the meetings; carrying out meeting logistics; assisting in their conduct, as needed; and documenting the meetings, especially by keeping records of the Meetings and preparing draft reports as needed.

The Secretariat is looked to assure timely and effective APN communications and to work closely with all of its bodies, with its members (nFPs and SPG and SC Members); with other regional institutions and networks; with the international global change research programs; with policy-makers; with donors and stakeholders; and with the scientific community and the general public (e.g., through newsletters, brochures, the APN website, publications, etc.).

When travelling on behalf of the APN, Secretariat staff will receive reimbursement for travel, accommodation and daily subsistence, as appropriate. Secretariat staffs are expected to submit a mission report, normally within a few weeks of the completion of the activity.

## 2. Membership

- i. The SC includes:
  - a. three Focal Points elected by the IGM, in addition to one Focal Point from the country to host the next IGM
  - b. the Focal Point from the country to host the next IGM has a one-year term on the SC while the other three Focal Points are elected for a two-year term
  - c. the two SPG Co-Chairs
  - d. if an SPG Co-Chair is also a Focal Point, then another Focal Point will be included
- ii. The SC may co-opt experts as members to participate in SC activities for a term of one-year (renewable).

## 3. Procedures

- i. ~~The SC elects from among its national Focal Points a Chair and Vice-Chair.~~

"The SC selects from among its elected national Focal Points a Chair, a First Vice-Chair, and a Second Vice-Chair. Should the position of Chair become vacant, the First Vice-Chair shall become Interim Chair until the next IGM. This procedure shall be followed until the SC can hold a normal election for this post. Similarly, should the position of First Vice-Chair become vacant, the Second Vice-Chair shall become Interim First Vice-Chair. This procedure shall be followed until the SC can hold a normal election for this post."

The Chair is responsible, with the assistance of the Secretariat, for managing SC activities.

## C. The Scientific Planning Group

### 1. Mandate

The Scientific Planning Group (SPG):

- i. reviews research proposals received by the APN, especially those in response to the APN annual calls for proposals, and on the basis of this review, recommends to the IGMs approval proposals for APN funding
- ii. recommends themes to be included in the Science Agenda
- iii. works with the Steering Committee and the Secretariat in arranging other scientific activities
- iv. interacts on the APN's behalf with other international research programmes on global change

SPG Co-chairs are automatically SC Members). An SC Member who is not able to fulfil his/her responsibilities for any reason should step down so that a new member may be appointed. If an nFP serving on the SC no longer serves as his/her country's nFP, then the newly appointed nFP for that country is expected to take his/her place on the SC in the capacity of an observer, until the next IGM at which a new SC Member will be selected.

The SC Chair, who is elected by the SC from among its national Focal Points, is expected to manage the IGM on an effective and timely basis, keeping in mind the need to do so on a fair and open-minded basis and to seek appropriate balance among the APN's scientific, scientific management, administrative and financial management interests and, when appropriate, set aside his/her personal scientific, managerial, and/or national official interests. The Chair is strongly encouraged to seek solutions to issues based on consensus.

The SC Chair and other SC Members as well are expected to work closely with the APN Secretariat to represent the APN in a wide range of international meetings and related activities, carrying to these audiences information regarding the APN program, planning and operations; inviting input to the APN program, planning and operations within and from these fora; and encouraging, when appropriate, improved interaction with the APN.

~~If the Chair finds it necessary to be absent or is otherwise unavailable (e.g., because of a conflict of interest), another SC Member may be asked to serve as an Acting Chair on an interim basis and, in doing so, to act in accordance with the above guidance.~~

"If the Chair finds it necessary to be absent or is otherwise unavailable during a meeting (e.g., because of a conflict of interest), the highest level Vice-Chair present shall serve as Acting Chair for the duration of the Chair's absence/availability. If no Vice-Chair is present, another SC Member may be asked to serve as Acting Chair on an interim basis. The Acting Chair shall, while serving in this capacity, act in accordance with the above guidance."

SC Members from developed countries are expected to seek and obtain funding from their programs, institutions and/or governments to participate in SC meetings and related activities. Travel support may be provided for SC Members from developing countries

### **Guidance for the APN Secretariat**

The Secretariat performs the daily operations of the APN and, in particular, assists the IGM, the Steering Committee and the SPG in implementation of the APN's Strategic and Operational Plans; program; budget; and other activities, as appropriate.

The Secretariat is expected to manage as a very high priority the Annual Regional Call for Proposals and CAPaBLE Call for Proposals processes.

The Secretariat is expected to organise and support staff APN Meetings, including the IGM and SPG and SC Meetings. This support should include, but may not be limited to, planning the meetings; carrying out meeting logistics; assisting in their conduct, as needed; and documenting the meetings, especially by keeping records of the Meetings and preparing draft reports as needed.

## Final Financial Report, Fiscal Year 2010 (01 April 2010~31 March 2011)

	Final Financial Report FY	Approved Budget FY 2010
<b>Resources Available</b>		
Operative Assets from FY 2009	187,000	188,000
Japan		
Ministry of the Environment	2,142,000	2,142,000
Hyogo Prefecture	339,000	339,000
USA	560,000	560,000
NSF/USGCRP		
New Zealand	18,000	18,000
Ministry for the Environment		
Republic of Korea	30,000	30,000
Mnistry of Environment		
<b>Total Resources Available<sup>1)</sup></b>	<b>3,276,000</b>	<b>3,277,000</b>
<b>Use of Resources</b>		
<b>Science, Policy, Institutional Activities</b>		
ARCP	875,000	875,000
CAPaBLE CRP	120,000	120,000
CAPaBLE CBA	490,000	490,000
Ecosystems, Biodiversity, Land Use		
- Call for Proposals	360,000	360,000
- Scoping Workshop	33,500	60,000
- Kobe-Oxford Symposium	0	30,000
Resources Utilisation, Pathways for Sustainable Development		
- Call for Proposals	215,000	215,000
- Scoping WS/International Symposium	0	50,000
Climate Synthesis	30,000	80,000
Proposal Development Training Workshop	20,000	20,000
UNFCCC SBSTA	18,000	10,000
Other International Fora and Activities	33,000	44,000
Hyogo Activities	32,000	50,000
Sub-Regional Cooperation	40,000	40,000
IGM/SPG and SC Meetings	120,000	110,000
Posts (Science, Policy, Institutional)	335,000	330,000
Programme Fellowship	55,000	54,000
Travel	44,000	50,000
Publication & Website	41,000	40,000
Reserve	0	38,000
<b>Sub Total Science, Polisy, Institutional Activities</b>	<b>2,861,500</b>	<b>3,066,000</b>
<b>Administrative/Operative Costs</b>		
Posts (Administration)	49,500	67,000
General operational costs, including supplies and equipment	70,000	80,000
<b>Sub Total Administrative Costs</b>	<b>119,500</b>	<b>147,000</b>
<b>Reimbursement for Services</b>		
IGES Overhead (3% of MOEJ contribution)	64,000	64,000
<b>Sub Total Reimbursement for Services</b>	<b>64,000</b>	<b>64,000</b>
<b>Total Use of Resources</b>	<b>3,045,000</b>	<b>3,277,000</b>
Resources Available Total - Total Use of Resources	231,000	
<b>Total Operative Assets to be rolled over to FY 2011</b>	<b>231,000</b>	

All figures are shown in US Dollars, based on the following exchange rates:

FY 2010                      US\$ 1 = Japanese Yen 95  
 NZ\$ 1 = US\$ 0.72

Interim Financial Report for Fiscal Year 2011 (01 April 2011-31 March 2012)

<b>Resources Available</b>	<b>Approved Budget FY 2011</b>	<b>Interim F-Report FY 2011</b>
Operative Assets from Previous Fiscal Year <sup>1)</sup>	233,000	231,000
Japan Ministry of the Environment <sup>2)</sup>	2,394,000	2,394,000
Hyogo Prefecture	334,000	334,000
U.S.A. NSF/USGCRP	600,000	600,000
New Zealand Ministry for the Environment	18,000	18,000
Republic of Korea Ministry of Environment <sup>3)</sup>	40,000	45,000
<b>Total Resources Available<sup>4)</sup></b>	<b>3,619,000</b>	<b>3,622,000</b>

<b>Use of Resources</b>	<b>Approved Budget FY 2011</b>	<b>Executed Resources</b>	<b>Committed Resources</b>	<b>Uncommitted Resources</b>
<b>Science, Policy, Institutional Activities</b>				
ARCP <sup>5)</sup>	1,240,000	544,000	696,000	0
CAPaBLE CRP <sup>6)</sup>	148,000	0	148,000	0
CAPaBLE CBA <sup>7)</sup>	768,000	549,000	219,000	0
Ecosystems, Biodiversity and Land-Use:				
- Kobe-Oxford Symposium <sup>8)</sup>	50,000	40,000	10,000	0
Resources Utilisation and Pathways for Sustainable Development:				
- Scoping Workshop/International Symposium <sup>9)</sup>	50,000	0	50,000	0
Climate Synthesis <sup>10)</sup>	70,000	66,000	4,000	0
Proposal Development Training WS <sup>11)</sup>	50,000	55,000	0	0
UNFCCC SBSTA <sup>12)</sup>	30,000	22,500	0	7,500
Biodiversity Framework <sup>13)</sup>	40,000	0	40,000	0
Science-Policy Dialogue <sup>14)</sup>	90,000	0	90,000	0
Planet Under Pressure <sup>15)</sup>	100,000	80,000	20,000	0
Hyogo Activities <sup>16)</sup>	105,000	95,000	10,000	0
Rio +20 (Earth Summit 2012) <sup>17)</sup>	40,000	0	40,000	0
Sub-Regional Cooperation <sup>18)</sup>	80,000	53,000	0	27,000
IGM/SPG and SC Meetings <sup>19)</sup>	110,000	120,000	0	0
Posts (Science, Policy, Institutional) <sup>20)</sup>	256,000	311,000	0	0
Programme Fellowship <sup>21)</sup>	61,000	71,000	0	0
Travel <sup>22)</sup>	60,000	84,000	0	0
Publication & Website <sup>23)</sup>	40,000	47,000	0	0
Reserve <sup>24)</sup>	34,000	0	0	34,000
<b>Sub Total Science, Policy, Institutional Activities<sup>25)</sup></b>	<b>3,422,000</b>	<b>2,137,500</b>	<b>1,327,000</b>	<b>68,500</b>
<b>Administrative/Operative Costs</b>				
Posts (Administration) <sup>26)</sup>	55,000	69,000	0	0
General Operational Costs, including Supplies Materials and Equipment <sup>27)</sup>	70,000	53,000	0	17,000
<b>Sub Total Administrative/Operative Costs<sup>28)</sup></b>	<b>125,000</b>	<b>122,000</b>	<b>0</b>	<b>17,000</b>
<b>Reimbursement for Services</b>				
IGES Overhead (3% of MOEI contribution) <sup>29)</sup>	72,000	72,000	0	0
<b>Sub Total Reimbursement for Services</b>	<b>72,000</b>	<b>72,000</b>	<b>0</b>	<b>0</b>
<b>Total Use of Resources and Committed/ Uncommitted</b>	<b>3,619,000</b>	<b>2,331,500</b>	<b>1,327,000</b>	<b>85,500</b>

**Committed Resources for Activities and Projects of FY 2011** 1,327,000

**Uncommitted Resources** 85,500

All figures are shown in US\$.

Exchange Rates Applied:

FY 2011: US\$ 1 = Yen 85  
NZ\$ 1 = Yen 0.72

### Allocation of Committed Resources from FY 2011<sup>31)</sup>

<b>Total Committed Resources from FY 2011</b>	<b>1,327,000</b>
ARCP	696,000
CAPaBLE                      CRP	148,000
CAPaBLE                      CBA	219,000
Ecosystems, Biodiversity and Land-Use: - Kobe-Oxford Symposium	10,000
Resources Utilisation and Pathways for Sustainable Development: - Scoping Workshop/International Symposium	50,000
Climate Synthesis	4,000
Ecosystems Services Framework	40,000
Science-Policy Dialogue	90,000
Planet Under Pressure	20,000
Hyogo Activities	10,000
Rio +20 (Earth Summit 2012)	40,000

## Explanatory Notes for the Interim Financial Report for Fiscal Year 2011 (01 April 2011 ~ 31 March 2012)

### Resources Available:

1. The Operative Assets from FY 2010 decreased by US\$ 2,000 as the total expenditure for the 16<sup>th</sup> IGM/SPG in Colombo, Sri Lanka, in April 2011 increased by this amount to US\$ 120,000.
2. The direct financial contributions from Japan (MOEJ and Hyogo Prefectural Government), US NSF/US-GCRP and the Ministry for the Environment of New Zealand totalled as presented in the Proposed Budget FY 2011 that was presented at the 16<sup>th</sup> IGM/SPG, in April 2011.
3. Republic of Korea announced at the 16<sup>th</sup> IGM/SPG that it will increase its direct financial contribution for FY 2011 by US\$ 5,000 to US\$ 45,000.
4. **The total revenue/resources available in FY 2011 amounts US\$ 3,622,000.**

### Use of Resources:

#### Science, Policy and Institutional Activities:

5. For Annual Regional Call for Proposals (ARCP) US\$ 1,240,000 was allocated. From this US\$ 544,000 was disbursed (as advance payments of 80% of the approved total grants, respectively) to those funded Projects that drew contracts with APN.

#### **US\$ 696,000 must be marked as 'Committed Resources' for:**

- a. **remaining 20% of the grants** of the projects that are kept with APN until the books can be closed;
  - b. some of the projects that were approved for funding at 16<sup>th</sup> IGM/SPG have not drawn the contracts yet. Thus 100% of their grants must be kept aside as 'Committed Resources'.
  - c. **US\$ 387,000 committed to Years 2 and 3 of some multi-year ARCP projects** that were approved for funding by the 16<sup>th</sup> IGM/SPG.
6. For the Comprehensive Research Projects (CRP) US\$ 148,000 was decided. These funds have not been used yet: US\$ 70,000 must be kept aside for one on going CRP that has not received the contract yet. The remaining US\$ 78,000 was originally allocated for a new phase of CRP.
  7. From the approved budget of US\$ 768,000 for Capacity Building Activities (CBA), US\$ 549,000 has been disbursed already. The remaining funds are committed resources until those projects will be finalised in the course of time.
  8. Under the activity titled 'Kobe-Oxford Symposium' the "**Beyond Carbon: Ensuring Justice and Equity in the Operationalisation of REDD+ Across Levels of Governance**" Conference will be held in March 2012 In Oxford. An up-front payment of US\$ 40,000 was made; the remaining US\$ 10,000 is committed, until the whole activity has been conducted.
  9. The allocated funds of US\$ 50,000 for a **Scoping Workshop/International Symposium** related to **Resources Utilisation and Pathways for Sustainable Development** were 'carried over' from Fiscal Year 2010. As the event could not be held in FY 2011, the entire resources must be carried over to FY 2012 as committed funds.



10. A very successful **writing workshop for the scientific book on Climate** was held with international experts in Kobe in October 2011. For this workshop, from the allocated funds of US\$ 70,000, US\$ 66,000 was spent. The remaining US\$ 4,000 should be added to the new proposed budget for this activity in FY 2012 (for the scientific book).
11. **Three Proposal Development Training Workshops (PDTWs) were held in FY 2011:** the first one in Hanoi, Vietnam in July 2011, one in Yantai, China in September 2011 and third one in Paro, Bhutan, in January 2012. All of these training workshops were held back-to-back to other events: in Hanoi and Paro to Sub-Regional Cooperation (SRC) Meetings, in Yantai to “*Young LOICZ Forum*” We spent US\$ 55,000 (compared to the budgeted US\$ 50,000).
12. For showcasing and representing APN at **SBSTAs 34 in Bonn, Germany, and UNFCCC17/SBSTA 35 in Durban, South Africa**, US\$ 22,500 was spent.
13. A follow-up meeting of the **Biodiversity Gap Analysis Workshop** (Tokyo, Japan, February 2011) could not be held yet. The allocated funds of US\$ 40,000 will be used for the renamed “**Ecosystems Services Framework**” meeting in FY 2012.
14. Some committed resources of US\$ 90,000 will be carried over to FY 2012 for the **Science-Policy Dialogue** (in collaboration with START). It is scheduled to be held in **Bangkok, Thailand in July 2012**.
15. US\$ 80,000 was sent to support “**Planet under Pressure**”, a very important event prior to Rio+ 20 Conference in Brazil. The funds will be used to bring in scientists from the Asia-Pacific region. US\$ 20,000 will be kept aside until the books can be closed.
16. Under Hyogo Activities APN has been supporting three activities:
  - a. 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Seas (**EMECS9**), Baltimore, USA, August 2011;
  - b. **Symposium and Training Workshop on Reforestation in Mongolia**, Ulaanbaatar, Mongolia, September 2011; and
  - c. **SATOYAMA – New Commons Workshop**, Tokyo, Japan, January 2012.

From the original budget (US\$ 105,000) US\$ 95,000 was disbursed already; a small portion of US\$ 10,000 is committed funds for SATOYAMA – New Commons Workshop.
17. The funds (US\$ 40,000) for an event related Rio+ 20 will now be allocated for **PROVIA (2012 International Conference on Climate Adaptation), Arizona, USA, May 2012**.
18. The allocated amount of US\$ 80,000 was supposed to be good for four **Sub-Regional Cooperation (SRC) Meetings**, however only two were held, one in Hanoi, Vietnam (July 2011) and Paro, Bhutan (January 2012), both back-to-back to Proposal Development Training Workshop (PDTW). In total US\$ 53,000 was spent.
19. Likely more resources than approved US\$ 110,000 may have to be spent for the conduct of the **Steering Committee (SC) Meetings and IGM/SPG Meeting in FY 2011**. The general trend seems to indicate that due to the increased prices in most of the developing countries in the Asia-Pacific countries and the stronger exchange rates of their currencies towards the US Dollar more funds are needed for the conduct of IGM/SPG Meetings in the future.

20. For salaries and social insurances for Posts for Science, Policy and Institution in the APN Secretariat a total sum of US\$ 311,000 was spent.

Caused by a mistake in the calculation of the allocated funds for this cost item in the proposed budget FY 2011 it appears as if some substantial excess expenditure were made. Based on the calculation of the administrative section of the APN Secretariat, **US\$ 308,000 should have been allocated for Posts (science, policy, institutional)**. Compared to this figure the overspent amount totals US\$ 3,000 which is due to the higher expenses on the salary of the new Programme Officer for Communications and Development. The APN Secretariat sincerely apologises for this mistake.

21. US\$ 71,000 was spent for the very successful **Programme Fellowship**. The increased expenses of about US\$ 10,000 is due to the 4 months (from May to August) at which we had three programme fellows (instead of two) at the same time.
22. Some substantial money was spent for **travelling** of secretariat staff and APN members who kindly represented APN at various events: US\$ 84,000. The trend of increased traveling also mirrors the enlarged acknowledgement of APN in the GC community. Also the airfare of incoming and outgoing Programme Fellows is included here.
23. For the glossy and professionally made **publications and information material** about APN activities US\$ 47,000 was spent. Although this exceeded the approved amount by US\$ 7,000 the investment is well worth as it has helped to strategically display APN's activities among both policy makers and scientists in the global change community.
24. The approved amount of US\$ 34,000 as **reserve** has not been explicitly spent and can be now fed to 'Uncommitted Resources' and can be used wisely in the coming Fiscal Year.
25. **The total disbursed resources for science, policy and institutional activities amounts about US\$ 2.14 Mio.**

Administrative/Operative Costs:

26. For salaries and social insurances of the secretariat **posts for administration** a total sum of **US\$ 69,000** was spent. The wrong impression of the excess expenditure of US\$ 14,000 is due to a mistake in the budgeted amount for this cost item: it should have read US\$ 67,000.

The increase of US\$ 2,000 is due to a temporary staff for 6 weeks from mid-February until the end of March 2012.

27. The total expenditure for the '**General Operational Costs**' including supplies, materials and equipment amounts US\$ 53,000. The breakdown of this amount is as follows:
1. Communications, postage, delivery service: US\$ 25,000
  2. Rental and leasing: US\$ 16,000
  3. Supplies: US\$ 8,000
  4. Utility: US\$ 2,500
  5. Miscellaneous: US\$ 1,500
28. The total disbursed **resources for administration and operative costs amount US\$ 122,000.**

Reimbursement for Services:

29. For the **administrative support the IGES HQ** provides the APN Secretariat an overhead of an amount equal to 3% of MOEJ's contribution must be disbursed. In FY 2011 it amounts **US\$ 72,000**.

Total Use of Resources and Committed/Uncommitted Resources:

- |   |                       |
|---|-----------------------|
| 30. The total amount of <b>already disbursed</b> resources in FY 2011 is: | <b>US\$ 2,331,500</b> |
| The total amount of <b>Committed Resources</b> amounts:                   | <b>US\$ 1,327,000</b> |
| The total amount of <b>Uncommitted Resources</b> is:                      | <b>US\$ 85,500</b>    |

The Uncommitted Resources of US\$ 85,500 will be fed into the **Resources Available of Fiscal Year 2012** as ***“Operative Assets”***.

Allocation of Committee Resources from FY 2011:

31. This list again summarises where the **Committed Resources from Fiscal Year 2011 are allocated for**, to be reimbursed in the new Fiscal Year of 2012.

Proposed Work Programme and Budget Plan, Fiscal Year 2012<sup>1)</sup>

		<u>Column 2</u>	<u>Column 3</u>
		US\$	US\$
<b>Resources: Core Budget and Accumulated Surplus</b>		<b>Core Budget<sup>2)</sup></b>	<b>Accumulated Surplus<sup>3)</sup></b>
MOEJ	Yen 182,115,000 /80	2,276,500	
Hyogo	Yen 25,500,000 /80	319,000	
NSF/USGCRP		540,000	
MOE ROK		50,000	
MfE MZ	NZ \$ 30,000 /1.20	25,000	
Uncommitted Funds from FY 2011		85,500	
<b>Total</b>		<b>3,296,000</b>	<b>2,393,500</b>

Use of Resources

		<u>Column 1</u>		
		<u>Allocated Resources</u>		
ARCP <sup>4)</sup>		1,240,000	1,240,000	0
CAPaBLE	CRP	0	--	--
	CBA <sup>4)</sup>	720,000	720,000	0
Climate Synthesis <sup>5)</sup>		0	0	20,000
Proposal Devlpt Training WS: 3 Sub-Region x 20,000 <sup>6)</sup>		0	0	60,000
SBSTA36 + UNFCCC18/SBSTA37 <sup>7)</sup>		30,000	30,000	0
Rio+20: PROVIA <sup>8)</sup>		60,000	20,000	0
Hyogo Activities <sup>9)</sup>	New Commons	50,000	50,000	0
	Climate Adaptation	130,000	110,000	20,000
	Hyogo/APN/IGES-KRC	40,000	40,000	0
Low Carbon Development <sup>10)</sup>		300,000	300,000	0
Sub-Regional Cooperation: 4 Sub-Region x 20,000 <sup>11)</sup>		80,000	40,000	40,000
IGM/SPG, incl. SC <sup>12)</sup>		0	0	120,000
Posts SC, Inst. <sup>13)</sup>	Yen 29,593,200 /80	370,000	370,000	0
New Coordinator <sup>14)</sup>	Yen 5,298,000 /80		0	66,000
Programme Fellowship <sup>15)</sup>		65,000	65,000	0
Travel <sup>16)</sup>		70,000	70,000	0
Publications <sup>17)</sup>		40,000	40,000	0
Posts Adm. <sup>18)</sup>	Yen 6,118,000 /80	76,500	76,500	0
Accounting Consultant, outsourced <sup>19)</sup>	Yen 630,000 /80		0	7,900
Office Supplies <sup>20)</sup>		55,000	55,000	0
IGES Adm Overhead <sup>21)</sup>	Yen 5,463,450 /80	68,000	68,000	0
<b>Total Use of Resources (Core Budget)<sup>22)</sup></b>			<b>3,294,500</b>	
<b>Reserve (Uncommitted Resources from Core)</b>			<b>1,500</b>	
Return of NSF/USGCRP Grant that was not used up <sup>23)</sup>				170,000
Committed Resources for Unfinished Projects from FY 2010 and Before <sup>24)</sup>				100,000
<b>Total Use from Accumulated Surplus<sup>25)</sup></b>				<b>603,900</b>
<b>New Total Accumulated Surplus<sup>26)</sup></b>				<b>1,789,600</b>

US\$ 1 = Japanese Yen 80

US\$ 1 = NZ\$ 1.20

## Explanatory Notes for the Proposed Work Programme and Budget Plan for Fiscal Year 2012 (01 April 2012 - 31 March 2013)

1. The new format has **three columns**:
  - **Column 1 for the general allocation of funds that are needed to conduct the proposed activities in 2012 (pale blue),**
  - **Column 2 for the Core Budget (pale violet); and**
  - **Column 3 for “Accumulated Surplus” (pale pink).**

The new format is needed to clearly show what activities are supposed to be financed with what resources.

### Core Budget:

2. With the direct financial contributions from Japan (Ministry of the Environment and Hyogo Prefectural Government), the United States of America (National Science Foundation (NSF)/U.S. Global Change Research Programme (USGCRP)), Republic of Korea (Ministry of Environment) and New Zealand (Ministry for the Environment), and a small Operative Assets of US\$ 85,500 from FY 2011, the **total revenue in FY 2012 almost amounts US\$ 3.3 Mio.**

### Accumulated Surplus/Account Balance:

3. **“Accumulated Surplus”**: Due to an inappropriate way of administering the resources that were not used up by the APN funded projects, the bank account of APN shows a **balance of about US\$ 2.4 Mio.**, as of 31 December 2011.

What happened is as follows, in simple words and using an example:

- A project was approved with a grant of US 10,000.
- Before closing this project had concluded completely the Interim Financial Report already of that Fiscal Year reported as if US\$ 10,000 were used up entirely.
- The Final Financial Report, one year later, still showed US\$ 10,000 as the final total amount of expenditure of that project although in reality the project may have closed with US\$ 9,000.
- The unspent funds of US\$ 1,000 has never been properly reported and resulted, with many other projects, in the “Accumulated Surplus”.

Another cause of the surplus is the savings APN has made in conjunction with the management of APN finances in Japanese Yen and US Dollars and the exchange rates between these two currencies.

In the light of the **change of the legal status of IGES** (under which administrative management APN Secretariat is operating) to a **“Public-Interest Incorporated Foundation”** under the new Japanese civil law concerned, in April 2012, MOEJ and IGES headquarters, as well as the external auditor, in particular, **have strongly recommended the secretariat not to accept the situation but consider ways of how carefully, but effectively and strategically use the resources from the “Accumulated Surplus”** – the new law does not basically approve any surplus that could be considered as turnovers and/or profit. Responding to this the APN Secretariat wants to suggest some activities to be funded with these resources, as seen under Column 3: Accumulated Surplus.

### Use of Resources:

4. In FY 2012, for **ARCP (US\$ 1,240,000)** and **Capacity Development Projects (CBA) of the CAPaBLE Programme (US\$ 720,000)** the same level of resources are allocated, taking into consideration and remembering that these two mechanisms of providing financial support remain the strongest pillars of APN activities. The resources allocated are from 2012 core budget.
5. Climate Synthesis: after the successful writing workshop in October 2011 and the publication of an informative report "*Climate in Asia and the Pacific – A Synthesis of APN Activities*" the authors and the secretariat are now concentrating on publishing a **scientific book**. For the publication (with the *International Publisher Springer*) US\$ 20,000 is allocated from the accumulated surplus.
6. **Proposal Development Training Workshop**: for this activity, well established and accepted by the member countries in the meantime, US\$ 60,000 (US\$ 20,000/ workshop for each of three sub-regions) is allocated from the accumulated surplus.
7. **UNFCCC-SBSTA** meetings, being excellent fora for exchanging views and showcasing APN US\$ 30,000 from the core budget is allocated for the participation of APN members/secretariat staff at SBSTA Meetings 36 and 37.
8. US\$ 40,000 that was allocated in FY 2011 approved budget for "Rio+ 20 (Earth Summit 2012)" and additional US\$ 20,000 from FY 2012 core budget are now proposed for **PROVIA (2012 International Conference on Climate Adaptation)**, Arizona, U.S.A., May 2012 (<http://www.provia-climatechange.org/>).
9. From the direct financial contribution from Hyogo Prefectural Government following activities are proposed:
  - **SATOYAMA and New Commons (Year 2)**: US\$ 50,000;
  - **Climate Adaptation Programme**: US\$ 110,000 (US\$ 60,000 from the contribution from Hyogo Prefectural Government, US\$ 50,000 from other sources within the core budget. Additional US\$ 20,000 from the accumulated surplus could be allocated for another Proposal Development Training Workshop (PDTW).
  - **Hyogo/APN/IGES-KRC Symposium** on climate change mitigation measures and CO<sub>2</sub> emission reduction: US\$ 40,000.
10. **Low Carbon Development**: in order to strengthen the capabilities of scientists and practitioners in the developing countries in low carbon and green growth strategies US\$ 300,000 from the core budget is proposed for a new **three-year Low Carbon Development Programme**.
11. **The Sub-Regional Cooperation (SRC) Meetings** have become a useful tool to actively involve APN members in discussions on global change issues that are most relevant to the sub-regions, respectively. An allocation of US\$ 80,000 from the accumulated surplus is proposed in order to enable the four sub-regions to hold SRC Meetings, if they wish to do so. US\$ 40,000 each will be born from both the core budget, as well as the accumulated surplus.
12. US\$ 120,000 from the accumulated surplus is proposed for the conduct of the mid-year **Steering Committee (SC) Meeting and 18<sup>th</sup> IGM/SPG Meetings**.
13. For **Posts (science, policy and institutional activities)** about Japanese Yen 30 Mio. is needed. This amounts equals to US\$ 370,000, using an exchange rate of US\$ 1 = Yen 80.

14. **New staff**, a new 'Coordinator', is urgently needed, in order to properly implement some **new important activities on science-policy dialogue and linkage**, such as Climate Adaptation Programme and Low Carbon Development Programme as seen above. Resources allocation: US\$ 66,000 from the accumulated surplus.
15. In order to provide two young professionals with the opportunity of receiving on-the-job-training in running an international organisation US\$ 65,000 for the **Programme Fellowship** is proposed. Source: core budget.
16. Responding to the increased acknowledgement of APN, invitations and requests of presence at numerous GC events US\$ 70,000 from the core budget is proposed to be used for **traveling** and participation of APN members and/or secretariat staff in these events.
17. Glossy **publications** are crucial for showcasing APN at various occasions. While resources could be saved by in-house desk top publishing, US\$ 40,000 from the core budget is suggest for allocation for professional information material by outside printing companies.
18. Proposed resources allocation for the **posts in the administration** section of the APN Secretariat amounts US\$ 76,500 (approximately Yen 6.1 Mio.) from the core budget.
19. **"Accounting Consultant"**: Having seen the very complex issues of finances the secretariat is dealing with, some guidance and assistance from experts are urgently needed. While it is not necessary to hire an accountant in a full time basis the secretariat wants to suggest looking for an external expert who could help us on a periodical basis. Proposed allocation of resources from the accumulated surplus: US\$ 7,900.
20. The amount disbursed for office supplies in FY 2011 was US\$ 53,000. For the new Fiscal Year 2012 we propose to allocate US\$ 55,000.
21. 3% of MOEJ's contribution will be transferred to IGES for the administrative support it provides APN with: US\$ 68,000 in FY 2012.
22. **The total amount of allocated resources from the core budget in FY 2012 is US\$ 3,294,500. A minimal amount of US\$ 1,500 is not allocated.**
23. **"Return of NSF/USGCRP Grant that was not spent up"**: Any funds that are not spent up from the NSF/USGCRP direct financial contribution must be returned. **For projects, approved for funding with funds from NSF/USGCRP in FY 2008 and FY 2009 a sum of US\$ 170,000 will be returned.**
24. **As there are some projects, approved for funding before FY 2011, are not finalised yet, some US\$ 100,000 must be marked as committed funds** from the accumulated surplus.
25. **The allocation of some resources from the accumulated surplus totals US\$ 603,900.**
26. **Subject to the condition of approval** of the presented Work Programme and Budget Plan for FY 2012 the total amount of the accumulated surplus will **decrease from US\$ 2,393,500 to US\$ 1,789,600.**

**It should be stressed that the financial management of the APN are duly incorporated in the overall financial statement of IGES and audited and certified by the external auditor Shin-Nihon, the Japanese partner of Ernest & Young, to be complete and correct.**

## **Proposed New & Continuing Activities**

*NOTE: While the new budget for 2012/13 is to be presented under Item 5, the IGM will not seek approval of the budget until after the following items have been presented and endorsed.*

The present paper lists the proposed continuing and new activities and requested budget for the period April 2012 to March 2013. The seven activities below will be presented independently and more information is available in the attached sub-item papers.

### **IGM-SPG/17/06-01: Southeast Science Policy Dialogue & Ecosystems Services Framework**

*Presented by: Dr. Linda Stevenson, Executive Science Officer, APN Secretariat* Time Allocated: 10min

Budget secured from 2011/12: US\$90,000 for the Science Policy Dialogue & US\$40,000 for Ecosystem Services Framework

Budget requested from 2012/13 Finances: US\$ZERO

### **IGM-SPG/17/06-02: PROVIA Climate Adaptation Futures Conference in the lead up to Rio+20**

*Presented by: Dr. Linda Stevenson, Executive Science Officer, APN Secretariat*

Time Allocated: 10min

Budget secured from 2011/12: US\$40,000 for Rio+20 Activity

Budget requested from 2012/13: US\$20,000 to showcase APN activities at Rio+20

### **IGM-SPG/17/06-03: UNFCCC/SBSTA and Annual Research Dialogue with the Parties**

*Presented by: Dr. Andrew Matthews, nFP/SPG Member for New Zealand*

Time Allocated: 10min

Budget requested from 2012/13: US\$30,000

### **IGM-SPG/17/06-04: Series of Hyogo Workshops on New Commons**

*Presented by: Dr. Akio Takemoto, APN Secretariat Director*

Time Allocated: 10min

Budget requested from 2012/13: US\$50,000

### **IGM-SPG/17/06-05: New Focussed Activities on Low Carbon Development**

*Presented by: Dr. Akio Takemoto, APN Secretariat Director*

Time Allocated: 10min

Budget requested from 2012/13: US\$300,000

### **IGM-SPG/17/06-06: New Focussed Activities on Climate Adaptation in Support of the Cancun Framework**

*Presented by: Dr. Akio Takemoto, APN Secretariat Director*

Time Allocated: 10min

Budget requested from 2012/13: US\$130,000

### **IGM-SPG/17/06-07: New Hyogo Activity: APN, Hyogo and IGES Local Symposium**

*Presented by: Dr. Akio Takemoto, APN Secretariat Director*

Time Allocated: 10min

Budget requested from 2012/13: US\$50,000



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## Continuing/New Proposed Activities: Southeast Asia Science Policy Dialogue & Ecosystems Services Framework

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### 1. Southeast Asia Science Policy Dialogue

Since the initial discussions that was followed by endorsement by the 16<sup>th</sup> IGM on a potential series of Science-Policy dialogues in the Asia-Pacific region co-organized by APN and START, developments to realize the first Southeast Asia Science-Policy Dialogue in that:

1. Budget of US\$90,000 is secured
2. Dates for the SP dialogue have been fixed as July 19-21, 2012
3. Logistics will be jointly carried out between the APN Secretariat and the START Secretariat with assistance from the START Southeast Asia Regional Hub.
4. Discussions on the SEA dialogue and its contents took place at the 4<sup>th</sup> SEA-SRC Meeting held in Vietnam in July, 2011 followed by additional discussions at the 19<sup>th</sup> SC meeting, held in Cambodia in October, 2011. The results of both meetings are detailed below for information.
5. The latest version of the Terms of Reference that was circulated among all stakeholders is available as ***IGM-SPG/17/06-01-Appendix1***
6. During the 7<sup>th</sup> SPG Pre-Meeting to be held on Tuesday 13<sup>th</sup> March 2012, discussion will take place on the most recent Terms of Reference, most importantly the structure of the Science-Policy dialogue and engage the commitment from the SPG members to assist in ensuring that their respective countries are well represented from both the science and policy perspective. The results will be reported to the IGM under the present item.

### 2. Ecosystem Services & Links to Green Growth & Sustainable Development

Following discussions at the recent 19<sup>th</sup> APN Steering Committee held in Phnom Penh, Cambodia, October 2011, a brainstorming session to discuss the outputs of the APN workshop held in January 2011 in Tokyo was held. The following was agreed upon:

#### *APN Framework on Ecosystem Services & Links to Green Growth and Sustainable Development*

- Development of the “framework” is to be considered in the context of resilient and sustainable ecosystem services.
- The report developed at the January 2011 scoping workshop (see ***IGM-SPG/17/06-01-Appendix2***) will be revised to integrate the science-policy and capacity building sections into the four research themes. Relevance to and alignment with IPBES will be considered taking into account the outputs of the meeting currently taking place in Nairobi, Kenya, and incorporated, as appropriate, into the framework document.
- *This is a timely and important topic for policy-makers and therefore APN should consider a workshop back-to-back with the SEA SP dialogue (date to be determined).*
- It is envisaged that the results from the Workshop will be presented to the 18<sup>th</sup> IGM with a view to highlighting “high priority” topics for funding by the APN. Mechanisms for funding (focused activities/standard ARCP/CAPaBLE programmes) might well be considered.
- Any endorsed topics should be incorporated into the 3<sup>rd</sup> strategic plan and procedure to do this would be discussed at the SPG Pre-Meeting.

Noting that a budget for the next workshop was reserved at the 16<sup>th</sup> IGM-SPG Meeting of US\$60,000, the 7<sup>th</sup> SPG Pre-Meeting to be held on Tuesday 13<sup>th</sup> March 2012, will discuss the above as well as the possibility of convening a workshop back to back with the SEA Science-Policy Dialogue.

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## **Item 06-02: Continuing Activity Activities for Rio+20**

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**2012/13 Budget Requested:** US\$20,000 for Rio+20 Dissemination of APN activities

2011/12 Budget Committed: US\$40,000

**TOTAL: US\$60,000**

### **CAPaBLE (WSSD Partnership II Initiative) and Climate Adaptation**

The APN's Scientific Capacity Development Programme, CAPABLE, was born from World Summit for Sustainable Development (WSSD) Conference in Johannesburg in 2002, and subsequently registered with the UNCSD as a "Partnership II Initiative" with the UNCSD. In attempt to showcase the results of CAPaBLE, particularly the most recent Focussed Activities on Climate Change, an amount of US\$40,000 was committed from the 2011/12 budget for a potential Rio+20 activity.

Noting the opportunity to showcase its climate adaptation and partnership activities with the recently formed PROVIA, the APN submitted a SESSION ABSTRACT for the second "Adaptation Futures" PROVIA Conference (The first was organized by CSIRO Adaptation Flagship, Gold Coast, June 2010 and attracted over 1000 people – APN presented an SCBCIA poster).

The aim of the session is to showcase both CAPaBLE Partnerships under Climate Adaptation as well as the results of the recent Focussed Activities on Scientific Capacity Building for Climate Vulnerability, Impacts and Adaptation (SCBCIA), which were completed in 2011.

*The outcome of this specific session will be a policy brief for Rio+20, showcasing the APN's commitment to the CAPaBLE programme and capacity building for sustainable development, as well as its strengthening partnerships for sustainable development in the region. More details on the session and invited speakers (from the APN SCBCIA programme, the CAPaBLE CRP programme, UNCECAR, ICAS) is available on pp2-7.*

### **What is PROVIA?**

The Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA) is a global initiative which aims to provide direction and coherence at the international level for research on vulnerability, impacts and adaptation (VIA). Launched with the support of leading scientists and decision-makers, PROVIA responds to the urgent call by the scientific community for a more cohesive and coordinated approach, and the critical need to harmonize, mobilize, and communicate the growing knowledge-base on VIA.

To this end, PROVIA will act as a new and growing network of scientists, practitioners and decision-makers working towards identifying research gaps and meeting policy needs in climate change vulnerability, impact and adaptation research.

Acknowledging emerging policy strategies, new scientific developments and lessons learnt from past programmes, PROVIA promises to deliver, in collaboration with its implementing partners, improved coordination of international research on the impacts of and responses to climate change, and provide the credible scientific information that is being increasingly requested by the world's decision makers.

**APN Session Abstract for PROVIA  
“Adaptation Futures” Conference 29-31 May 2012, Arizona University, USA**

**Networking Beyond Rio+20:  
Climate Adaptation Partnerships for Sustainable Development  
(90-minute session)**

**1. Abstract**

The need for climate change adaptation is increasingly recognized by communities, with an initial focus on assessing vulnerabilities and identifying adaptation options. The complexity of adaptation due to the multidisciplinary nature of the required solutions and the lack of long-term data pose a great challenge, particularly in the Asia-Pacific region. Approaches at the grass-roots levels (including the identification of local champions) that involve communities and local governments to incorporate climate change adaptation practices into development planning will be needed, and Integrated Assessment Models (IAMs) will need to be customized for local to regional and sectoral levels. This session, fully funded by the Asia-Pacific Network for Global Change (APN), focuses on the importance of partnerships and networking to facilitate the adoption of local to regional-based adaptation strategies. Encompassing a range of activities funded by the APN, the session highlights the need for collaboration among a range of stakeholders to ensure the most appropriate responses to the impacts of climate change.

**2. Speakers:**

<u>Role</u>	<u>Name</u>	<u>Affiliation</u>
<b>Moderator:</b>	Linda Anne Stevenson	APN; Japan
<b>Speakers:</b>	Akio Takemoto	APN; Japan
	Nobuo Mimura	ICAS; Japan
	Srikantha Herath ( <a href="#">ARCP</a> )	UNU-ISP (UNCECAR); Japan
	Kafeer Salik ( <a href="#">CAPaBLE</a> )	SDPI; Pakistan
	Juan Pulhin ( <a href="#">SCBCIA</a> )	UPLB, Philippines
	Chuluun Togtohyn ( <a href="#">CAPaBLE</a> )	DPI, Mongolia
	Hoh Minh Duc ( <a href="#">SCBCIA</a> )	HUS, Viet Nam
	S.V.R.K. Prabhakar ( <a href="#">CAPaBLE CRP</a> )	IGES, Japan

**3. Program:**

**A: IMPORTANCE OF PARTNERSHIPS FOR SUSTAINABLE CLIMATE ADAPTATION SCENARIOS**

**- Opening & Overarching Statements (15 minutes):**

- Introduction to Session and Speakers: Dr. Linda Anne Stevenson
- *Professor Nobuo Mimura, Ibaraki University (Talk on ICAS Adaptation Networking)*
- *Professor Srikantha Herath, UNU-ISP (Talk about UN-CECAR Adaptation Research)*

- **APN's Future Climate Adaptation Strategies in Asia and the Pacific (10 minutes)**

- Dr. Akio Takemoto, APN Secretariat Director

**B: BEST PRACTICE EXAMPLES FROM APN ACTIVITIES THE ASIA-PACIFIC REGION (50 MINUTES)**

- **LOCAL SCIENTIFIC CAPACITY BUILDING FOR ADAPTATION (30 minutes)**

- **Scientific Capacity Building for LGUs in the Philippines (Pulhin)**  
— *Professor Juan Pulhin*
- **Scientific Capacity Building for Drylands in Mongolia (Chuluun)**  
— *Professor Togtohyn Chuluun*
- **Scientific Capacity Building for Rural Coastal Zones in VietNam (Duc)**  
— *Professor Do Minh Duc*

- **REGIONAL RESEARCH FOR ADAPTATION (20 minutes)**

- **Ongoing ARCP Project on Climate Change Adaptation Modelling**  
— *Mr. Kashif Majeed Salik*
- **Ongoing CAPaBLE Project: Regional Science-Policy Adaptation Network**  
— *Dr. S.V.R.K. Prabhakar*

**C: PANEL DISCUSSION & POLICY BRIEF FOR RIO+20 (20 MINUTES)**

**4. Participants contact details (confirmed):**

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**Dr. Akio Takemoto**

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As a network that engages governments and scientific institutions from 22 member countries, the Asia-Pacific Network for Global Change Research (APN) is committed to achieving its second goal of strengthening appropriate interactions among scientists and policy-makers and providing scientific input to policy decision-making and scientific knowledge to the public and other non-science communities. The APN will continue to develop effective methodologies and procedures in its science thematic areas identified under its Scientific Research Agenda, and aim to transfer this knowledge and information to the science, non-science (public, civil society, etc.) and decision-making communities. In this context, and addressing one of the APN's scientific themes of climate change and climate variability, the APN will adopt a 3 to 5 year programme on climate change adapta-

tion from April 2013 that will utilise a networking approach and engaging other institutions in a partnership approach to ensure that the best opportunities are available for developing countries in the Asia-Pacific region to react to the impacts of climate change in a manner that will also support their sustainable development.

**Prof. Nobuo Mimura**

Institute for Global Change Adaptation Science (ICAS)  
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Japan  
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The Institute for Global Change Adaptation Science (ICAS) focuses on climate change. There are two approaches to addressing these problems: prevention of warming through reduction of greenhouse gas emissions on the one hand, and adaptation to a warming environment on the other. Given the profound effects of climate change on the Asia-Pacific region, the development of a framework, policies and measures for adaptation is a critical issue for the region's sustainability. ICAS will study adaptation in a range of fields such as disaster prevention, social safety and security, agriculture, and urban environments and lifestyle.

**Dr. Anura Srikantha Herath**

UN-CECAR  
Institute for Sustainability and Peace  
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Established in 2009, the University Network for Climate and Ecosystems Change Adaptation Research (UN-CECAR) is a network of universities and research institutes in the Asia-Pacific and Africa who develop and launch research and education programmes on climate change, ecosystems change and adaptation. The network aims to bring together the best resources and expertise in joint research for the design of appropriate policy and development strategies, and development of postgraduate education courses and training across disciplinary lines.

**Dr. Juan M. Pulhin**

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*Locally-based Activity:* The reality of climate change calls for a need to understand how it might affect a range of natural and social systems, and to identify and evaluate options to respond to these effects. This has led to in-depth investigation of vulnerability and adaptation to climate change, which has become central to climate science, policy and practice. The capacity, however, to conduct vulnerability and adaptation assessment is still limited in the Philippines, particularly with gaps in downscaling simulated scenarios and mainstreaming re-

search findings into decision-making. The project undertaken with funding from the APN trained key stakeholders in Albay in impacts, vulnerability and adaptation assessments using a computer-based modeling system and participatory approaches. SimCLIM was used and developed for Albay (AlbayClim) as an innovative tool for assessing and creating climate change scenarios. This aided in characterizing future risks specific for the province. Case studies were conducted in upland and coastal communities to demonstrate the assessment of impacts, vulnerability and adaptation to climate change and sea-level rise. The AlbayClim was complemented with participatory techniques to solicit knowledge and experiences of the local people. This put into context the source of vulnerability, as well as facilitated mainstreaming adaptive responses.

**Dr. Togtohyun Chuluun**

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**Mongolia**  
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Locally-based Activity: Mongolia is a vast country comprised of mountains, rangelands, and desert landscapes with scarce water resources. As a consequence of socio-economic conditions and climate changes in the last two decades, social-ecological vulnerability of Mongolia's pastoral social-ecological systems has increased. Using the Dryland Development Paradigm (DDP) to analyse pastoral social-ecological systems in the Tuin and Baidrag river basins, we explain the dynamics of a coupled human-environmental system that is defined by primarily two different variables factors: market forces and climate disasters. Privatization of livestock in early 1990s has triggered an & interest in increasing private livestock numbers-especially in the number of goats due the value of their cashmere. However, a series of climate disasters, droughts followed by *zud* (*severe winter conditions*), has caused massive livestock losses. Global warming is the most critical slow variable in the drylands, with amplified consequences than in other regions. Results ultimately show that the desert-steppe region is becoming more vulnerable to climate and land- use change.

**Assoc. Prof. Dr. Do Minh Duc**

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Locally-based Activity: Climate change is the most serious environmental problem facing the world today and places pressure on socio-economic activities. In terms of climate change-related losses there is more easily recognized potential damage in urban to rural areas and present efforts have focused on urban areas, especially on coastal mega-cities. Rural areas have not been adequately considered and, therefore, the present activity investigated the vulnerability of rural coastal zones in Vietnam. Activities were concentrated on capacity building of local communities and young scientists. Residents in rural coasts are more vulnerable to climate change because of lower awareness and poor infrastructure and the impacts of climate change make sense to them. Local authorities joined meetings and training courses on climate change and their awareness was improved. However, they wonder about "wise" or "smart" adaptation practices that may require top down approaches. Two workshops with the participation of experts from Japan, Germany, and concerning institutions were organized to share experiences on wise adaptation to climate change. The results will be discussed during the PROVIA session.

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*Regional-based activity:* Leading a regional research project funded by the APN, the present research seeks to provide science-based information about the impact of climate change on mangrove ecosystem in South Asia. The impacts of sea level rise, decrease in fresh water flows in the region and other climatic parameters like temperature fluctuations, precipitation etc will be carried out for developing future scenarios of mangroves forests in South Asia. Moreover, the overall vulnerability of mangrove ecosystems will be evaluated by hydrological, climatic, institutional and socio-economic assessments using hydrodynamic modeling, regional climate models, GIS and RS techniques, landscape vegetation models and applying statistical methods respectively. This project intends to raise awareness among local and national level policy and decision makers about the potential impacts of climate change on mangroves ecosystem. This information will help to devise policies and interventions for mangroves sustainability, development and conservation by selection of appropriate site in the region to develop a conceptual institutional framework describing drivers, pressures, responses, trends and impacts on mangroves ecosystem. This is being achieved by involving researchers from participating countries of Pakistan, India, Bangladesh, USA and Sri Lanka conducting research on these issues.

**Dr. S.V.R.K. Prabhakar**

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Analysis of policies in select countries reveal that important decisions in the agriculture and water sectors are implemented without consideration of projected impacts of climate change. One of the most important barriers identified was the limited capacity of researches in the region to provide adaptation policy-relevant information. Research on indicators for monitoring the effectiveness of adaptation options at different spatial scales is completely lacking. Networking and communication among researchers and policymakers focusing on adaptation is also extremely limited. The present APN-funded project was initiated in August 2009 in order to strengthen research capacity on mainstreaming climate change adaptation concerns into agricultural and water policies and also to create a network for adaptation policy research in Asia. The Project adopts a three-pronged approach: Firstly, identification of practical options for mainstreaming and metrics for monitoring the effectiveness of adaptation policies and measures; secondly, exchange of adaptation policy-relevant information through creation of a network called **ARNAP** (Adaptation Research and Policy Network for Asia and Pacific); and lastly, dissemination of outputs beyond the project boundaries. Project findings will be disseminated through project reports, peer reviewed articles, UNFCCC COP side events and the Project website.



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## Item 06-03: UNFCCC and SBSTA

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### Background and Report

For the past number of years, APN has been attending the research dialogues that have been requested by SBSTA under their agenda Item 6: Research and Systematic Observations. Additionally in 2011, in response to an invitation from the UNFCCC Secretariat, the APN also attended a Pre-Dialogue Workshop (1-3 June, 2011) to engage scientists and parties in a workshop that would ultimately improve the communications of science to the parties, address issues of uncertainty and ensure that the needs of both the international scientific communities and those of the Parties to the UNFCCC were mutually being met and understood. The Chair of SBSTA reported back to SBSTA34 in June, 2011 and the report is available as an appendix *IGM-SPG/17/03-App.1*. APN's submission to SBSTA for both the workshop and the dialogue (held on 8 June, 2011) is outlined in appendix *IGM-SPG/17/03-App.2*. The APN was represented at these two meetings by Dr. Andrew Matthews, Invited Expert to the APN Steering Committee; and Dr. Linda Stevenson, APN Executive Science Officer.

In addition and as indicated earlier under Item 2, the APN also showcased, in an exhibit, the recently released APN Climate Synthesis report. This report will also be made available to the international research and policy community at the SBSTA36.

### International Research Dialogue at SBSTA36

UNFCCC/SBSTA36 is scheduled to take place from 14-25 May, 2012, in Bonn Germany. The UNFCCC has informed the international research community (that includes the APN) that the dialogue will be likely be held at the end of the first week of SBSTA36. An invitation was sent to the APN Director, Dr. Akio Takemoto (carbon copied to Drs. Stevenson and Matthews).

This year, the SBSTA36 has invited the international community to engage in a research dialogue that focuses on, as a minimum, GHGs from coastal and marine ecosystems. The APN will submit its paper by the deadline of end March 2012.

### SBSTA36 Attendees:

Week One – Dr. Andrew Matthews, Invited Expert to the Steering Committee

Week Two – Dr. Akio Takemoto, Secretariat Director

### Budget requested:

US\$30,000 (for SBSTA36 and SBSTA37/COP18 in Qatar)

**Report to the SBSTA34 on the  
International Research Dialogue and Pre-Workshop  
on Developments in Research Activities  
Relevant to the Needs of the Convention.**

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**Report by the Chair of the SBSTA**

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I am pleased to report back to you on this year's research dialogue which took place on Wednesday, 8 June. The dialogue followed a successful workshop on research, which was held prior to this session of the SBSTA. Short reports of the main outcomes of the workshop were provided during the dialogue by Mr. Sergio Castellari of Italy and Mr. Carlos Fuller of Belize who facilitated two of the sessions, respectively, during the workshop.

The dialogue was organized around the following two sessions:

- (1) Understanding the science: recent climate change research findings and uncertainty management; and
- (2) Communicating climate science and building capacity for research in developing countries.

We had excellent contributions and representation from the climate change research community, including the Earth System Science Partnership (ESSP) on behalf of its member programmes (i.e. the WCRP, IGBP, IHDP and DIVERSITAS), the IPCC, the WMO, UNEP, the Arctic Monitoring and Assessment Programme of the Arctic Council (AMAP), the International START secretariat, the Asia Pacific Network for Global Change Research (APN), the Inter-American Institute for Global Change Research (IAI), and PROVIA (Programme of Research on Climate Change Vulnerability, Impacts and Adaptation).

I was happy to see that the dialogue meeting was also well attended by Parties who participated very actively and presented their views on climate change research needs and priorities relevant to the Convention. Contributions from Parties addressed matters relating to temperature stabilization scenarios and the review of the long-term global goal; research needs to support policies and strategies on adaptation and mitigation; existing gaps in data and systematic observation; research capacity building needs, in particular in the LDC's; and sector-specific needs and priorities, including agriculture, coastal ecosystems and blue carbon, as well as possible ways to enhance communication of research outcomes and how to enhance the science-policy dialogue under the Convention.

Information provided by the research community on their on-going research activities included emerging results from global climate change research by the ESSP and its partner programmes, findings from the UNEP/WMO's Integrated Assessment of Black Carbon and Tropospheric Ozone, and key results of the Arctic Council's Assessment of regional and global climate change impacts on Snow, Water, Ice and Permafrost in the Arctic (SWIPA), including resulting consequences for sea level rise. The IPCC reported on a number of recent activities and developments for its upcoming Fifth Assessment Report, including matters related to Article 2 of the Convention.

The deliberations during the dialogue showed that there is an interest in furthering the understanding on a number of issues emerging from climate science, including the possible multiple impacts of carbon dioxide on oceans, ocean acidification and related consequences for fishery and other sectors and ecosystems; consequences of observed and projected changes in the Arctic, including sea level rise; and the need to better understand the socio-economic dimensions of climate change through multidisciplinary research. Also, strengthening of systematic observation networks is *key* for understanding changes in the climate and supporting research.

The session on communicating climate change science and building capacity for research in developing countries highlighted good practices and challenges, including success stories from the regions in communicating research results, opportunities for research capacity building in developing countries, and developments under the WMO's Global Framework for Climate Services.

Before concluding, I wish to note that this year's research activities have contributed to making significant progress in the implementation of decision 9/CP.11, and provided a good basis for continuing our fruitful collaboration and dialogue with the research programmes and organizations in the future. It is important that SBSTA and also other bodies under the UNFCCC make use of this possibility of receiving updated information emerging from climate change science, while at the same time providing views to the scientific community on what we see as emerging research priorities under the Convention.

Finally, I would like to thank all Parties that participated in and contributed to this successful dialogue meeting and express our appreciation to the representatives of the research programmes and organizations and the IPCC for their active participation and excellent contributions. I also wish to express our thanks to the secretariat for having organized these two very important events under the research dialogue.

This concludes my report on the research dialogue to the closing of the 34<sup>th</sup> session of the SBSTA.

SBSTA34 Research Dialogue. Submission from  
Asia-Pacific Network for Global Change Research (APN)

8th June 2011, Bonn Germany

**Acknowledgment:**

The APN welcomes and appreciates the continuing opportunity to inform, and engage in a dialogue with SBSTA on issues of global change research, capacity development and science-policy interfacing mechanisms within the Asia-Pacific region that is relevant to the convention. The present brief summarises the current main activities undertaken by APN to address some of the issues outlined in the recently published document **FCCC/SBSTA/2011/MISC.4** regards those topics for discussion at the dialogue meeting to take place during SBSTA 34, taking into account developments in research activities outlined in document **FCCC/SBSTA/2007/4, Paragraph 47 (a-f)**.

**What is the APN:**

Established in 1996, the Asia-Pacific Network for Global Change Research (APN) is a network of twenty-two member governments in Asia and the Pacific whose vision is to enable countries in the region to successfully address global change (GC) challenges through science-based response strategies and measures, effective science and policy linkages, and scientific capacity development.

As APN is an inter-governmental network, a high priority goal is to produce sound scientific results that can be made available as a supportive tool for policy-making processes. Accordingly, the APN conducts regular synthesis and assessment activities of the projects its supports in order to identify important outcomes, research gaps and/or emerging issues that could be used to support policy development.

APN is financially sponsored by the Governments of Japan (Ministry of Environment [MOEJ]; Hyogo Prefectural Government), New Zealand (Ministry for the Environment), Republic of Korea (Ministry of Environment [MEV]) and the United States (National Science Foundation [NSF]; United States Global Change Research Program [USGCRP]).

The APN goals are achieved through a number of activities selected from the APN's two main programmes, which involve **two annual open Calls for Proposals in which scientists based in APN member or approved countries can submit proposals for funding support**. The two main programmes are the *Annual Regional Call for Research Proposals (ARCP)* and the *Scientific Capacity Development Programme (CAPaBLE)*. Particularly encouraged to submit APN proposals are developing-country researchers working in collaboration with the APN's international GC partners including DIVERSITAS, ESSP, GEO/GEOSS, IGBP, IHDP, START, WCRP and their related core and joint projects.

Research and capacity building activities under the ARCP, CAPaBLE and other related initiatives of the APN focus on four scientific themes identified in the APN's Science Agenda. These are (i) **Climate Change and Climate Variability**; (ii) Ecosystems, Biodiversity and Land Use; (iii) Changes in Atmospheric and Terrestrial Domains; and (iv) Resources Utilisation and Pathways for Sustainable Development. Under these scientific themes, the APN supports activities that are interdisciplinary in nature and cut across natural, social, economic and political sciences.

Examples of the kinds of activities APN undertakes are:

- Promoting and strengthening GC research, including identifying gaps via syntheses and assessment work
- Identifying and developing existing methodologies and developing new methodologies and tools for effective transfer of scientific knowledge
- Strengthening the interface of policy- and decision-making processes and society in general for mainstreaming environmental concern
- Encouraging initiatives from developing countries for place-based, integrative research
- Aligning with programmes of the GC community

### **New APN Activities:**

#### **2.1 APN Climate Synthesis Executive Summary (Synthesis report will be published June 2011):**

Work for the present Synthesis - Climate in Asia and the Pacific: A Synthesis of APN Activities began in November 2009 with a scoping workshop followed by an authors' workshop in August 2010. The work entailed summarising over fifty scientific research and capacity building projects funded by the APN that had a climate-related element - whether natural climate variability and/or climate change. The contributing authors' of the synthesis report are leaders in their field and many of them are authors for the next fifth assessment report of the Intergovernmental Panel on Climate Change (IPCC AR5). The present report will be a useful tool not only for the IPCC, but also for scientists, decision-makers and educators; as it identifies both research gaps and future research activities for the Asia-Pacific region in the context of climate change and climate variability.

The adverse effects of climate change and natural climate variability pose a significant threat to humanity, with the poorest communities being the most vulnerable. Scientific understanding of our climate is advancing at a significant rate, with new information emerging about the likely impacts of climate change, the options to adapt to these changes, and new approaches to mitigation.

Through national and international fora, it is becoming clear that climate is one of the most, if not *the* most, pressing issue in the political arena today. This has been evident in government and stakeholder meetings such as the 34<sup>th</sup> G8 Summit (Japan, 2008) and the most recent UNFCCC 16<sup>th</sup> Conference of the Parties Meeting (Mexico, 2010), where commitments to climate change have been underscored, particularly the need to support developing countries for financing and transferring knowledge and skills to respond effectively to climate change.

The IPCC 4<sup>th</sup> Assessment reports that climate change will interact at all scales with other aspects of the global environment and aggravate existing concerns about the provision of natural resources, including water, soil and air pollution, health hazards, disaster risk, and deforestation. Their combined impacts may be compounded in the future in the absence of integrated mitigation and adaptation measures (IPCCAR4 [SPM], 2007).

The present synthesis report is part of the APN's larger aim to contribute, from the science perspective, to the development of policy options for appropriate responses to climate vulnerability and impacts, including adaptation and mitigation, which in turn will contribute to sustainable development. The timing of this publication also leads into three major activities, the Planet under Pressure and Rio+20 Conferences, both taking place in the first half of 2012, and the work of the current IPCC 5<sup>th</sup> Assessment with the report scheduled for release in 2014.

The synthesis report indicates that while there is much activity at the global level, there is a great need to intensify investigative research of climate change and climate variability and trends at the regional level, as these are still poorly understood. Consistent socio-economic data collection is needed. The increasing frequency and severity of floods, droughts and extreme temperatures requires use of appropriate indices to improve monitoring and prediction of extreme events.

The effects of climate on water resources have been studied in APN projects but many issues remain unclear. There is a need for models to predict better the effects of seasonal to inter-annual climate on water. Coastal cities continue to be highly vulnerable to sea-level rise and research is needed in identifying appropriate adaptation measures, strategies, and policies. Similarly small islands are especially vulnerable and research is required into relocation options. APN has supported international workshops to reduce vulnerability and devise coping strategies of agriculture to climate variability and change. These have built the knowledge-base for developing predictive capacity to manage climate variability and climate change-related vulnerability, strengthen overall climate responses and build resilience to socio-economic, and environmental shocks, which is one of the region's urgent development needs.

APN projects have also contributed substantially to the building of regional capacity to include climate change in national sustainable development strategies and action plans. APN workshops on trends in climate extremes have provided a framework for international trend analysis in developing countries around the world. However, what is abundantly clear is that open access to climate data, including relevant socio-economic data, will be essential for countries in the Asia Pacific to carry out risk assessments of their vulnerability to trends in climate within a regional framework. It is, therefore, in the interest of all countries of the APN to promote the open exchange of climate-related data.

Modelling the effects of climate on agriculture and fishery production needs to be refined. Critical to climate adaptation research, practice and policy are downscaled climate data. Developing Regional Climate Models (RCMs) in Asia has helped provide more detailed information on monsoon circulation; and high-resolution regional/local information from RCMs can be used in impact, vulnerability and adaptation studies. There is a need for regional climate models and statistical downscaling methods to help localise GCM results. Especially problematic in the Asia-Pacific are small islands states and areas with rough and steep terrain like the Himalayas.

The investments by APN in projects aimed at improving the Asia-Pacific region's understanding of the climate of the region, at assessing the risks to society and nature from climate variability and change, and at raising awareness of these issues to decision-makers and the public are well justified in terms of need and benefits. Formal assessments and literature citations have demonstrated that these activities have been effective and of high quality.

Given the high quality of APN projects and the potential of many to yield longer-term benefits through the provision of marginal resources, there should be an investigation of innovative means to sustain such projects beyond the term of initial APN support.

Strategic planning of APN would benefit by ensuring that it maintains close contact with the relevant international developments on indicators of the impact of research and capacity building. The APN should continue to recognise the benefits of applying appropriate models to the assist the integration of information in complex systems. The APN should recognise that effective application of climate knowledge to practical problems of societies across the Asia Pacific region requires effective dialogue across the traditional boundaries of science, technology and policy.

The APN has a role to play in promoting research in the region that clarifies the strategies that lead to true sustainable development. The Asia Pacific region has a rich variety of cultures, and the APN has been effective in promoting connections and alliances across all these cultures. This effectiveness comes from recognition of cultural differences and not imposing a one-hat-fits-all approach. These sensitivities to culture will be especially important as the APN continues to promote exchanges of knowledge on climate-related issues across disciplines and sectors.

Clearly, the most important aspect of interactions across a region is the human factor. The APN has been effective in promoting innumerable networks of participants in its projects related to climate. One potential element in the future development of sustained networks is through the engagement of young people who can carry their scientific and social networks into the future.

Finally, while substantial progress has been made by APN-supported projects on climate science, capacity building and policy outreach, much remains to be done in the Asia-Pacific region. Among the key trends impacting the region are: rising population, increasing urbanization, rapid economic development, rising energy demand, massive land use and cover change, increases in temperature, heatwaves, floods and droughts, and globalisation. APN may wish to invest in some of these areas in its future strategies and research agendas.

### **APN Biodiversity Gap Analysis: Linking and Integrating Ecosystems Services and Biodiversity with Green Growth & Sustainable Development**

The Asia-Pacific region is spectacularly rich in biodiversity, but also home to more than half the world's human population. Policy- and decision-making to realise the objective of establishing sustainable, green growth practices in the Asia-Pacific region needs to be underpinned by sound scientific knowledge. However, much of the knowledge needed to effectively link biodiversity and ecosystem services to sustainable development and green growth is lacking throughout the region, particularly in developing countries.

With the above rationale and in the present "United Nations Decade on Biodiversity 2011-2020," the APN seeks to contribute to this crucial and urgent period by promoting comprehensive scientific research, capacity development and science-policy connections in a new (initial) 5-year Biodiversity Framework: *Linking and Integrating Ecosystems Services and Biodiversity with Green Growth & Sustainable Development*.

#### Gap Analysis Workshop

With funding from the Ministry of the Environment, Japan (MOEJ), and as a contribution to the International Year of Biodiversity 2010, the APN conducted a Biodiversity and Ecosystem Services Gap Analysis Workshop (February 13-15, 2011). The aim of the workshop was to identify gaps in scientific research and capacity development and to establish APN's role in developing an agenda for this important area of research. The agenda would be in line with the UN Decade of Biodiversity, and contribute not only to the UNCBD, but also to the UNCSD (specifically the 2002 WSSD's Johannesburg Plan of Implementation [JPOI]) and its lead up to Rio+20; the Millennium Development Goals; and, where appropriate, contribute to the Second Millennium Ecosystems Assessment (MEA2) and the IPBES.

Prior to the Gap Analysis Workshop expressions of interest were sought from experts in the global change community, particularly from those working in the Asia-Pacific region. As a result, the workshop included participation from key experts from ICSU, DIVERSITAS, United Nations University and ASEAN ACB, GEOBON and other key organisations. Gaps and priorities outlined were based on analysis of feedback received from the global change community and invited experts to the APN Gap Analysis Scoping Workshop. Initially, the following issues were considered: vulnerability and predictions; impacts; adaptation and mitigation. The workshop

also reviewed and took into account key publications and background papers on biodiversity and ecosystem services and all relevant issues at the sub-regional level.

The four Research Themes identified are indicated below all of which have a link with climate change:

- **Theme 1:** *Drivers and pressures for biodiversity change that influence ecosystem services (land-use change; climate change, etc.)*
- **Theme 2:** *Assessment of impacts of biodiversity loss and vulnerability to the shrinking of ecosystem services*
- **Theme 3:** *Model-based prediction of changes in biodiversity and ecosystem services*
- **Theme 4:** *Adaptation, Response and Mitigation of the Depletion of Biodiversity and Ecosystems Services*

The next steps are to have a steering group meeting to develop the framework further and integrate it into the activities of the APN. It is expected that a calls for proposals will be launched in the above themes for both regional research and scientific capacity development activities.



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## Item 06-04: APN/Hyogo New Commons Workshop Series

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### Background

The project “SATOYAMA: The New Commons in the Asia-Pacific Region” was proposed as a two-year joint initiative of APN, DIVERSITAS, Hyogo Prefecture, IHDP and UNU, and approved at the 16<sup>th</sup> IGM/SPG meeting, Colombo, Sri Lanka held in April, 2011 (please refer to IGMSPG/16/05-05-03 available in the 16<sup>th</sup> IGM Proceedings. It was approved as a Hyogo Activity, funded by Hyogo Prefecture. After the 16<sup>th</sup> IGM/SPG meeting, the title of the project was revised as follows in order to describe the content in detail:

### **Building Resilience with Common Capital, Managing Shared Resources: Meeting the Challenges of a Rapidly Modernizing World under Climate and Ecosystem Change.**

The objective of the project is to identify governance systems overseeing the management of the New Commons, supply of ecosystem services and enhancement of socio-ecological resilience against climate and ecosystem changes in an efficient and equitable manner across a range of stakeholders.

Three workshops are planned in FY 2011 and FY 2012. The first workshop was held at UNU Headquarters Tokyo Japan, 23-25 January, 2012.

A group of experts are invited to a series of workshops in order to ensure continuity of the process and the development of the New Commons Framework. Policy makers are also invited to the workshops. The workshops will draw on case studies in Japan and other countries in Asia-Pacific region that have SATOYAMA landscapes.

Outputs of the project are

- A policy paper providing guidelines for the enhancing community resilience through the establishment and/or “New Commons” landscapes
- One scientific journal paper on
  - » Methodology/concept (based on the outputs of the first workshop)
  - » Results/analysis (based on the outputs of the three workshops)

Expected outcomes are

- National and local governments and private institutions in the Asia-Pacific region will utilize the outputs of this activity as guidance to develop new sustainable ecosystem and rural landscape management policies and measures. Such policies and measures include regulatory approaches such as designation of protected areas, participatory approaches of the community and incentive approaches, which will vary according to the natural and socio-economic conditions of each country.
- Based on the case studies viewed in the present project recommendations to foster activities under the “New Commons Framework” will be presented to governments and enterprises with a view to environmental protection and sustainable growth of local and national economies.

For the first workshop, more than 20 experts and policy makers gathered at UNU Headquarter in Tokyo. In Day-1, following the opening session, a group of experts on various research areas including agriculture, ecosystem, climate change and economics coming from Asia-Pacific and other regions, and policy makers including Japan and Thailand made presentations. In Day-2 and Day-3, breakup sessions were held to have intensive dis-

discussion for outlining outputs based on the objective of the project. For example, one group had very intensive discussion on such issues as how to bridge institutions within and between different levels (i.e., community, local, provincial, national, regional and international), and what kind of drivers to enhance or revitalize Satoyama activities (i.e., market size of the products produced by Satoyama activities)

**Proposed activities**

For the purpose of producing the project outputs, the second workshop will be held in Colombo Sri Lanka, 28-30 May, 2012, and the third workshop will be held in Kobe in late 2012.

**Budget Requested:**

For the third workshop, US\$50,000 (funded by Hyogo Prefecture) noting that for the second workshop

Committed remaining funds of US\$24,000 from the 2011/12 budget will be allocated from the US\$50,000 that was already approved by the 16<sup>th</sup> IGM/SPG meeting for this activity.

In addition to in-kind contributions, matching funds of US\$50,000 for the entire 2 years has been pledged from UNU/ISP.

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## Item 06-05: Climate Mitigation to Support Low Carbon Development

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### Background

Parties to the UNFCCC adopted the Cancun Agreements at the 2010 COP16/CMP conferences in Cancun Mexico. They agreed to work towards identifying a global goal for substantially reducing global emissions by 2050 (para. 5 of UNFCCC Cancun report). In order to achieve the global goal, both developed and developing countries agreed to enhance mitigation actions. In the case of developing country parties, parties agreed to take nationally mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building (para. 48), and encouraged developing countries to develop low-carbon development strategies or plans in the context of sustainable development (para.65). At 2011 COP17/CMP7 conferences in Durban South, Africa, parties recalled the above Cancun agreements and decided further on parties' mitigation actions.

In order to promote low carbon development in Asia, *the International Research Network for Low Carbon Societies (LCS-RNet)*, [See Box 1, page 2] proposed, at the 10<sup>th</sup> ASEAN Plus Three Environment Ministers Meeting, Phnom Penh, Cambodia, 19 October 2011, that a new network, *Low Carbon Asia Research Network (LocARNet)*, [See Box 2, Page 3] be established.

The LCS-RNet was established as a result of the 2008 G8 Environment Ministers meeting in Kobe Japan. It is a knowledge base platform among from researchers in the world associated with low carbon development. It is expected that the LocARNet will become a platform for knowledge sharing and capacity building of relevant researchers in Asia. At the above Ministerial meeting, some countries asked for coordination between LocARNet and APN, particularly in the context of research activities.

APN has supported more than sixty research projects related to climate change and variability; a major theme in the APN's science agenda. APN has also supported workshops and training on GHG inventory compilation, sustainable technology transfer and measuring emissions from landscapes. The 15<sup>th</sup> IGM/SPG meeting, Busan, Republic of Korea (2010) hold the Low Carbon Green Growth and Development Session, which made participants share the concept on low carbon and green growth development.

### Proposed activities

Based on the results of UNFCCC conferences, it is critically important to strengthen the capacity of scientists and practitioners in developing countries so that they can be involved in decision-making processes on national strategies for low carbon and green growth. It is expected that the APN will play a significant role in enhancing scientific capacity of experts, strengthening science-policy linkages and strengthening synergies with other relevant organizations and networks that will ultimately assist in promoting low carbon technologies in developing countries in the region.

In this regard, we propose to establish a set of focused activities on **Low Carbon Development (LCD)**.

The LCD programme will be a three-year programme from April 2012 to March 2015, mainly comprised of:

1. regional research,
2. capacity development, and
3. communication activities.

It is estimated that proportion of fund for (i) regional research activities among the entire LCD programme will be approximately 60%. Category (iii) will include activities for communicating with ARNLCD and LCS-RNet in order to promote their own LCD activities effectively.

For (i) and (ii), an independent call for proposals will be launched over a 6 month-period from June to December 2012, with new research and capacity development activities expected to start in January 2013.

#### **Budget Requested**

- The Ministry of the Environment, Japan has earmarked US\$260,000 for LCD activities from its financial contribution 2012/13.
- As US\$ 300,000 is requested for fulfilling the LCD programme in FY 2013 (additional USD 40,000 is requested from the APN core budget for scientific activities).

#### **BOX 1**

##### **What is LCD-Rnet?**

<http://lcs-rnet.org/about.html>

Realization of low-carbon societies (LCS) is an urgent global challenge. By strengthened networking through LCS-RNet, researchers will have more opportunities to share their knowledge and to cooperate with each other across the border. With the direct link between LCS-RNet and the G8 Environment Ministers Meeting process, researchers will continue efforts to communicate with decision-makers and various stakeholders such as businesses, IGOs, and NGOs, to share social, economic and scientific research findings to help realise low-carbon societies.

##### **Objectives of LCS-RNet**

Promotion of information exchange and research cooperation that cover various issues relating to low-carbon societies,

Promotion of understanding about LCS through dialogues between researchers and various stakeholders including policy-makers, businesses, citizens and others to share national and sub-national visions on low-carbon societies, and

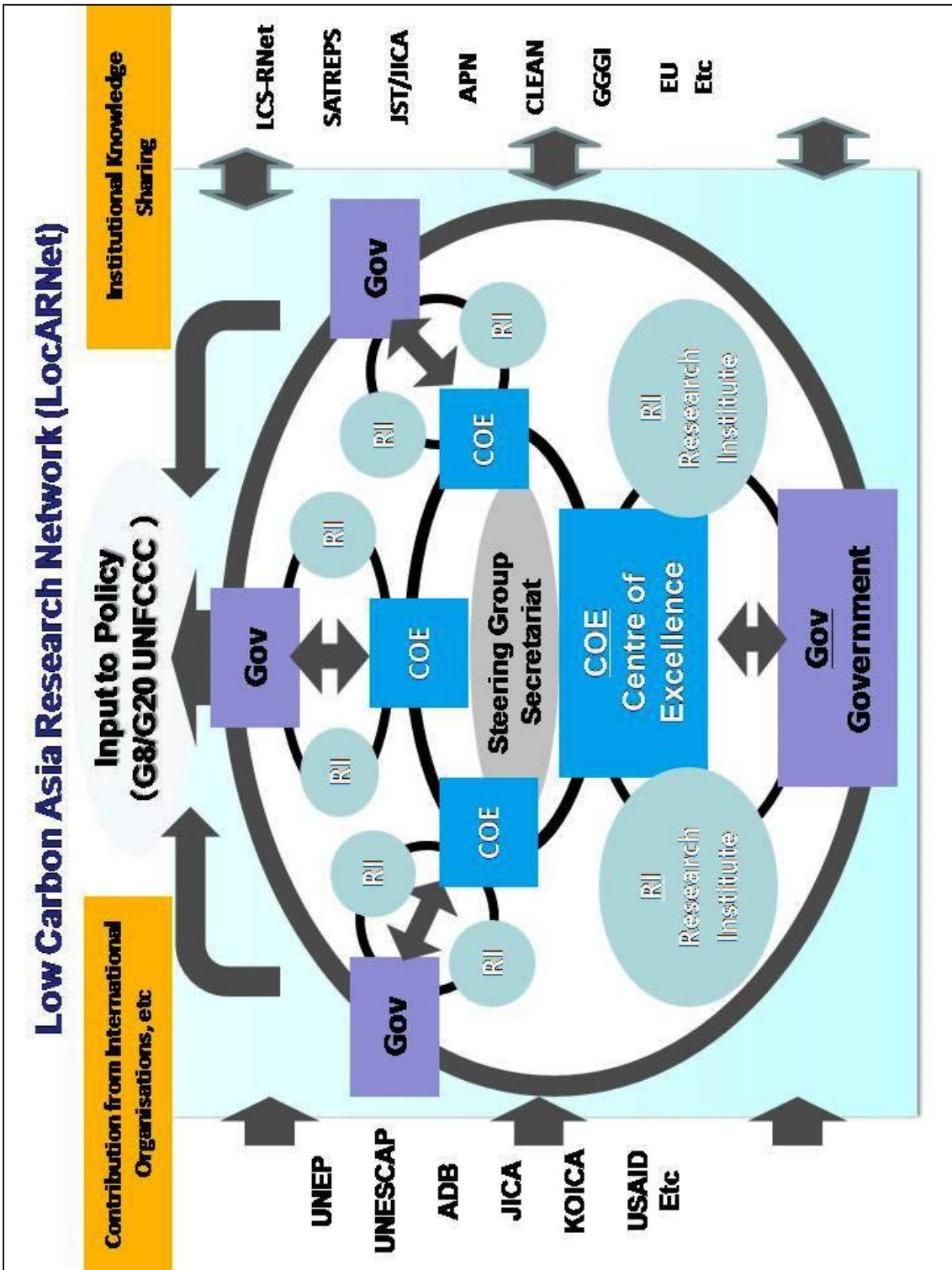
Contribution to international policy-making processes on climate change including G8 process by providing research outcomes and recommendations.

##### **Platform of LCS research**

The basic nature of LCS-RNet is a platform to support and encourage information sharing and voluntary cooperation among research institutions specifically in the field of LCS research. LCS-RNet also facilitate the interaction between researchers and various stakeholders, and delivers their findings to policy-makers to assist science-based policy making in transitioning to low-carbon societies.

##### **Non-binding network**

LCS-RNet is a non-binding network, and its activities and outcomes are independent from official views of any governments, and while policy relevant, should not be policy prescriptive. Participation in the Network will not hamper individual research activities in any way, but to enhance them.



Box 2:

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## Item 06-06: Climate Adaptation Programme to Support Cancun Adaptation Framework

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### Background

Parties adopted the Cancun Adaptation Framework (CAF) as part of the Cancun Agreements at the 2010 COP 16/CMP 6 conferences in Cancun Mexico. In the Agreements, parties affirmed to enhance action on adaptation with the same level of priority as mitigation.

At the 2011 COP17/CMP7 Conferences in Durban, South Africa, parties reaffirmed the above decision and decided on the modalities and procedures for the Adaptation Committee that supports enhanced action including engagement with, and draw on expertise of, relevant networks and centres.

The objective of CAF (paras. 11-35 of UNFCCC Cancun report) is to enhance action on adaptation, including through international cooperation and coherent consideration of matters relating to adaptation under the Convention. Enhanced action on adaptation covers a wide range of fields such as

1. Planning and implementing action identified in national and sub-national adaptation plans and strategies,
2. Impact and vulnerability assessments,
3. Strengthening institutional capacity,
4. Enhancing climate related risk reduction strategies,
5. Research, development and diffusion of technologies, practices and processes,
6. strengthening data, information, knowledge systems, education and public awareness; and
7. Improving research and systematic observation.

It is particularly important to assist least developed countries to formulate and implement national adaptation plans including the above action points.

### Proposed activities

Based on the above decisions, the APN is expected to play a more important role in supporting action on adaptation in the Asia-Pacific region, particularly through regional cooperation in global change research, scientific and technical capacity building and interaction between scientists and policy-makers. More importantly, it is essential to enhance the support for member countries to achieve Goal 2 of APN, i.e., strengthening interactions among scientists and policy-makers. In this context of the CAF, it is critically important to strengthen the capacity of scientists and practitioners in our member developing countries so that they can be more effectively involved in decision-making processes on national adaptation planning, which requires regional and sub-regional cooperation. Therefore, we propose the following process to establish a new adaptation programme under the APN.

#### **(1) Hyogo-Funded Activity: Scoping workshop to enhance the action of APN developing country members on adaptation in the Asia-Pacific region**

APN, Hyogo Prefecture and the Institute of Global Change Adaptation Science (ICAS) of Ibaraki University will co-organize a scoping workshop to be held in Kobe, Japan. The workshop will be conducted as a new HYOGO Activity and sponsored by Hyogo Prefecture. ICAS is renowned for research activities on climate change impact assessments and adaptation in the Asia-pacific region.

The 3-day workshop will be held between August and September, 2012. The objective of the workshop will be to:

1. Compare recent experiences in the region to identify needs, gaps and lessons on planning and implementation of adaptation,
2. Identify prioritized activities on adaptation under the CAF which should be supported by APN in regional or sub-regional scale, and
3. Identify effective programmes and/or tools to support developing member countries in the region in the context of linking science and policy.
4. Bring scientists, policy-makers and practitioners associated with adaptation together in one venue – both within and outside the APN member countries.

### **(2) Joint activity with UN-CECAR: Training course on adaptation planning and implementation in Asian-Pacific region**

APN and University Network for Climate and Ecosystem Change Adaptation Research (UN-CECAR) will co-organize a training course on adaptation planning and implementation in developing countries in Asia-Pacific region. UN-CECAR is a joint initiative of more than 20 leading universities across Asia. It is committed to developing postgraduate educational and research programmes on climate and ecosystems change, adaptation and sustainability science. It has been actively conducting a series of training courses on adaptation for post-graduate students in Asian countries.

The joint training course will be held for three days back-to-back with a UN-CECAR training course in FY 2012, utilizing the above existing capacity development mechanism (venue will be decided later). It aims at raising capacity of scientist as well as practitioners that should be involved in policy making process on adaptation in respective countries.

The results of the joint activity will be reflected in the draft multi-year programme on adaptation that is described in (4) below, and that will be reported to the 18<sup>th</sup> IGM.

### **(3) Proposal Development Training Workshop**

It is vital that countries in the Asia-Pacific region have the capacity to conduct high quality research that provides underpinning scientific support for policy-makers and policy-making processes. Under the CAPaBLE programme early-career scientists are provided with opportunities to develop their knowledge and capabilities in global change research. Since 2008, the APN has been conducting Proposal Development Training Workshops in various parts of the region. Most recently, these were held in Shanghai, New York, Kobe, Manila, Pune, China, VietNam, and Bhutan back to back with other important meetings.

Held back to back with (2) above, we are proposing that Asian adaptation students be engaged in a proposal development training workshop so that they might be able to actively engage in potential future calls for funding related to adaptation and (4) below.

### **(4) Formulation of draft multi-year programme on adaptation**

Based on the results of the scoping workshop and the joint training course, we expect to draft a three to five year programme to support action on adaptation in member countries. This programme will be presented to the 18<sup>th</sup> IGM/SPG meeting in 2013 for approval. The draft programme will include research and capacity development activities on prioritized themes, as well as science-policy dialogues related to adaptation. If, once the

draft programme is approved, it is expected that the programme will be reported and reviewed by the IGM/SPG meetings that will be held in subsequent years. We will introduce the above activities at events organized by UNFCCC and other relevant international fora.

**Budget Requested**

- Scoping workshop: US\$60,000 (funded by Hyogo Prefecture)
- Training course: US\$50,000
- Proposal Development Training Workshop (PDTW): US\$20,000



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## Item 06-07: New Hyogo Activity - APN/IGES/Hyogo Symposium

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### Background

As it is emphasized in the new focused activity on Low Carbon Development (IGM-SPG/17/06-05), all countries should work together towards low carbon development and green growth by enhancing mitigation action both in developed and developing countries. Hyogo prefectural government of Japan, who hosts the APN Secretariat and who is a major financial contributor to the APN, is keen on implementing mitigation measures at the local scale, including CO<sub>2</sub> emission reduction in public and commercial sectors by way of regulatory, economic and informational measures to encourage energy-saving.

The Institute for Global Environmental Strategy, Kansai Research Centre (IGES/KRC) is a Hyogo-based research institution, which conducts research activities on “Business and the Environment” including experimental studies on low carbon technology transfer in Asia. It is very useful for APN, IGES/KRC, and Hyogo Government to organize a public event to communicate and raise awareness of low carbon development. This will help promote mutual understanding on the latest relevant technology, know-how, legal frameworks and lifestyles. Also, it is important to hold the event from the view point of redistribution of APN’s outcomes to Hyogo prefecture who has been supporting the APN for more than 12 years.

### Proposed activities

We propose a Symposium on “Low Carbon Development in Asia” as a new Hyogo Activity (funded by Hyogo Prefecture). The Symposium will be co-organized by APN, IGES/KRC and Hyogo Prefecture. The venue will be Kobe, Japan. It will be held for one day in late 2012 or early 2013.

The objectives of the symposium will be to:

1. Deepen mutual understanding on the latest relevant technology, know-how, legal frameworks and lifestyles in Japan and other Asian countries as well as needs, gaps and lessons on implementation of mitigation actions; and
2. Enhance communication between experts of APN and IGES/KRC and the citizens of Hyogo Prefecture on the issue of low carbon development.

Experts in APN member countries, researchers of IGES/KRC projects, policy makers and civil society are invited to the symposium. It is expected that the result will be reflected on the APN new focused activity “Climate Mitigation to Support Low Carbon Development” (IGM-SPG/17/06-05).

**Budget Requested:** US\$40,000 (funded by Hyogo Prefecture)

## **Sub-Regional Cooperation (SRC)**

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The aim of this paper is to provide a brief background of Sub-Regional Cooperation (SRC), a summary of the activities conducted to date. Activities are presented in reverse chronological order with the most recent activity indicated first.

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### **Background**

Institutional sub-regional cooperation was initiated in the second phase of APN with the establishment of the Southeast and South Asia Sub-Regional Committees. The conduct of sub-regional cooperation meetings, with participation from key international organisations, has improved the flow of information among members of the APN at the sub-regional level and has strengthened collaboration with key partners.

### **Major Activities on SRC to date**

#### **JANUARY 2012. 3<sup>rd</sup> SA-SRC Meeting. Paro, Bhutan**

The 3<sup>rd</sup> SA-SRC Meeting was hosted by Bhutan, the newest member of the APN. Representatives shared their respective countries' scientific trends on Rio+20 and sustainable development, and collectively identified a list of prioritized research and capacity development topics that are relevant for multilateral collaboration.

#### **OCTOBER 2011. 19<sup>th</sup> SC Meeting, Phnom Penh, Cambodia**

The SC recommended that the Terms of Reference for the planned SP Dialogue(s) be developed further in consultation with APN SEA-SRC and the START International Secretariat. This was carried out and the SP is to be held 18-21 July 2012.

#### **JULY 2011. 4<sup>th</sup> SEA-SRC Meeting, Hanoi, Viet Nam**

The Secretariat will prepare a revised Terms of Reference on an SP Dialogue(s) planned to be held before the 17<sup>th</sup> IGM/SPG Meeting. A summary proposal that complies with APN format guidelines will be drafted by the SPG Member for Indonesia for final refinement and submission to the APN Secretariat.

#### **April 2011. 16<sup>th</sup> IGM/SPG Meeting, Colombo, Sri Lanka**

Members suggested that there is a need to have clear direction in proposing and conducting sub-regional activities as well as the need to discuss directions in conducting real regional activities that are relevant to the region and not only focus on the current mechanism that the APN has for sub-regional activities. It was agreed that these issues will be discussed in the next SC Meeting.

#### **November 2010. 3<sup>rd</sup> SEA-SRC Meeting, Manila, Philippines**

All members recognised that more attention should be put on the result of SWOT (strengths, weaknesses, opportunities, threats) analysis that was conducted at the second meeting. SEA-SRCom should look into how the strengths can be further enhanced and how the weaknesses could be addressed, both at the country and sub-regional level. Coordination among the SEA-SRCom can be strengthened through the exchange of information/updates on a structured format. The need to strengthen collaboration at all levels: national, sub-regional, regional, global was emphasised.

**November 2010. 2<sup>nd</sup> SA-SRC Meeting, Pune, India**

It was re-emphasised that the formation of a SA-SRCom is a very important approach to focus on issues of global change research on topics, which are receiving great international attention. It was suggested that APN needs to look at the scope of development, influence and relevance of policy and the context of the project activities.

**AUGUST 2010. 16<sup>th</sup> SC Meeting, Kobe Japan**

The SC emphasised the need to encourage sub-regional groups to become more actively engaged in APN activities both under the Science and Institutional Agendas

**MARCH 2010. 15<sup>th</sup> IGM/SPG Meeting, Busan, Republic of Korea.**

All members acknowledged that there is still a great need to raise awareness among policy-makers on various global change issues. It was suggested to explore all mechanism in place and platforms for APN to effectively convey its messages to policy-makers through appropriate platforms and communication tools.

**AUGUST 2009. 2<sup>nd</sup> SEA-SRC Meeting, Bangkok, Thailand.**

Discussed and reviewed existing APN mechanisms in terms of strengths, weaknesses, opportunities, and threats in order to strengthen appropriate interactions within the sub-region and among APN nFPs, SPG Members and Project Leaders/Collaborators

Outcomes of selected APN-funded projects and global/climate change situation in the region were reported

Tackled members' involvement in monitoring and coordination of APN-funded projects in their respective countries and how coordination at the sub-regional level can be strengthened

Identified possible ways forward in enhancing the flow of information and identifying mechanism or communication channels that would lead to improved relations among the nFPs, SPG Members, project leaders/collaborators, global change partners in Southeast Asia

**JULY 2009. 1<sup>st</sup> SA-SRC Meeting, Colombo, Sri Lanka. Country Experience.**

All members shared their thoughts and provided comments and suggestions as additional input in the evaluation of APN's second strategic phase and formulation of the third strategic plan.

They discussed the APN's progress in achieving its goals and implementing the second strategic plan; areas that need more efforts (e.g. project management/ implementation, funding, institutional arrangements, etc.); and, APN's direction in the next 5-10 years.

An open discussion among the participants ensued and the following were tackled: new thematic areas; needs, priorities and gaps in the region; how to address these gaps; and ways of integrating actions/responses into a regional effort.

**MARCH 2009. 14<sup>th</sup> IGM/SPG Meeting, Kuala Lumpur, Malaysia.**

All APN Members stressed the importance of sub-regional cooperation not only among the nFPs and SPG Members but with other research and decision-making communities. Particularly stressed was the importance of information exchange among the countries to facilitate relevant scientific research at the sub-level.

**FEBRUARY 2009. APN Secretariat Brief Informal Meeting with the host of the next SEA-SRCom Meeting. Bangkok, Thailand.**

Two main issues that were discussed was the chairperson of the SEA-SRC and agenda items for the SEA group at the SC parallel sessions. The summary of this Meeting is appended to this paper for information and to seek further suggestions on the way forward.

**OCTOBER 2008. 10<sup>th</sup> SC Meeting. Manila, Philippines**

The SC stressed that the sub-regional committees are to focus on strengthening the role of nFPs and their relation to the science community (the role intended for the sub-regional committees as opposed to writing proposals for submission to the APN).

**MARCH 2008. 13<sup>th</sup> IGM/SPG Meeting. Kobe, Japan**

Many issues were raised, particularly on proposal submission, and the IGM agreed that before any decision could be reached on functionality within the APN, the discussion was to be pursued further in a careful, thorough and thoughtful manner. The SC was asked to consider the issues in the inter-sessional period for further consideration. The Secretariat is to explore institutional and financial implications on how to tackle the issue under the supervision of the SC and in coordination with the SEA-SRCom.

**MARCH 2008. SEA-SRC Ad Hoc Meeting. Kobe, Japan**

SEA-SRCom expressed interest in developing a research proposal for the APN's next Call. It was raised that in order to enhance the ability of each member country to develop a strong regional proposal to the APN, communication among the scientists in SEA sub-region should be enhanced first.

**AUGUST 2007. 1<sup>st</sup> SEA-SRC Meeting. Jakarta, Indonesia**

The SEA-SRCom laid out its medium to long-term work plan and agreed on the organisational structure, membership, functions and modalities. Scientific priorities of the SEA-SRCom were identified and a mechanism for scientists and policy-makers dialogue was introduced. Thailand was asked to host the next SEA SRCom Meeting.

**MARCH 2007. 12<sup>th</sup> IGM/SPG Meeting. Honolulu, USA**

An item paper outlining the membership, roles, organisation and arrangement of the SEA-SRCom was discussed and revised. Another paper providing some procedures that should be considered when drafting a Terms of Reference (TOR) for the SR Committees was presented and revised. The IGM allocated a budget for the trial model and Indonesia was requested to host the first SEA-SRCom Meeting.

**AUGUST 2006. Sub-Regional Committee (SRCom) Meeting. Jakarta, Indonesia**

The Southeast Asia (SEA) SRCom was formed, initiated by the national Focal Point for Indonesia, Ms. Liana Bratasida.

## APN Climate Synthesis and Related Activities

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The APN Climate Synthesis activities began in November 2009 and involve key scientists from the Asia-Pacific region, all of whom have been involved in APN activities either through leading APN-funded projects and/or through being a member country or expert member in the APN.

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*Publications envisaged:*

(1) *Climate and the Asia-Pacific Region: A Synthesis of Climate Activities.*

- Published September 2011.

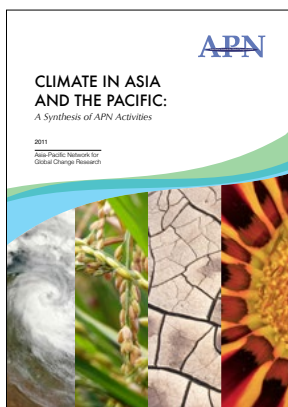
(2) *Peer-Review Paper for Publication:*

- Submitted to EOS January 17<sup>th</sup> 2012. Under review 23<sup>rd</sup> January 2012

(3) *APN Climate Synthesis Book/Special Journal Edition*

- Published by late autumn 2012.

### 1. Climate in Asia and the Pacific: A Synthesis of APN Activities



Work for the present Synthesis – Climate in Asia and the Pacific: A Synthesis of APN Activities began in November 2009 with a scoping workshop followed by an authors' workshop in August 2010. The work entailed summarizing over fifty scientific research and capacity building projects funded by the APN that had a climate-related element – whether natural climate variability and/or climate change. The contributing authors of the present synthesis report are leaders in their field and many of them are authors for the next Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCCAR5). The present report will be a useful tool not only for the IPCC, but also for scientists, decision-makers and educators as it identifies both research gaps and future research activities for the Asia-Pacific region in the context of natural climate variability and climate change.

#### Steps to disseminate/raise awareness of the publication:

- 1000 hard copies were printed and showcased specifically at:
  - » UNFCCC Workshop in Lima, Peru in risk management strategies for Climate, October 2011
  - » WCRP Conference in Denver, Colorado, October 2011
  - » UNFCCC COP17 (via booth) and UNFCCC Secretariat (specifically for SBSTA Systematic Research & Observations.
  - » Planet Under Pressure Conference, London 26-29 March, 2012.
  - » Bonn/SBSTA36 Dialogue at the Research Dialogue, 14-25 May 2012.

- » Distributed in hard and soft copy among APN Members and other relevant organisations, particularly the IPCC.
- Various communications with the IPCC Secretariat on the availability of the publication by the Authors themselves and by the APN Secretariat. This would be regarded as gray literature and will need the agreement of 2 CLAs for any one chapter to be cited.
- A booklet of the outputs (new series of mini-booklets by the APN on activities under its various scientific themes – refer to Coastal Zone booklet).

## 2. Peer-Review Paper for Publication



Submitted January 18<sup>th</sup> 2012, a paper for publication is currently in draft format and is being targeted for AGU's EOS, which is an international newspaper rather than a journal. A reputable publication, EOS does not publish original research but publishes other kinds of articles, including synthesis work.

## 3. Book/Special Edition: Being published by Springer in its Advances in Global Change Research Series.

Following a workshop from 17-20 October, in Kobe Japan, the book authors are now in the process of preparing Second Order Drafts for the Chapters outlined below. There will be a 90-minute Progress meeting on March 14<sup>th</sup> from 3pm to discuss progress, status and readiness of the draft for submission to Springer in April 2012. An outline of the book to date, which will look at current/emerging issues in the Asia-Pacific region is as follows:

### **TITLE: Climate in Asia & the Pacific: Security, Society and Sustainability**

#### **Foreword**

- Helen Clark of UNDP (to be confirmed)
- WCRP Executive Director

#### **Message from the Steering Committee Chair of APN**

#### **List of Contributors**

#### **Chapter I: Introduction (Coordinating Lead Author: Michael Manton)**

Include purpose of the book, tools/methodologies used and opportunities for climate impact, adaptation and vulnerability assessments. There is a need to recognise the importance of Asian societies that extend from remote communities to mega-cities.

#### **Chapter II: Climate Variability and Change (Coordinating Lead Authors: Jim Salinger & Madan Shreshta)**

##### Section 1: Observed Climate, Variability and Trends

- Highlight characters and drivers of climate, variability and trends across the Asia-Pacific, including extremes, glacial mass balance changes and large scales temperature , e.g. circulation and monsoon
- Include pre-historical perspectives and variability across time-scales

Section 2: Modelling Projections and Regional Downscaling

- Highlight regional climate modelling and downscaling for Asia-Pacific, including projections on future climate and potential applications of models outputs in projects initiated by WCRP [e.g. Coordinated Regional Climate Downscaling Experiment (CORDEX)], IITM, APCC, BoM, GCISC, IRI, etc.

**Chapter III: Climate and Urbanisation (Coordinating Lead Author: Peter Marcotullio)**Section 1: Urbanisation as a driver of Climate Change

- Highlight the needs of urban areas on food, water, and energy and hence recognise urban areas as source of greenhouse gases. Note the impact of urban design on water and energy efficiency.

Section 2: Mega-Cities (coastal and inland)

- Highlight vulnerabilities of mega-cities to climate-related events such as sea-level rise and flooding. Note strategies for managing impacts, including urban planning.

**Chapter IV: Climate and Security (Coordinating Lead Authors: Lance Heath & Elena Nikitina)**Section 1: Food Security: Agriculture and Fisheries

- Highlight vulnerabilities and opportunities of agriculture and fisheries to climate variability and change and note strategies for managing and planning those vulnerabilities and opportunities.

Section 2: Water Security

- Highlight vulnerabilities and opportunities of water security to climate variability and extreme events for Asia-Pacific including Himalayas, Tibetan Plateau and Pacific States. Note strategies to manage vulnerability including extreme events.
- Include conflict resolution

Section 3: Disaster Management

- Highlight strategies and opportunities for managing climate-related disasters

Section 4: Energy (distribution, efficiency, sources)

- Highlight vulnerabilities of energy supply to climate change and variability and extreme events. Note strategies to manage those vulnerabilities.

**Chapter V: Climate and Society (Coordinating Lead Author: Kanayathu Koshy)**Section 1: Governance

- Describe capabilities and potential strategies for societies to manage climate risks at various levels of governance.

Section 2: Remote Communities

- Mountain Communities
- Small Islands
  - » Highlight vulnerabilities of remote communities to climate variability and change and discuss strategies to manage those vulnerabilities

Section 3: Human Health

- Highlight vulnerabilities of human health to climate variability and change including extremes and discuss potential strategies to manage those vulnerabilities

**Chapter VI: Climate and Sustainability (Coordinating Lead Author: Rodel Lasco)**Section 1: Integrated Assessment and Energy Options

- Highlight development of integrated assessment methodologies to determine sustainable energy options for Asia-Pacific region.

Section 2: Ecosystem Management

- Highlight importance of natural ecosystems in sustainable development and discuss their roles in climate change adaptation and mitigation.

**Chapter VII: Future Directions for Climate Research in the Asia-Pacific Region (All CLAs)**

- Highlight overall conclusion and knowledge gaps across all chapters

**Coordinating Lead Authors**

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Lance Heath (SPG, Expert, AUS)  
Kanayathu Koshy (SPG, Expert, Malaysia)  
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## APN Climate Synthesis: Executive Summary (Michael Manton and Linda Stevenson)

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The adverse effects of climate change and natural climate variability pose a significant threat to humanity, with the poorest communities being the most vulnerable. Scientific understanding of our climate is advancing at a significant rate, with new information emerging about the likely impacts of climate change, the options to adapt to these changes, and new approaches to mitigation.

Through national and international fora, it is becoming clear that climate is one of the most, if not *the* most, pressing issue in the political arena today. This has been evident in government and stakeholder meetings such as the 34th G8 Summit (Japan, 2008) and the most recent United Nations Framework Convention on Climate Change (UNFCCC) 16th Conference of the Parties (COP) Meeting (Mexico, 2010) and the Copenhagen Accord, where commitments to climate change have been underscored, particularly the need to support developing countries for financing and transferring knowledge and skills to respond effectively to climate change.

IPCC is the Intergovernmental Panel for Climate Change and its Fourth Assessment Report (AR4) states that “warming of the climate system is unequivocal” and that climate change will interact at all scales with other aspects of the global environment and aggravate existing concerns about the provision of natural resources including water, soil and air pollution, health hazards, disaster risk, and deforestation. Their combined impacts may be compounded in the future in the absence of integrated mitigation and adaptation measures [IPCCAR4 (SPM), 2007].

***With this background, it comes as no surprise that the majority of projects funded by the APN since its inception have had a climate component.***

The present synthesis report is part of the APN’s larger aim to contribute, from the science perspective, to the development of policy options for appropriate responses to climate vulnerability and impacts, including adaptation and mitigation, which in turn will contribute to sustainable development. The timing of this publication also leads into three major activities such as the “Planet Under Pressure: New Knowledge Towards Solutions Conference” and the “Rio+20 United Nations Conference on Sustainable Development,” both taking place in the first half of 2012, and the work of the current IPCC fifth assessment with the report scheduled for release in 2014.

The synthesis report indicates that while there is much activity at the global level, there is a great need to intensify investigative research of climate change and climate variability and trends at the regional level, as these are still poorly understood. Consistent socio-economic data collection is needed, as is the need for an interdisciplinary approach to solving complex climate change problems. The increasing frequency and severity of floods, droughts and extreme temperatures requires use of appropriate indices to improve monitoring and prediction of extreme events.

The effects of climate on water resources have been studied in APN projects but many issues remain unclear. There is a need for models to better predict the effects of seasonal to inter-annual climate on water availability and quality. Coastal communities continue to be highly vulnerable to sea level rise and research is needed in identifying appropriate adaptation measures, strategies, and policies. Small islands are especially vulnerable and research is required into relocation options or alternatively, where relocation is not an option, into engineering solutions. APN has supported international workshops to reduce vulnerability and devise

coping strategies for agriculture to climate variability and change. These have built the knowledge-base for developing predictive capacity to manage climate variability and climate change-related vulnerability, strengthen overall climate responses and build resilience to socio-economic, and environmental shocks, which is one of the region's urgent development needs.

APN projects have also contributed substantially to the building of regional capacity to include climate change in national sustainable development strategies and action plans. APN workshops on trends in climate extremes have provided a framework for international trend analysis in developing countries around the world. However, what is abundantly clear is that open access to climate data, including relevant socio-economic data, will be essential for countries in the Asia-Pacific to carry out risk assessments of their vulnerability to trends in climate within a regional framework. It is, therefore, in the interest of all countries of the APN to promote the open exchange of climate-related data.

The need for climate change adaptation is increasingly recognized by communities, with an initial focus on assessing vulnerabilities and identifying adaptation options. The complexity of adaptation due to the multidisciplinary nature of the required solutions and the lack of long-term data pose a great challenge. Approaches at the grass roots levels (including the identification of local champions) that involve communities and local governments to incorporate climate change adaptation practices into development planning will be needed, and Integrated Assessment Models (IAMs) will need to be customized for local to regional and sectoral levels.

Modelling the effects of climate on agriculture and fishery production needs to be refined. Critical to climate adaptation research, practice and policy are downscaled climate data. Developing Regional Climate Models (RCMs) in Asia has helped provide more detailed information on monsoon circulation; and high-resolution regional/local information from RCMs can be used in impact, vulnerability and adaptation studies. There is a need for further work on RCMs and statistical downscaling methods to help localise Global Climate Model (GCM) results and to quantify the uncertainties associated with these results. Especially problematic in the Asia-Pacific region are Small Islands States and areas with rough and steep terrain like the Himalayas.

The investments by APN in projects aimed at improving the Asia-Pacific region's understanding of climate in the region, at assessing the risks to society and nature from climate variability and change, and at raising awareness of these issues to decision-makers and the public are well justified in terms of need and benefits. Formal assessments and literature citations have demonstrated that these activities have been effective and of high quality.

Given the high quality of APN projects and the potential of many to yield longer-term benefits through the provision of marginal resources, there should be an investigation of innovative means to *sustain* such projects beyond the term of initial APN support.

Strategic planning of APN would benefit by ensuring that it maintains close contact with relevant international developments on indicators of the impact of research and capacity building. The APN should continue to recognise the benefits of applying appropriate models to assist in the integration of information in complex systems. The APN recognizes that effective application of climate knowledge to practical problems of societies across the Asia-Pacific region requires effective dialogue across the traditional boundaries of science, technology and policy.

The APN has a role to play in promoting research in the region that defines the strategies that lead to true sustainable development. The Asia-Pacific region has a rich variety of cultures, and the APN has been effective in promoting connections and alliances across all these cultures. This effectiveness comes from the

recognition of cultural differences and not imposing a monolithic approach. These sensitivities to culture will be especially important as the APN continues to promote exchanges of knowledge on climate-related issues across disciplines and sectors.

Clearly, the most important aspect of interactions across a region is the human factor. The APN has been effective in promoting innumerable networks of participants in its projects related to climate. One potential element in the future development of sustained networks is through the engagement of early-career researchers who can carry their scientific and social networks into the future.

Finally, while substantial progress has been made by APN-supported projects on climate science, capacity building and policy outreach, much remains to be done in the Asia-Pacific region. Among the key trends impacting the region are rising population, increasing urbanization, rapid economic development, rising energy demand, massive land use and cover change, increases in temperature, heatwaves, floods and droughts, and globalization. APN may wish to invest in some of these areas in its future strategies and research agendas.

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## A 10-Year Synthesis of Climate Activities in Asia and the Pacific

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James Salinger<sup>1</sup> and Linda Stevenson<sup>2\*\*</sup>

Submitted to AGU/EOS 17<sup>th</sup> January 2012 (currently under review)

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### Abstract

The vision of the Asia-Pacific Network for Global Change Research (APN) is to enable countries in the region to successfully address global change challenges through science-based response strategies and measures, effective science and policy linkages, and scientific capacity development.

For more than a decade, the APN has supported a range of activities related to climate in the Asia-Pacific region, the scope of which has extended from leading-edge research and scientific capacity building, to forums for dialogue between scientists and decision-makers, and public awareness seminars on climate-related issues. Considered well justified in terms of need and benefits, these investments have aimed at improving the region's understanding of climate, assessing associated risks to society, and raising awareness global environmental change issues among decision-makers and the public.

The present brief report summarizes a recent synthesis of 56 APN climate-related projects and their outputs, and emerging issues and priorities.

### The Synthesis

Fifty-six APN projects undertaken from 1989-2009 that had climate (climate change and/or natural variability) as the main element were reviewed (Manton *et al.* 2011). The activities focussed around eight themes of food, agriculture and climate; seasonal climate prediction and applications; climate variability, trends and extremes; regional climate change modeling; vulnerability and adaptation to climate change; climate change mitigation; coastal cities and climate change; and climate change policy and outreach. Most of the activities attempted to bridge climate science and policy, one of the four main goals of the APN.

Utilizing seasonal to inter-annual climate variability prediction, workshops developed methods to communicate climate information from climate and agricultural experts to farmers in the Pacific. An international multi-disciplinary network of scientists providing *actionable climate knowledge* to farming groups in parts of South and Southeast Asia was created and climate information to enhance the resilience of farming systems exposed to climate risk was applied in these Asian sub-regions. Using systems analysis and modelling can uncover the best response to climate forecasts for disease risk management, which has been achieved for various crops in two regions of India; drought costing in Bandung, Indonesia; and in farm trials in Pakistan.

For long-term change APN work has developed approaches to characterize and manage risk, resulting in preparedness planning, risk assessments and instillation of early warning systems. APN produced the first major assessment of climate change impacts on water and agriculture security in South Asia. To reduce vulnerability, activities have shown that incorporating climate adaptation into development planning is crucial.

Projects on seasonal climate prediction and its application have been central to developing scientific capacity and strengthening interactions between scientists and policy-makers. A Pacific-based climate and society training institute helped train media groups to produce accurate climate information and awareness materials, especially during cyclones, floods and drought-related disasters. This contributed substantially to APN's second goal of strengthening interactions between scientists and policy-makers.

Workshops on indicators and indices for monitoring trends in climate extremes not only produced the first regionally consistent analysis of trends in temperature and precipitation extremes across Southeast Asia and the Pacific, but provided a framework for international trends analysis in developing countries. Trends in temperature extremes, such as increases in the number of hot days and decreases in the number of cold nights each year, have occurred across the entire region of South Asia.

Projects supported the development of Regional Climate Models (RCMs), which improved the simulation of the Asian monsoon system and local downscaling. Modeling groups from throughout the region collaborated to compare their RCMs, setting the scene for regional projection comparisons of future scenarios. This provided more detailed local information on monsoon circulation at high-resolution, providing vital information for policy-makers. Training in downscaling Global Climate Models (GCMs) to produce locally-relevant information remains crucial for the region to effectively respond to climate change.

Small islands in the Pacific and developing countries in Asia feel the harsh impacts of climate change the most. Climate vulnerability projects have shown that the poorest are the most vulnerable, and livelihoods in these areas are consistently threatened by extreme climatic events. Abnormal climate patterns have already been observed and are making an impact. The Philippines is experiencing larger impacts from the increased frequency and intensity of typhoon rain patterns shifting to more concentrated pockets, and coastal communities have observed sea level at high tide going beyond historical levels inundating some areas, with longer flooding times. It is clear that in some areas vulnerability differs from sector to sector.

Integrated Assessment Models (IAMs) have an important role in increasing resilience and developing adaptation and mitigation options. While APN has improved the capacity of developing countries to assess greenhouse gas (GHG) emissions to develop mitigation strategies, better alignment between sustainable development and climate change mitigation is needed.

Recognizing the need for action to assess the impacts of flooding in coastal areas across the region, a GIS database of hydrological characteristics and socio-economic conditions was developed for risk assessment studies of flooding in Southeast Asia. Another workshop on coastal cities in Asia assessed vulnerability to flooding with sea level rise at 2025, 2050, 2075 and 2100. Climate risk in urban planning has been recognized as a result of these activities. The complexity of cities requires enhanced interaction among scientists, urban planners and policy-makers, and Asian coastal cities are benefitting from increased capacity in urban climate risk planning, with activities growing across the region.

According to geographic and socio-economic parameters, different options have been adopted in APN projects to convey the science and the impacts of climate change. Remote communities such as in the small islands of the Pacific or the Himalayas have varied cultural and economic backgrounds and activities to raise awareness

of climate-related issues have been successful by ensuring that monolithic approaches to capacity building and awareness-raising are avoided across the region.

An example of effective science-policy interactions was through a training course to promote the application of scientific knowledge in forest management and climate adaptation, which strengthened the capacity of forest scientists in APN developing countries. The activity also raised the awareness of forest-related global change research among policy-makers and practitioners.

### **What Next?**

Human activities and the natural environment of Asia and the Pacific are influenced profoundly by its climate. Food and water security depend vitally on local climate, and they are susceptible to both natural climate variability and the trends associated with anthropogenic climate change.

Emerging issues and priorities include research in trends and variability at regional levels via climate modeling, vulnerability assessments, and adaptation strategies in various sectors to decadal climate change. There remains a large gap between the science and policy communities because of the time horizon between the two groups; the former working up to decades and the latter as short as two years or less. Close collaboration among experts and the media is required to effectively mainstream climate information to various sectors.

The most important aspect of interaction is the human factor. The APN has been effective in promoting innumerable climate-related networks involving scientists from a range of disciplines, urban planners, policy-makers, natural resource managers, farmers and the public. One element in sustaining these networks is through the engagement of young people who can carry their scientific and social networks into the future. Capacity building continues to be crucial over most of the eight themes in the synthesis report as does the need to actively cooperate and network across the region.

The APN recognizes that effective application of climate knowledge to the practical problems of societies throughout the Asia-Pacific region requires effective dialogue across the traditional boundaries of science, technology and policy.

The Asia-Pacific region has a rich variety of cultures, and the APN has been effective in promoting connections and alliances across all these cultures. This effectiveness comes from the recognition of cultural differences and these sensitivities are especially important as the APN continues to promote exchanges of knowledge on climate-related issues across disciplines and sectors.

### **Conclusion**

Finally, while substantial progress has been made by APN-supported projects on climate science research, capacity development, and policy outreach, much remains to be done in the Asia-Pacific region. Among the key trends impacting the region are rising population, increasing urbanization, rapid economic development, rising energy demand, massive land use and cover change, increases in temperature, heat waves, floods and droughts, and globalization. APN will consider these in its future strategies and research agendas. The synthesis report, which has had over 4,000 downloads to date is available on the APN website at <http://goo.gl/info/gVW8M>.

### **References**

Manton MJ, Heath L, Salinger J and Stevenson, LA (2011). *Climate in Asia and the Pacific: A Synthesis of APN Activities*, Asia-Pacific Network for Global Change Research. ISBN978-4-9902500-1-0. 78 pp.

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## Updates on Activities Involving the Scientific Planning Group (SPG) and Capacity Development Committee (CDC)

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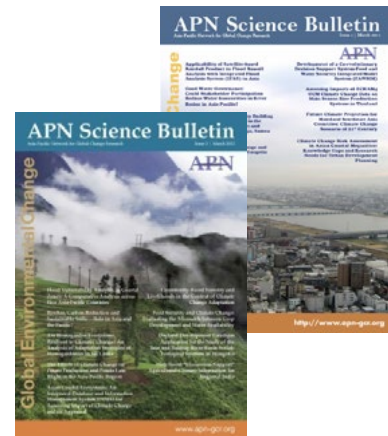
The information contained in the present paper and appendices outline some of the main activities conducted over the past year through the annual calls for proposals for both CAPaBLE and the ARCP programmes. The present paper explains the process implemented by the Secretariat and the work conducted by the SPG and CDC, particularly during the review process.

*Additional information on other activities will be highlighted by members of the SPG and CDC during their report to the IGM.*

### 1. PROJECT MANAGEMENT

#### a. Projects from the Annual Calls for Proposals

The APN is currently supporting **41 new and continuing projects** of which 22 are under the Annual Regional Calls for Research Proposals (ARCP) and 19 are under the CAPaBLE Programme (1 comprehensive research project, 17 capacity building projects, and 1 seed grant). Summaries of the projects under the ARCP and CAPaBLE programmes are attached as [IGM-SPG/17/09-App.1](#), [IGM-SPG/17/9-App.2](#), and highlights are available in the APN Science Bulletin, Issue 2, March 2012. The spreadsheets also indicate the amount of funding awarded to each project.



#### b. Projects from Focussed-Activity Calls for Proposals

Two (2) Focused Calls for Proposals were launched in 2010 on Ecosystems, Biodiversity, and Land Use (EBLU) and Resources Utilisation and Pathways to Sustainable Development (RUSD). These projects began in late 2010/early 2011 and all, bar one single year project, are moving into their second year of funding. There are 5 projects under EBLU (3 research projects and 2 capacity building projects); and 2 projects (1 research project and 1 capacity building project) under RUSD. Summaries of these projects are attached [IGM-SPG/17/09-App.3](#), and highlights are available in the APN Science Bulletin, Issue 2, March 2012. The spreadsheets also indicate the amount of funding awarded to each project.

#### c. Management

- Submission of reporting requirements are regularly followed-up and consistent. However, the APN Secretariat is struggling with some issues on financial reports particularly those projects that did not submit their report on time despite repeated reminders, did not provide necessary and correct evidence of expenditures, lacking evidence, etc. Financial reporting continues to be the main problem under the “reporting requirements” stipulated by the APN.
- Project leaders are constantly reminded to inform the Secretariat of any changes in their project activities particularly on events for announcement on the APN website and EML. They are also reminded to inform the Secretariat of any event in which any project outputs will be presented. This allows the APN to maintain an up-to-date calendar of activities for the international community via the APN website google calendar, implemented this year.
- Project Leaders are continuously encouraged by the APN Secretariat to establish links from, and display the APN logo on, their institutions’ websites and/or APN project websites to the

APN website. This is work in progress and, as links are established, information is placed on the APN website: <http://www.apn-gcr.org/newAPN/links/supportedProjectSites.htm>

- The Secretariat has developed bulletins and press releases highlighting completed and continuing projects under ARCP and CAPaBLE Programmes and these are disseminated in various events and conferences. Please refer to Item 2. Highlights of 2011-11 Activities
- This year the data management policy was included in the Contractual Documentation of all APN-funded activities from annual regional calls for proposals.

#### **d. Science Bulletin**

In the past decade, APN has published yearly project reports containing abstracts of APN-funded activities that have been useful for the APN members and other interested parties. However, with the implementation of the APN third strategic phase (2010-2015) and the need to ensure that the work of the APN reaches all stakeholders, including the science, policy and civil-society communities, the APN launched a new publication series: **APN Science Bulletin last year.**

The APN Science Bulletin publishes annually and highlights all of the projects funded and completed by the APN in the year of publication (the present year running from April 2011 – March 2012).

The Science Bulletin, this year, has five main sections:

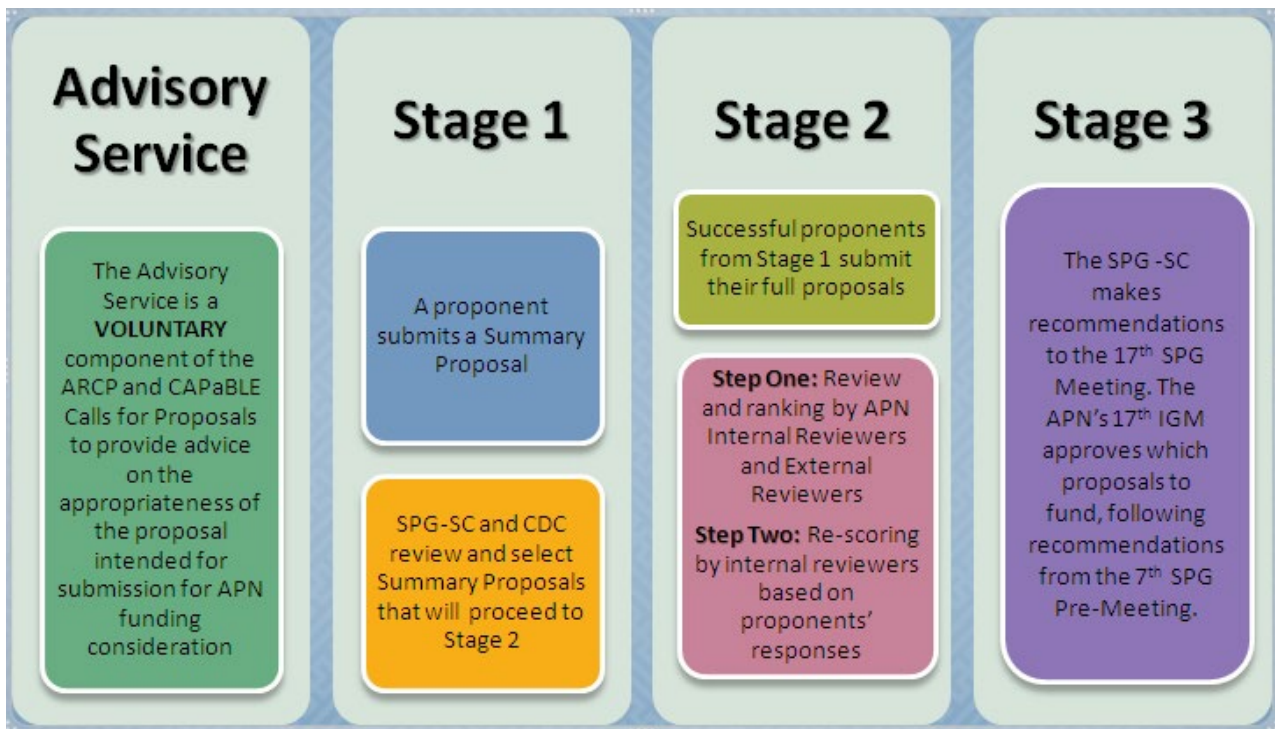
1. Featured Articles;
2. Regional Research Projects funded under the Annual Regional Call for Proposals (ARCP) Programme;
3. Scientific Capacity Development Projects funded under the CAPaBLE Programme; and
4. Projects funded under the APN's Focussed activities Programme (EBLU).
5. Projects funded under the APN's Focussed activities Programme (RUSD).

In this **second issue of the APN Science Bulletin, March 2012** (please refer to the hard copy provided in your folders); all activities that were funded and undertaken since January 2011 have been included. Under featured articles, full scientific research papers have been written and cover a number of major themes in the APN's science agenda Sections 2 and 3 look at the work conducted under the APN's two main pillars of activities; the ARCP and CAPaBLE programmes, respectively. Sections 4 and 5 highlight projects funded through a special focussed activity on Ecosystems, Biodiversity and Land-Use (EBLU)m focusing mainly on Forestry and REDD+ issues; and Resources Utilization and Pathways for Sustainable Development (RUSD), focusing mainly on Solid Material Flow and Recycling initiatives.

## **2. ANNUAL CALLS FOR PROPOSALS PROCESS**

a. Following the 16<sup>th</sup> APN IGM/SPG Meeting in April 2011, the APN Secretariat implemented the 2011 Annual Calls for Proposals for ARCP and CAPaBLE Programmes. The Annual Calls for Proposals was officially launched on 26<sup>th</sup> May 2011. Please refer to Figure 1 for information, especially for new members of APN, on the general procedure and overall process of the Calls for Proposals.





**Figure 1.** Annual Calls for Proposals Submission and Review Stages

## General Information on Procedure for the Calls for Proposals Process

### ADVISORY SERVICE (Voluntary)

The Advisory Service is a **VOLUNTARY** component of the ARCP and CAPaBLE Calls for Proposals to provide advice on the appropriateness of the proposal intended for submission for APN funding consideration, as well as to provide assistance for emerging/young/early-career scientists seeking collaborators in the region. A potential proponent consults with the APN Secretariat with a carbon copy to the [national Focal Point \(nFP\)](#) and the [Scientific Planning Group \(SPG\)](#) Member from his/her country by sending a [Letter of Intent \(LOI\)](#).

### PROPOSALS SUBMISSION AND REVIEW PROCESS

The proposals submission and review process consists of 3 main stages:

- Stage 1 – Submission and review of Summary Proposal (compulsory)
- Stage 2 – Submission and 2-step review process of Full Proposal (by invitation)
- Stage 3 – Final Decision-Making

#### Stage 1: Submission and Review of Summary Proposal (Compulsory)

A proponent submits a summary proposal with carbon copy to the nFP and to the SPG member from his/her country (deadline was 29 July 2011). The summary proposals underwent a screening process performed by the SPG Sub-Committee (SPG-SC) and Capacity Development Committee (CDC), who select proposals that will proceed to Stage 2. All proponents were notified of the results of the Stage 1 review process on 21<sup>st</sup> September 2011, and only those proponents that passed Stage 1 were asked to submit a full proposal for further consideration.

## **Stage 2: Submission and Review of Full Proposal (compulsory and by invitation)**

This stage is by **invitation only**. Successful proponents from Stage 1 are invited to submit their **Full Proposals** to the APN Secretariat by **mid-October 2011**.

### **Two-Step Review process**

Review by APN internal reviewers (SPG members) and external reviewers. Proponents above the set cut-off line respond to the questions and comments of the APN internal reviewers, and unsuccessful proponents are informed of the results of the first review (**Step 1 Review: November 2011 – December 2011**). SPG members submit revised ratings based on responses of the proponents at Step 1 Review (**Step 2 Review: January 2011**).

## **Stage 3: Final Decision-Making**

The APN's 17<sup>th</sup> IGM/SPG Meeting approves which proposals to fund, following recommendations from the SPG (**March 2012**). The Secretariat informs proponents of the final decision in April 2012.

### **b. Report on the Implementation of the Calls for Proposals**

#### ***Advisory Service (Voluntary)***

The APN Secretariat received 72 Letters of Intent on 24<sup>th</sup> June 2011. The Letters of Intent were sent to respective nFPs and SPG Members for their information and should they wish to provide feedback to the proponents. Their feedback was sent to the potential proponents together with the Secretariat's response on 25<sup>th</sup> July 2011, to give proponents who are advised to submit a Stage 1 Summary Proposal at least one full month to prepare it.

#### ***Proposals Submission and Review Process (Compulsory)***

Under ARCP Programme, 48 summary proposals were received by the APN Secretariat, 47 of which were considered by the Secretariat to have met the basic eligibility criteria for submission. Following review by the SPG-SC, 31 proponents were requested to submit full proposals, which were reviewed by the SPG. SPG recommendations for funding will be discussed separately on Day 3 under Item 14 of the 17<sup>th</sup> IGM/SPG Meeting agenda. Please also refer to [\*IGM-SPG/17/14-App.1\*](#) under Item 14 in your folders for a summary spreadsheet of the summary proposals.

Furthermore, the APN Secretariat received 47 summary proposals under the CAPaBLE Programme, 40 of which have been considered by the Secretariat to have met the basic eligibility criteria for submission. Following review by the CDC, 20 proponents were requested to submit full proposals, which were reviewed by the SPG and CDC. SPG recommendations for funding will be discussed separately on Day 3 under Item 14 of the 17<sup>th</sup> IGM/SPG Meeting agenda. Please also refer to [\*IGM-SPG/17/14-App.2\*](#) under Item 14 in your folders for a summary spreadsheet of the summary proposals.

Following the 16<sup>th</sup> Steering Committee (SC) Meeting recommendation that proposals with clearly high scores not be re-reviewed, only the "borderline" proposals were rescored at Step 2 (i.e. those above the SPG-SC and or CDC cut-off line. The responses from all proponents, however, are made available for the SPG-SC and CDC meetings prior to the SPG Pre-Meeting.

All borderline proposals have also undergone reviews by external reviewers, although the scores of the external reviewers have not been integrated with the SPG scores. The aim of the external reviewer comments is to provide additional information on a proposal or proposals, particularly where those proposals sit at the "border-

line” or “cut-off line” for funding from the APN. **As of December 2011, the APN has 145 external reviewers in its External Mail Review System.**

Please refer to appendix *IGM-SPG/17/09-App.4* for supplemental information related to 2011 Proposals and Projects.

### **3. OTHER CURRENT AND FUTURE ACTIVITIES**

*Will be reported to the IGM following the SPG Pre-Meeting on 13<sup>th</sup> March 2012.*

## Report of the South Asia Sub-Regional Committee Ad Hoc Meeting

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### Participants

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#### Bangladesh

A.N.Shamsuddin Azad CHOWDHURY (nFP)

Md. Giashuddin MIAH (SPG Member)

#### Nepal

Shanta Devi PANT (nFP Alternate)

Madan Lall SHRESTHA (SPG Member)

#### India

Hemant BORGAONKAR (SPG Member Alternate)

#### Pakistan

Amir MUHAMMED (SPG Member)

#### Sri Lanka

Basnayake Mudiyansele Uthpala Dayananda BASNAYAKE (nFP)

Gunavi Baladeva SAMARASINGHE (SPG Member)

Vindya HEWAWASAM (Delegation Member)

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### Report from the SA-SRCom

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The SPG member for Sri Lanka facilitated discussions during the meeting before a Chair was elected. He provided a review of past APN South Asia sub-regional cooperation and called for strong leadership for the sub-region. He referred members to the draft Chairperson's Summary noting the tangible outcome and that the engagement of young scientist in the region has contributed to building research capacity in the region.

#### Chair of the SA-SRC

The SPG Member for Bangladesh was nominated as Chair of the South Asia Sub-Regional Committee (SA-SR-Com) for 2012/2013 and presided over the present meeting.

#### Review of the 3rd SA-SRC Meeting and Action Points

The Chairperson's Summary of the 3rd SA-SRC Meeting was presented for review and comments. The SA welcomed the summary noting that the meeting was well documented and it was generally agreed that proposal development training workshops are very important to raising scientific capacity among young scientists in the sub-region and therefore, this program should be continued. Regarding the topics of interest to the South Asia group, the following topics were further noted:

1. Biodiversity and ecosystem services;

2. Climate change and adaptation in relation to agriculture.
3. Awareness raising among the general public and policy-makers on the reality of climate change using existing data and evidence, involving both the scientific and policy-making community;
4. Coastal and ocean pollution, acidification, salinity intrusion and temperature change;
5. Energy use and energy efficiency;

Taking into consideration the APN's focus on biodiversity and ecosystem service and adaptation issues in its programme of work for 2012/13, and importance of these issues in the region, members of the SA-SRCom agreed to focus on 1) **biodiversity and ecosystem services**; and 2) **climate change and adaptation in relation to agriculture**, in the sub-regional cooperation meeting and back-to-back events to be organized later into the year.

It was suggested that, in order to maximize the outcomes of the above proposed meetings, the organizer must be well prepared by identifying the relevant experts in well ahead, and therefore, a mechanism may be put in place to provide seed funds for inviting experts to collate information on the status and opportunity of the targeted topics in each country, which would help to make a successful meeting.

It was also suggested that members liaise with SEA-SRCom with regard to the SEA dialogue and workshop, and if possible, the APN may consider inviting two or three members of the SA-SRCom to participate in the next SEA dialogue. In this case, experiences and perspectives from the SEA dialogue will guide and feed into the SA-SRCom meeting to make it more fruitful.

Following active discussions, the venue and time of the 4th SA-SRC Meeting were agreed:

- **Venue:** Nepal (subject to approval from national Focal Point for Nepal) or Sri Lanka (if Nepal is unavailable)
- **Time:** November 2012
- **Chair:** Prof. Dr. Md. Giashuddin MIAH, SPG Member for Bangladesh
- **Objectives:** To contribute, from the South Asia perspective, to APN's ongoing focus on 1) biodiversity and ecosystem services, and 2) climate change adaptation, especially in relation to agriculture, by sharing knowledge and experiences among SA-SRCom members and by developing proposals for submission and approval by the APN.

**Events:** SA-SRC Meeting with emphasis to consultation on (i) biodiversity and ecosystems, (ii) climate change adaptation and followed by PDTW workshop.

The Chair closed the meeting giving thanks to all for their active participation and cooperation.

## Draft Notes from the Southeast Asian Sub-Regional Committee Meeting

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### Participants

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#### CAMBODIA

Sundara SEM (National Focal Point)  
Veasna KUM (SPG Member)

#### INDONESIA

Erna Sri ADININGSIH (SPG Member)

#### LAO PDR

Chanseng PHONGPACHITH (SPG Member Alternate)

#### MALAYSIA

Che Gayah ISMAIL (National Focal Point Alternate)  
Subramaniam MOTEN (SPG Member)

#### PHILIPPINES

Marcial Jr. AMARO (SPG Member)

#### THAILAND

Pavich KESAVAWONG (National Focal Point Alternate)  
Jariya BOONJAWAT (SPG Member)

#### VIET NAM

Xuan Bao Tam NGUYEN (National Focal Point)  
Kim Chi NGO (SPG Member)

#### OBSERVERS

Michael Manton (Monash University)  
Mohd Nordin Hasan (ICSU-ROAP)  
Tengku Sharizad Tengku (ICSU-ROAP)

### Welcome Remarks and Brief Introduction

The national Focal Point (nFP) for Cambodia, Mr. Sundara Sem, provided remarks and gave a short introduction to the meeting. He noted that the Chair of the *ad hoc* meeting should be the current Chair of the SEA-SR-Com, Dr. Kim Chi Ngo, the SPG Member for Viet Nam. The nFP for Viet Nam, Dr. Ngo, was nominated as Chair and Mr. Sundara Sem was nominated as Vice Chair. The Committee agreed.

Mr. Sem noted that in the last SEA-SRC Meeting in Viet Nam, it was decided that the next SEA-SRC Meeting would be held in Cambodia sometime in October. He also noted that the “opportunity fund” was just brought up by the Secretariat to the IGM so now there was more opportunity for SEA to propose new activities. The

Committee agreed that activities such as Downscaling Workshop and the PDTW have to continue to the next SEA-SRC Meeting.

## **Item 2. Review of the 4th SEA-SRC Meeting Item Points**

The Chair noted that the first action point was the Terms of Reference for the Science-Policy Dialogue and that it had been approved. The Committee informed the Chair that the Terms of Reference was still a draft.

The next issue was the concept paper for the Summer School on Climate Change Adaptation proposed by Dr. Erna Sri Adiningsih, SPG member for Indonesia in collaboration with Prof. Roland Fuchs.

The Chair also noted that she had proposed an activity related to Green Growth at the 4<sup>th</sup> SEA-SRC Meeting.

Dr. Subramaniam Moten, the SPG Member from Malaysia commented that the committee had a very successful Climate Downscaling Workshop in Viet Nam. The focus should not only be on downscaling but also the uncertainties using global models and different regional models. He noted that the Committee also discussed that some countries do not have the facilities to do this work. Viet Nam is quite advanced at this, such as the University of Hanoi. He suggested that perhaps Viet Nam could assist Cambodia and Laos and submit a proposal in relation to this. Dr. Moten also noted that the Committee had a short PDTW but managed to submit proposals to the APN which could be quite encouraging to the young scientists.

Dr. Jariya Boonjawat informed the Committee that Dr. Moten discussed UN-CECAR's work in the region in downscaling modelling. Suggested perhaps Dr. Michael Manton, working with the Climate Synthesis, could give their ideas for activities that could help the SEA-SRC.

Chanseng Phongpachith informed the Committee that Laos was not equipped to run climate modelling projects and use information from Australia. Laos would be very interested in this idea and also Green Growth and Low Carbon Development.

Prof. Michael Manton, Observer, informed the Committee that he was here in two capacities, 1) Chairing the group for APN's Climate Activities and 2) Chair of MAIRS Steering Committee. With both committees, climate downscaling was an area of interest. In MAIRS, try to bring together groups in CORDEX (COordinated Regional climate Downscaling Experiment) as there was a lot of overlap from different regions. CORDEX focuses on both modelling and application on modelling.

Prof. Nordin Hasan, Observer from ICSU-ROAP, informed the Committee that ICSU had no activity in climate change at the moment. CORDEX submitted a proposal for a grant from ICSU for South Asia. This was a CORDEX and START initiative. ICSU was not involved in Climate Change however ICSU would present on Future Earth at Interactive Session III.

Dr. Jariya Boonjawat informed the Committee that START be responsible for the logistics in Thailand for the S-P Dialogue. The nFP would be co-host for the local participants. At the moment, wondering how to include the civil population into the dialogue.

Prof. Nordin informed the Committee that ICSU had visited Cambodia can benefit a lot from capacity building work. Level of technical monitoring of environmental factors and lab and field based research. At the moment, ICSU was developing follow up work for the region, focusing on Disaster Risk Management. Largely on Psychological Impacts after a Disaster for Adolescence and Children. Urban health and well-being in relation to environmental change in urban areas was the third focus. Sustainable Energy was the fourth focus. Re-exam-

ining energy options for the region. Final new area of research, Future Earth Systems Sustainability which was related to Climate Change.

Dr. Erna enquires as to whether these were the topics for the Science-Policy Dialogue. Dr. Jariya suggested that these can be the topics for the Science-Policy Dialogue and for the School. If we can pick a theme and design an activity.

Prof. Nordin enquires as to whether the downscaling workshop had been designed yet? If it had not then he suggested as CORDEX was helping SA hold a Downscaling workshop, there was already a package there. If the APN can fund such an activity, CORDEX would be happy to repeat the workshop for SEA.

Mr. Marcial Amaro Jr, SPG Member for Philippines, suggested that perhaps the Committee would like to leave the proponents with the decision as to how the workshop should be designed.

Dr. Jariya Boonjawat invites MAIRS to be a part of the Downscaling Workshop. Prof. Michael Manton thanked Dr. Jariya and stated that he would contact MAIRS contacts in the region.

Mr. Amaro proposed an Action Point regarding the Downscaling workshop, the Committee would coordinate or get in touch with CORDEX to enquire about working with them in designing the downscaling workshop back to back with the 5<sup>th</sup> SEA-SRC meeting in Cambodia.

Mr. Sundara Sem noted that it was important to also have a PDTW during the 5th SEA-SRC to be held in Cambodia in some time in October 2012. It would be very helpful and necessary need to improve Young Scientists' skill in development good proposal based on the APN's guideline for the APN's projects. In this propose, he would like to propose for 3days PDTW instead of 2days as we did in Viet Nam and Philippine. We want participants to have enough time to for discussion and practice in developing their proposal to submit to the APN during the training workshop. Mr. Amaro assures Mr. Sem that if Cambodia was willing to host 3 back to back meetings, the Committee had no objections.

The committee agreed to this proposed and if Cambodia was willing to host 3 back to back meetings during the 5th SEA-SRC Meeting in Cambodia, the committee had no objection, and support.

Dr. Erna Adiningsih provided a follow up of the proposal proposed in the 4<sup>th</sup> SEA-SRC Meeting. She drafted a summary proposal which was submitted under the CAPaBLE programme. All the SEA SPG Members did not review this project as there was a conflict of interest. Based on the recommendations of the reviewers, 3 proposals were combined. The final proposal did not meet our needs. The proposal went through the review process and the CDC decided that this proposal did not meet the needs of the Committee and was given a seed grant to develop the original proposal further. Dr. Erna requests the Committee's suggestion in how to run these activities if we receive funding from the APN. If the Committee agree on the topic we can follow up this action point with the same topic.

### **Item 3. Review of Country Reporting**

The Committee decided not to discuss this due to the time constraint.

### **Item 4. Southeast Asia Science-Policy Dialogue**

Mr. Amaro suggested that the Committee refer to the Terms of Reference to discuss this issue. The Committee agrees.



Dr. Erna noted that the Committee needs to discuss the topics based on the Terms of Reference. There were 6 scientists and 40 policy makers and this seems imbalanced.

Mr. Amaro suggested a round table discussion in the last SEA-SRC Meeting however he noted that the subject matter was critical. The Committee needs to decide who to invite, the subject matter, and the activity.

Dr. Erna proposed that Dr. Jariya Boonjawat be part of the Organizing Committee.

Prof. Nordin Hasan enquires if the Committee had tried tapping into the ASEAN process.

The Committee informed Prof. Nordin that this had been the initial idea and informed him of the difficulties of this idea.

Dr. Jariya stated that in this policy dialogue the Committee still had a choice to invite the practitioners and mid-level policy makers. If we design the Science-Policy dialogue and choose a theme that would be important for practitioners.

Prof. Manton agreed that this was the practical thing to do however, inviting a high level policy maker would create more interest. He also enquires as to whether 4 months is enough time to plan this Dialogue. Dr. Jariya agreed that this might not be enough time to invite high level policy makers.

Mr. Amaro proposes a suggestion that instead of prescribing who can attend the dialogue, perhaps it should be left to the nFPs to identify which officials would be interested to be engaged in this activity. Request nFP to identify who would be the best to be represented in this dialogue.

Mr. Sundara Sem suggested that perhaps we should ask Prof. Manton or Prof. Nordin their opinion on a theme for the science-policy dialogue.

Prof. Manton, referring to the Terms of Reference, noted that there were

two themes/aims and for the Committee to just pick one theme and address the different topics within the theme. Don't let just scientists to speak but policy makers as well. Having a formal dialogue and presenting their issues might be more effective.

The Committee agreed that the second topic, "Regional Climate Change and associated impacts and vulnerability as we as disaster reduction; management; and adaptation strategies" would be the theme for the Science-Policy Dialogue. The Committee would also explore the option of contacting the ASEAN Secretariat for assistance.

#### **Item 5. Future Plans/Activities**

The Committee agreed that the most pressing future activity is the Meeting to develop proposal on summer school and the development of full proposal is important if the proposal is accepted at the IGM.

The Chair brings to the attention of the Committee of Viet Nam's proposal new activities submit to the APN Secretariat to facilitate the APN Director's new activities on Climate Mitigation and LCD as well as the Climate Adaptation in support of Cancun Framework and the need of organise for the South East Asia Subregion the Scientific based Seminar and PDTW correspondent to the two new activities presented by Dr. Akio Takemoto. In that case, Viet Nam also had the experiences in organising the mentioned activities and Viet Nam had the intention on hosting a Southeast Asian seminar/PDTW for LCD and Climate Adaptation to involve the SEA scientists in these new activities. She also mentioned that the proposal and the budget estimation would followed

the APN guide and APN financial regulation. These proposals would be for the APN “opportunity funds” to show support of the new Director’s proposed initiatives if the APN approve.

The Committee noted Viet Nam’s intention to submit these proposals and include in Chairman Summary Report. (Revised by SPG from Viet Nam).

Mr. Sundara Sem suggested that the 6th SEA-SRC should be held in Lao PDR or Malaysia because the SEA-SRC had to rotate among the SEA countries. As we did the 1st SEA-SRC in Jakarta, Indonesia, 2nd SEA-SRC in Bangkok, Thailand, the 3rd SEA-SRC in Manila, Philippine, and the 4th SEA-SRC in Hanoi, Viet Nam. He requested the nFP for Lao PDR and Malaysia to inform us the interest as soon as possible for reporting to the IGM/SPG Meeting. The committee welcome and agreed with this proposed

Due to the time constraint, the meeting was brought to an end.

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## Sub-Regional Committee (SRC) Development

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### **Background**

Referring to the history of Sub-Regional Cooperation Institutional sub-regional cooperation was initiated in the second phase of APN with the establishment of the Southeast and South Asia Sub-Regional Committees. The conduct of sub-regional cooperation meetings, with participation from key international organizations, has improved the flow of information among members of the APN at the sub-regional level and has strengthened collaboration with key partners.

- The Southeast Asia Sub-Regional Committee is entering its 5<sup>th</sup> year of cooperation
- The South Asia Sub-Regional Committee is entering its 4<sup>th</sup> year of cooperation.

Other sub-regions of Oceania and Temperate East Asia have funds each year reserved for sub-regional cooperation and/or a Proposal Development Training Workshop and/or any other sub-regional activity that promotes cooperation among the member countries of that region. To date the countries of Temperate East Asia Oceania and the USA have not wished to form sub-regional committees.

### **Sub-Regions**

The Sub-regions are as follows:

**South Asia:** Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka (6 countries)

**Southeast Asia:** Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Viet Nam (7 countries) and Singapore as an approved country

**Temperate East Asia:** China, Republic of Korea, Japan, Mongolia Russia (5 countries)

**Oceania & USA:** Australia, Fiji, New Zealand, USA (Pacific Islands as approved countries)

**Mitra Award Presentation  
For Best Poster Presenter at Interactive Session II  
Global Change Community Exhibit & Young Indonesian Scientists Poster Session**

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**Presentation by Winning Poster Presenter & Mitra Award Ceremony**

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Following the announcement of the winning poster (which takes place at the end of Interactive Session III on day 2) the Chair will introduce the winning scientist who will provide a 20-minute presentation based on the work in his/her poster. The presenter will then receive the Mitra Award for scientific excellence.

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**2011 Mitra Awardee (16th IGM/SPG Meeting)**

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Winning poster presenter: Dr. W.G.D. Lakmini, Faculty of Agriculture, University of Ruhuna, Sri Lanka

Presentation Title: Plant Mediator to Tackle Climate Change

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**2010 Mitra Awardee (15th IGM/SPG Meeting)**

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Winning poster presenter: Mr. Woo-Seop Lee, from Kongju National University, Korea

Presentation Title: Relationship between absorbing aerosols and snow cover/snow water equivalent over the Himalayas and the western Tibetan Plateau during boreal spring”

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## PROCEDURE FOR RECOMMENDING PROPOSALS FOR FUNDING

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### **Procedures for Recommending ARCP research proposals to the IGM for Funding:**

The Scientific Planning Group Sub-Committee (SPG-SC) at its 7<sup>th</sup> SPG-SC Meeting to be held on Monday 12<sup>th</sup> March 2012 will review all full proposals in ranking order; the reviews they received from both the SPG and the APN's pool of external reviewers; as well as responses from proponents to reviewers' questions and comments. Following this rigorous process, the SPG-SC will compile a spreadsheet, in ranking order, that highlights those proposals that they recommend for funding.

The recommendations from the SPG-SC are then taken to the SPG Pre-Meeting, held on Tuesday 13<sup>th</sup> March 2012 and a similar process to the above ensues, although much less rigorous at this point. Following a detailed discussion, the SPG will prepare a revised spreadsheet, in ranking order, for recommendation to the 17<sup>th</sup> IGM for funding.

The recommendations will be made available on the morning of the 16<sup>th</sup> March, 2012 for IGM perusal, discussion and approval.

### **Procedures for Recommending CAPaBLE capacity building proposals to the IGM for Funding:**

The APN Capacity Development Committee (CDC) at its 11<sup>th</sup> CDC Meeting to be held on Monday 12<sup>th</sup> March 2012 will review all full proposals in ranking order; the reviews they received from the CDC, SPG and the APN's pool of external reviewers; as well as responses from proponents to reviewers' questions and comments. Following this rigorous process, the CDC will compile a spreadsheet, in ranking order, that highlights those proposals that they recommend for funding.

The recommendations from the CDC are then taken to the SPG Pre-Meeting, held on Tuesday 13<sup>th</sup> March 2012 and a similar process to the above ensues, although much less rigorous at this point. Following a detailed discussion, the SPG will prepare a revised spreadsheet, in ranking order, for recommendation to the 17<sup>th</sup> IGM for funding.

The recommendations will be made available on the morning of the 16<sup>th</sup> March, 2012 for IGM perusal, discussion and approval.

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## Hosting of Future Inter-Governmental Meetings

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The process of seeking potential IGM hosts started in January 2012 with a letter from the APN Secretariat Director to member countries asking for their willingness to host. A list of all former IGM locations is provided below.

### Locations of IGM (and associated meetings) since 1996

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#### 1996 – *Chiangmai, Thailand (SEA)*

- 1<sup>st</sup> IGM, 25-26 March

#### 1997 – *Tokyo, Japan (TEA)*

- 2<sup>nd</sup> SPG Meeting, 24-26 March
- 2<sup>nd</sup> IGM, 27-28 March

#### 1998 – *Beijing, China (TEA)*

- 3<sup>rd</sup> IGM, 11-13 March

#### 1999 – *Kobe, Japan (TEA)*

- 4<sup>th</sup> IGM, 18-20 March

#### 2000 – *Islamabad, Pakistan (SA)*

- 5<sup>th</sup> SPG Meeting, 26-27 March
- 5<sup>th</sup> IGM, 29-30 March

#### 2001 – *Jeju Island, Republic of Korea (TEA)*

- Small Group Meeting, 18 March
- 6<sup>th</sup> SPG Meeting, 19-20 March
- 6<sup>th</sup> IGM, 22-23 March
- SC Meeting, 24 March

#### 2002 – *Manila, Philippines (SEA)*

- Small Group Meeting, 17 March
- 7<sup>th</sup> SPG Meeting, 10-11 March
- 7<sup>th</sup> IGM, 13-14 March
- SC Meeting, 15 March

#### 2003 – *Hanoi, Viet Nam (SEA)*

- Small Group Meeting, 9 March
- 8<sup>th</sup> IGM and SPG Meeting, 10-14 March
- 1<sup>st</sup> Ad Hoc RDC Informal Meeting, 12 March

#### 2004 – *Canberra, Australia (Oceania)*

- Small Group Meeting, 21 March
- 9<sup>th</sup> SC Meeting, 25 March
- 9<sup>th</sup> IGM/SPG Meeting, 22-24 March

#### 2005 – *Kobe, Japan (TEA)*

- 11<sup>th</sup> SC Meeting, 10 April
- 2<sup>nd</sup> CSC Meeting, 11 April
- 10<sup>th</sup> IGM/SPG Meeting, 12-14 April
- 1<sup>st</sup> SC Meeting, 14<sup>th</sup> April (in the second strategic phase)

#### 2006 – *Bangkok, Thailand (SEA)*

- 1<sup>st</sup> SPG-SC Meeting, 20 March (in the second strategic phase)
- 4<sup>th</sup> CDC Meeting, 21 March
- 3<sup>rd</sup> SC Meeting, 21 March
- 11<sup>th</sup> Joint IGM/SPG Meeting, 22-24 March
- 1<sup>st</sup> SPG Meeting, 22 March (In the second strategic phase)

#### 2007 – *Honolulu, USA (Pacific)*

- 5<sup>th</sup> SC Meeting, 17 March
- 2<sup>nd</sup> SPG-SC Meeting, 18 March
- 5<sup>th</sup> CDC Meeting, 19 March
- 2<sup>nd</sup> SPG Pre-Meeting, 20 March
- 12<sup>th</sup> Joint IGM/SPG Meeting, 21-23 March
- 6<sup>th</sup> SC Meeting 23 March

#### 2008 – *Relocated from Sri Lanka to Kobe, Japan (TEA)*

- 3<sup>rd</sup> SPG-SC Meeting, 15 March
- 7<sup>th</sup> CDC Meeting, 16 March
- 3<sup>rd</sup> SPG Pre-Meeting, 17 March

- 8<sup>th</sup> SC Meeting, 17 March
- 15<sup>th</sup> SC Meeting, 19 March

- 13<sup>th</sup> Joint IGM/SPG Meeting, 18-20 March

2011 – **Colombo, Sri Lanka (SA)**

- 9<sup>th</sup> SC Meeting, 20 March

- 6<sup>th</sup> SPG-SC Meeting, 4 April

- 10<sup>th</sup> CDC Meeting, 4 April

2009 – **Kuala Lumpur, Malaysia (SEA)**

- 4<sup>th</sup> SPG-SC Meeting, 16 March

- 6<sup>th</sup> SPG Pre-Meeting, 5 April

- 8<sup>th</sup> CDC Meeting, 16 March

- 17<sup>th</sup> SC Meeting, 5 April

- 4<sup>th</sup> SPG Pre-Meeting, 17 March

- 16<sup>th</sup> Joint IGM/SPG Meeting, 6-8 April

- 11<sup>th</sup> SC Meeting, 17 March

- 18<sup>th</sup> SC Meeting, 8 April

- 14<sup>th</sup> Joint IGM/SPG Meeting, 18-20 March

2012 – **Jakarta, Indonesia (SEA)**

- 12<sup>th</sup> SC Meeting, 20 March

- 7<sup>th</sup> SPG-SC Meeting, 12 March

- 11<sup>th</sup> CDC Meeting, 12 March

2010 – **Busan, Republic of Korea (TEA)**

- 5<sup>th</sup> SPG-SC Meeting, 15 March

- 7<sup>th</sup> SPG Pre-Meeting, 13 March

- 9<sup>th</sup> CDC Meeting, 15 March

- 20<sup>th</sup> SC Meeting, 13 March

- 5<sup>th</sup> SPG Pre-Meeting, 16 March

- 17<sup>th</sup> Joint IGM/SPG Meeting, 14-16 April

- 14<sup>th</sup> SC Meeting, 16 March

- 21<sup>th</sup> SC Meeting, 16 April

- 15<sup>th</sup> Joint IGM/SPG Meeting, 17-19 March

**Locations of other APN Meetings**

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- 1<sup>st</sup> SPC Meeting – **Tokyo, Japan** (25-26 January 1996)
- 1<sup>st</sup> SPG Meeting – **Kuala Lumpur, Malaysia** (29-30 August 1996)
- 3<sup>rd</sup> SPG Meeting – **Canberra, Australia** (19-21 January 1998)
- 4<sup>th</sup> SPG Meeting – **Jakarta, Indonesia** (2-4 February 1999)
- 1<sup>st</sup> SC Meeting – **Honolulu, USA** (3-4 December 2000)
- 4<sup>th</sup> SC Meeting – **Manila, Philippines** (16-17 December 2001)
- 6<sup>th</sup> SC Meeting – **Kuala Lumpur, Malaysia** (9-10 December 2002)
- 8<sup>th</sup> SC Meeting – **Wellington, New Zealand** (11-12 December 2003)
- 2<sup>nd</sup> SC Meeting – **Tokyo, Japan** (19-20 November 2005)
- 3<sup>rd</sup> CSC Meeting – **Tokyo, Japan** (18-19 November 2005)
- 4<sup>th</sup> SC Meeting and Workshop on the New Liaison Model – **Jakarta, Indonesia** (24-26 August 2006)
- 1<sup>st</sup> SEA Sub-Regional Committee Meeting – **Jakarta, Indonesia** (20-21 August 2007)
- 7<sup>th</sup> SC and 6<sup>th</sup> CDC Meeting – **Kobe, Japan** (4-5 October 2007)
- 10<sup>th</sup> SC Meeting – **Manila, Philippines** (6-7 October 2008)
- 1<sup>st</sup> SA Sub-Regional Cooperation Meeting – **Colombo, Sri Lanka** (27-28 July 2009)
- 2<sup>nd</sup> SEA Sub-Regional Committee Meeting – **Bangkok, Thailand** (19-20 August 2009)

## IGM-SPG/17/15: Hosting of Future Inter-Governmental Meetings

- 13<sup>th</sup> SC Meeting, Augmented SC Meeting (ASCM) and Writing Workshop – **Kobe, Japan** (24-27 August 2009)
- 16<sup>th</sup> SC Meeting – **Kobe, Japan** (30-31 August 2010)
- 2<sup>nd</sup> SA Sub-Regional Committee Meeting – **Pune, India** (2 November 2010)
- 3<sup>rd</sup> SEA Sub-Regional Committee Meeting – **Manila, Philippines** (9-10 November 2010)
- 4<sup>th</sup> SEA Sub-Regional Committee Meeting – **Hanoi, Viet Nam** (25-29 July 2011)
- 19<sup>th</sup> SC Meeting – **Phnom Penh, Cambodia** (6-7 October 2011)
- 3<sup>rd</sup> SA Sub-Regional Committee Meeting – **Paro, Bhutan** (16-19 January 2012)

### Host of the 18<sup>th</sup> IGM

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The IGM Chair or Vice-Chair will announce the host on Day 3 of the Meeting.

#### Sub-regions

- SA – South Asia
- SEA – Southeast Asia
- TEA – Temperate East Asia
- Oceania

#### APN Groups/Committees

- CDC – Capacity Development Committee
- CSC – CAPaBLE Standing Committee
- RDC – Resources Development Committee
- SC – Steering Committee
- SPC – Scientific Planning Committee
- SPG – Scientific Planning Group
- SPG-SC – Scientific Planning Group Sub-Committee



# Section IV

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Winning Poster and Selected Presentations





# Natural Properties of Carbon Stock in Customary Peat Forest at Danau Sentarum National Park, West Kalimantan, Indonesia

Evi Gusmayanti<sup>1</sup>, Gusti Anshari<sup>1</sup>, and M. Affudin<sup>2</sup>

<sup>1</sup>Center for Wetlands People and Biodiversity, Universitas Tanjungpura, West Kalimantan Province, Indonesia  
<sup>2</sup>Provincial Forestry Office, Pontianak, West Kalimantan Province, Indonesia

## Abstract

Natural properties of Carbon stock in tropical region are barely investigated. We aim at analyzing natural properties of variables that affect Carbon stock in tropical peats. We conducted this research in the Customary Nung Forest at Danau Sentarum National Park, which is an important Ramsar site with seasonal flood plain lakes, unique peat domes, and high biodiversity. A total of 431 peat samples from four transects were collected and analyzed to measure Bulk Density (BD), Total Organic Carbon (TC), and Total Nitrogen (TN). We also calculated Total Carbon Density (TCD), Total Nitrogen Density (TND), and C:N ratio. We collected these samples with a Russian type peat auger. Means of these variables according to spatial and vertical distributions are compared by one-way ANOVA. When significantly different, we use Games-Howell multiple comparison approach to determine the difference.

We found the average values of variables affecting peat carbon stock are  $0.166 \text{ t m}^{-3}$ , 51.03%, 0.79%,  $0.084 \text{ t m}^{-3}$ ,  $0.0013 \text{ t m}^{-3}$ , 71.06 for BD, TC, TN, TCD, TND, and C:N ratio respectively. Spatially, the mean values of all variables are significantly different among sample plots and transects. Vertically, the distribution of BD, TN, TCD, TND and C:N ratio indicate distinctive patterns. The patterns show significant high values in BD, TCD, TN and TND in top 100 cm depth, and significant low values in C:N ratio in top 100 cm depth. We conclude that an assessment of tropical peat carbon stock is sufficiently based on 200 cm depth, and 8 subsamples with 25 cm increment are statistically representative.

**Keywords:** Peat Carbon Stock, Natural Properties, Danau Sentarum National Park

## Introduction

Tropical peats play a significant function as a major storage of carbon stores in the world (Anshari et al., 2010; Page et al. 2010; Wetlands International, 2010). It is estimated that about 56% of tropical peats occur in Southeast Asia, and approximately contain 68.5 Giga ton (Gt) Carbon (Page et al., 2010). The largest Carbon stock in tropical peats occurs in Indonesia, and then Malaysia. According to Page et al (2010) and Jaenicke et al (2008) the range of Carbon stock in Indonesia is between 50 and 58 Gt, and Malaysia has approximately 9 Gt C stock. Distribution of Carbon stock in tropical peats in the world is presented in Table 1.

Under undisturbed environment, these Carbon stock are well preserved. When disturbed, Carbon embedded in tropical peat materials will decompose into  $\text{CO}_2$  gas, and Dissolved Organic Carbon (DOC). Logging, fires, drainage and conversion of tropical peat forests are important underlying causes of Carbon loss in tropical peats (Couwenberg et al., 2010; Hergoual 'ch et al., 2010; Hooijer et al., 2010; Page et al., 2011; Jauhiainen et al., 2012). We aim at analyzing natural properties of variables that affect Carbon stock in tropical peats in an un-drained tropical peat dome in Danau Sentarum National Park (DSNP), West Kalimantan Province, Indonesia (See Fig. 1).

No	Region	Area (km <sup>2</sup> )	% Global	% Tropical	Average Carbon Stock (Gt)
1	South East Asia	247,778	5.80%	56.20%	68.5
2	South America	107,486	2.50%	24.40%	9.7
3	Africa	55,860	1.30%	12.70%	6.9
4	Central America and the Caribbean	23,374	0.50%	5.30%	3.0
5	Asia (other)	6,337	0.10%	1.40%	0.4
6	The Pacific Region	190	0.00%	0.04%	0.01
Total		441,025	10.30%	100.00%	88.6

Table 1. Distribution of tropical peats and estimated Carbon Stock (Source: Zink, 2011; Page et al., 2011)

## Materials and Methods

We conducted this research in Nung peat Forest of DSNP, which has been designated as a Ramsar site since 1994. The park lies at approximately latitude  $0^{\circ}35' - 1^{\circ}07' \text{N}$  and longitude  $111^{\circ}50' - 122^{\circ}27' \text{E}$  in the upper Kapuas River basin, and its terrain varies in altitude from 35 to 50 m above sea level (Fig. 1).

We collected peat core samples with a Russian type peat auger. A total of 12 sample cores collected from four transect lines. Samples (10 cm long) for Total Carbon (TC) and Total Nitrogen (TN) were cut at 10 cm increment up to 300 cm depth, and at 50 cm increment below 300 cm depth. A total of 431 samples were dried at  $40^{\circ}\text{C}$  for Bulk Density (BD) measurements and combusted at high temperature to measure concentrations of TC and TN. We also calculated Total Carbon Density (TCD), Total Nitrogen Density (TND), and C:N ratio. We multiplied TC and TN with BD to estimate TCD and TND. BD is dry mass of peat sample (ton) divided by sample volume ( $\text{m}^3$ ), and both TC and TN are in fraction.

Means of these variables according to spatial and vertical distributions are compared by one-way ANOVA. When significantly different, we use Games-Howell multiple comparison approach to determine the difference. A SPSS version 17 is used to analyze these data.

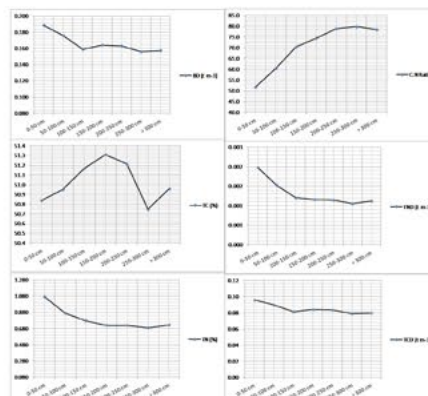


Fig.3. Vertical distribution of BD, TC, TN, C:N Ratio, TND and TCD in Transects in every 50 cm depth layer interval

## Results

In this study we found the average values of variables affecting peat carbon stock are  $0.166 \text{ t m}^{-3}$ , 51.03%, 0.79%,  $0.084 \text{ t m}^{-3}$ ,  $0.0013 \text{ t m}^{-3}$ , 71.06 for BD, TC, TN, TCD, TND, and C:N ratio respectively. The mean values of all variables are significantly different among sample plots and transects as well, as shown in Fig. 2.

The vertical distribution of peat properties in every 50 cm depth interval is presented in Fig. 3. The figure shows the decreasing pattern of the average values of BD, TN, TCD, and TND from top to 150 or 200 cm depth, then level off. The average values of TC shows an increasing trend from top 50 cm to 200 cm, and then decline until depth 300 cm. Whereas the average values of C:N ratio show an increasing trend from top layer to 200 cm depth

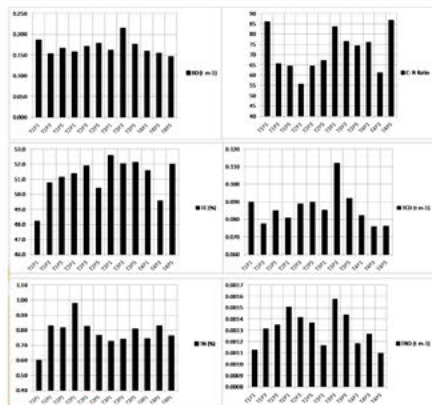


Fig. 2. Spatial distributions of BD, TC, TN, C:N ratio, TCD, and TND in sample plots

## Acknowledgements

This research was funded by the TWINCAM, a CIFOR-USAID project. We would like also to express our sincere thank you to local villagers in DSNP for their energetic labor during sample campaign. Tatang Abdurrahman, M Nurman and Tya A. Putri are grateful for directing sample collection and laboratory work.

## Discussion and Conclusion

Both spatial and vertical distribution of selected variables affecting peat Carbon pool in Nung Forest shows some variability. In general, spatial variability seems to relate with peat depths, which are determined by the age of peat formation and accumulation. Samples from deep peats seem to be more variable than those samples of shallow peat (i.e. samples from Transect T3).

Vertical distribution of BD, TN, TCD, TND and C:N ratio indicate distinctive patterns. All vertical patterns of these variables show a threshold value at 100 cm depth. In summary, the patterns show significant high values in BD, TCD, TN and TND in top 100 cm depth, and significant low values in C:N ratio in top 100 cm depth. These findings suggest that an assessment of tropical peat carbon should sufficiently look at natural properties of peats up to 200 cm depth. Samples are adequately analyzed at a 25 cm interval, or only have a total of 8 samples from every 200 cm peat core. The top layer, probably up to 100 cm seems to represent properties of the above water table depth (acrotelm), and the bottom layer (between 100 cm and 200 cm depth) represents properties of an-aerobic layer (catotelm).

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### Natural Properties of Carbon Stock in Customary Peat Forest at Danau Sentarum National Park, West Kalimantan, Indonesia

Evi Gusmayanti<sup>1</sup>, Gusti Anshari<sup>1</sup>, and M. Afifudin<sup>2</sup>


<sup>1</sup>Center for Wetlands People and Biodiversity, Universitas Tanjungpura, West Kalimantan Province, Indonesia

<sup>2</sup>Provincial Forestry Office, Pontianak, West Kalimantan Province, Indonesia

Presented at the 17th Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting of the Asia-Pacific Network for Global Change Research (APN), 16 March 2012, Shang Ri La Hotel, Jakarta

### Tropical Peats

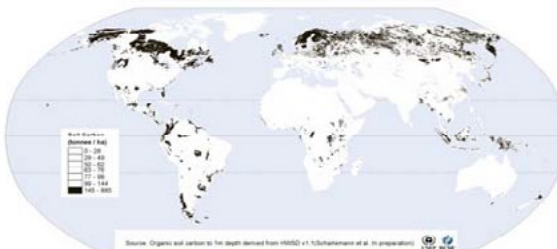
- Tropical peats are defined as woody organic matters at different stages of slow decomposition rates due to water-logged environment (i.e. poor in Oxygen) and low pH (soil acidity) inhibiting biological activities
- In Soil Taxonomy, peats are classed as organic soils, Ordo Histosols



### Tropical Peat Distribution


- Peats are widely distributed in this world.
- The majority of peats occurs in temperate climates (approximately 4,000,000 km<sup>2</sup>) and only about 10% of peats occur in tropical climates

Estimated distribution of organic soils (peats) in the world (Source: Victoria et al., 2012)



### Distribution of Tropical Peats

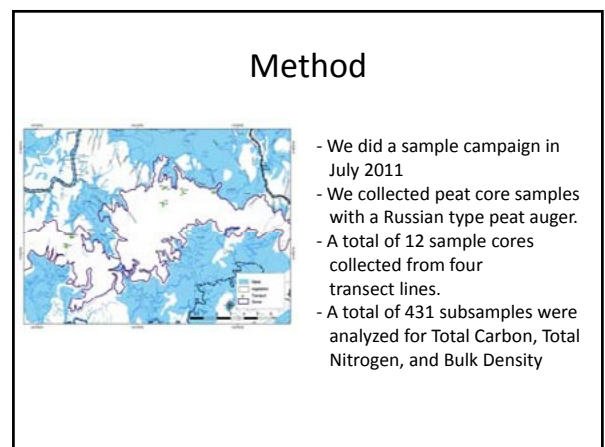
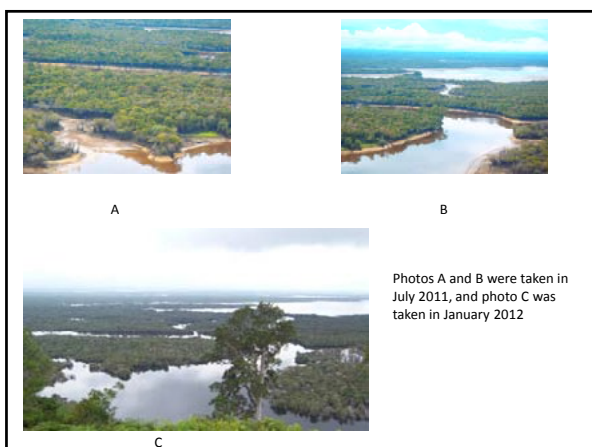
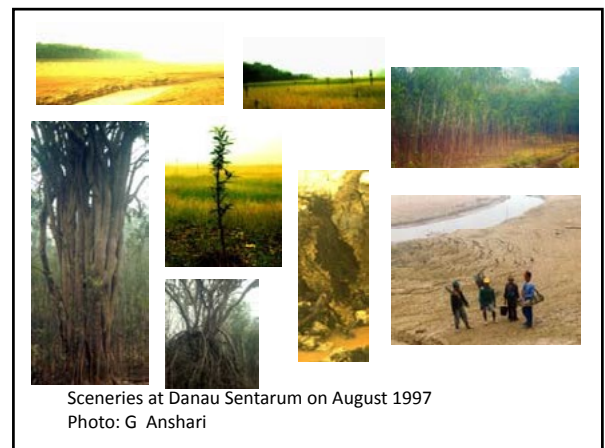
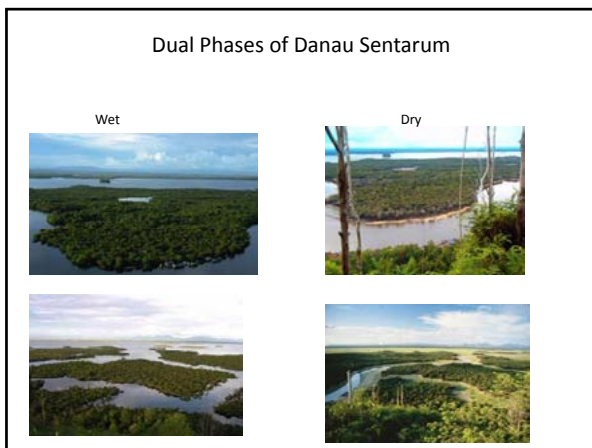
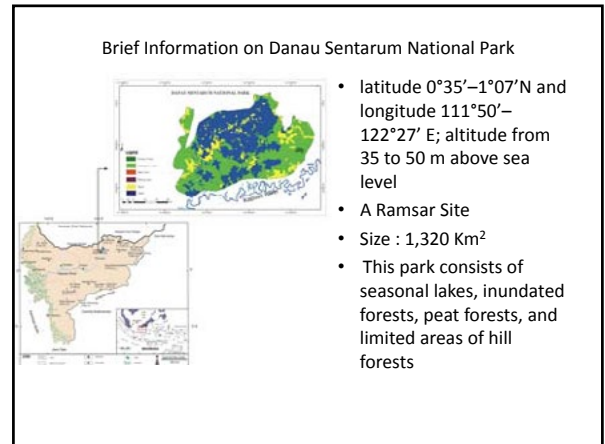
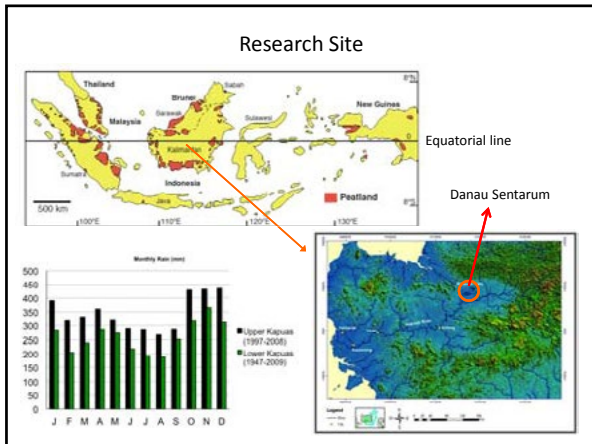
No	Region	Area (km <sup>2</sup> )	% Global	% Tropical	Average Carbon Stock (Gt)
1	Southeast Asia	247,778	5.80%	56.20%	68.5
2	South America	107,486	2.50%	24.40%	9.7
3	Africa	55,860	1.30%	12.70%	6.9
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5	Asia (other)	6,337	0.10%	1.40%	0.4
6	The Pacific Region	190	0.00%	0.04%	0.01
Total		441,025	10.30%	100.00%	88.6



Global peatland: 4 millions km<sup>2</sup>  
 Tropical peatland: 441,000 km<sup>2</sup>  
 About 248,000 km<sup>2</sup> in South East Asia; and about 210,000 km<sup>2</sup> in Indonesia

### The Aim of this paper

- We have shown the importance of peats as large Carbon stores, which are important in maintaining global C cycles
- As our scientific knowledge on carbon complex in tropical peats is very limited, we aim at analyzing natural properties of variables that affect Carbon stock in tropical peats in an un-drained tropical peat dome in Danau Sentarum National Park (DSNP), West Kalimantan Province, Indonesia



### Laboratory Work

$$\text{Bulk Density (BD)} = \frac{\text{Dry Mass (g)}}{\text{Volume (cm}^3\text{)}}$$

Fractions of Total Carbon (TC) and Total Nitrogen (TN) were measured by high combustion method, using a LECO CHNS Analyzer

$$\text{C/N Ratio} = \frac{\text{TC}}{\text{TN}}$$

Total Carbon Density = BD x TC;

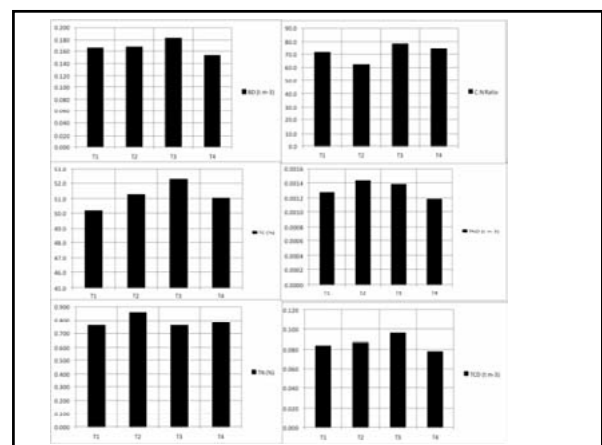
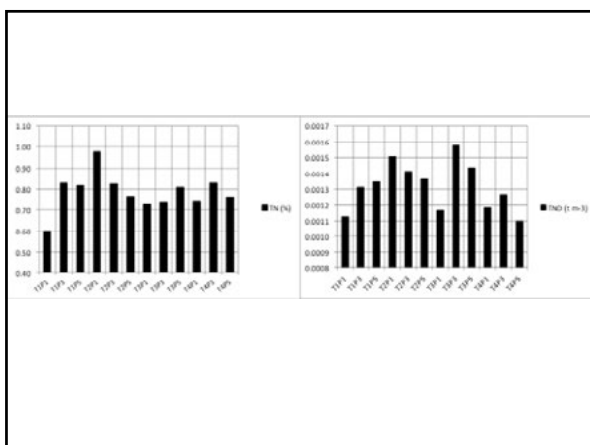
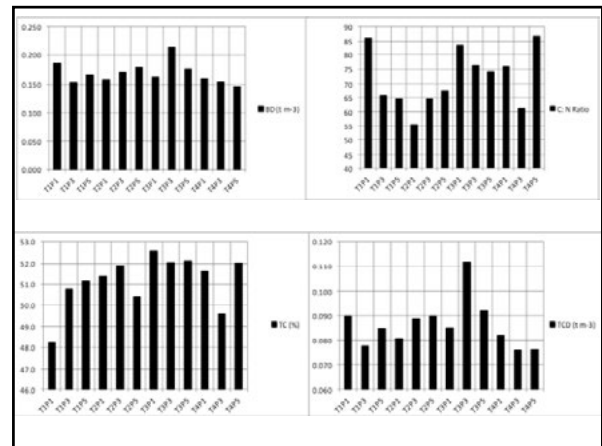
Total Nitrogen Density = BD x TN

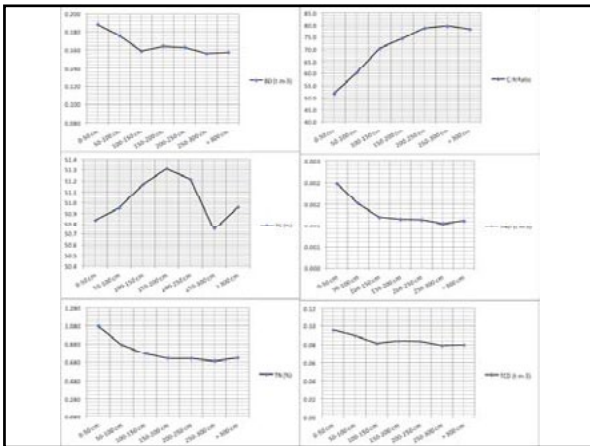
### Results

Code	Zone	Coordinates	ELEV (m ASL)	Water Table (cm)	Depth (cm)	Date
T1P1	49 N	624225	85349	37	117	1-Jul-11
T1P3		624332	85350	39	43	2-Jul-11
T1P5		624428	85341	38	47	2-Jul-11
T2P1		622068	85450	55	79	3-Jul-11
T2P3		622084	85370	53	50	4-Jul-11
T2P5		621948	85135		38	5-Jul-11
T3P1		620768	85663	53	32	6-Jul-11
T3P3		620665	85634	53	38	6-Jul-11
T3P5		620579	85589	41	35	6-Jul-11
T4P1		620605	84566	50	39	7-Jul-11
T4P3		620593	84439		48	14-Jul-11
T4P5		620600	84363		38	12-Jul-11

The average values of variables affecting Carbon stock in peats (per 50 cm depth layer)

BD (t m <sup>-3</sup> ) ± SD	TC (%) ± SD	TN (%) ± SD	TCD (t m <sup>-3</sup> ) ± SD	TN (t m <sup>-3</sup> ) ± SD	C/N Ratio ± SD
1.66 ± 0.039	51.03 ± 1.93	0.79 ± 0.239	0.084 ± 0.020	0.0013 ± 0.0005	71.06 ± 27.66





- The mean values of all variables are significantly different among sample plots and transects
- The decreasing pattern of the average values of BD, TN, TCD, and TND from top (surface) to 150 - 200 cm depth
- The average values of TC shows an increasing trend from top to 200 cm, and then decline until depth 300 cm
- the average values of C:N ratio show an increasing trend from top to 200 cm depth

### Discussions and Conclusions

Horizontal and vertical variability of peat carbon is influenced by many factors, including peat depths and peat accumulation rates. Samples from Transect T3, which has shallow peat depths are more variables than other samples from Transects T1, T2 and T4.


Vertically, the patterns show significant high values in BD, TCD, TN and TND in top 100 cm depth, and significant low values in C:N ratio in top 100 cm depth.

These findings suggest that an assessment of tropical peat carbon should sufficiently look at natural properties of peats up to 200 cm depth. Samples are adequately analyzed at a 25 cm interval, or only have a total of 8 samples from every 200 cm peat core.



# MAINSTREAMING LOW CARBON DEVELOPMENT POLICY ON CLIMATE CHANGE IN INDONESIA — HERMIEN ROOSITA AND RASIO RIDHO SANI

17th Inter-Governmental Meeting & Scientific Planning Group Meeting  
Jakarta, March 12-16th, 2012



## MAINSTREAMING LOW CARBON DEVELOPMENT POLICY ON CLIMATE CHANGE IN INDONESIA

**Hermien Rosita & Rasio Ridho Sani**  
Ministry of Environment Republic Indonesia

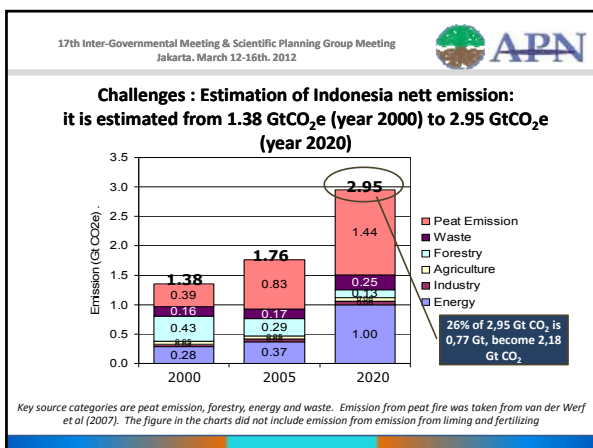
17th Inter-Governmental Meeting & Scientific Planning Group Meeting  
Jakarta, March 12-16th, 2012



### 2010 – 2014 National Midterm Development Planning

9<sup>th</sup> Priority :  
The Environment & Disaster Management:

*“In order to anticipate climate change, Environmental utilization conservation will be utilized to support economy growth & sustainable welfare which is complemented by management and mastering of disaster risk”*



17th Inter-Governmental Meeting & Scientific Planning Group Meeting  
Jakarta, March 12-16th, 2012



### Indonesia's Pledge for Emission Reduction\*


Statement by President Soesilo Bambang Yudhoyono



*“We are devising an energy mix policy ... that will reduce our emissions by 26 percent by 2020. With international support, we are confident we can reduce emissions by as much as 41 percent.”*

*“We are also looking into the distinct possibility of committing a billion tons of CO<sub>2</sub> reduction by 2050. We will change the status of our forests from that of a net emitter sector to a net [carbon] sink sector by 2030”*

17th Inter-Governmental Meeting & Scientific Planning Group Meeting  
Jakarta, March 12-16th, 2012



### WALK THE TALK: PUTTING COMMITMENT ON THE GROUND POLICY FRAMEWORK FOR LOW CARBON DEVELOPMENT

- PRESIDENTIAL DECREE NO. 61 YEAR 2011 ON “NATIONAL ACTION PLAN ON GHG EMISSION REDUCTION ( RAN – GRK)”
  - A Guidance to line ministries in planning, implementing, monitoring, and evaluating the national action plan of GHG emission reduction
  - A Guidance to Provincial Governments in formulating Regional Action Plan for reducing GHG emission (RAD – GRK)
  - A Reference to community and private sector in implementing GHG emission reduction
- PRESIDENTIAL DECREE NO. 71 YEAR 2011 “THE CONDUCT OF NATIONAL GHG INVENTORY”



Sustainable Development



Indonesia Green Economy

Low Carbon  
Development

Resources Efficiency

Social Inclusive

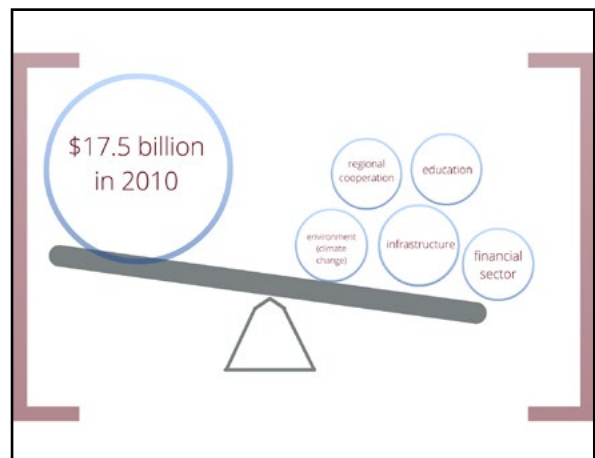
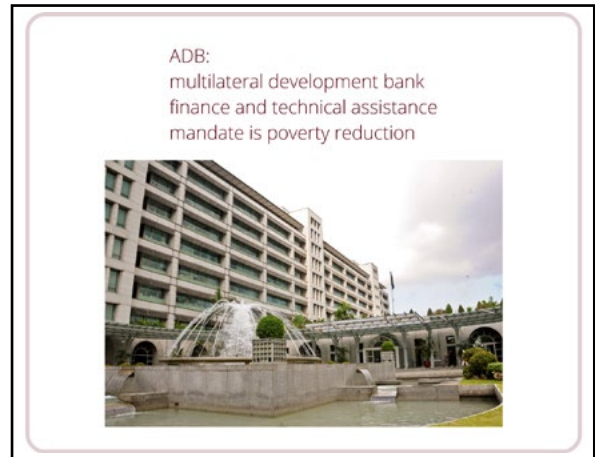
**How about contribution from the  
Science-Based Research' s Societies to  
support Policy Research ??**

**THANKYOU**

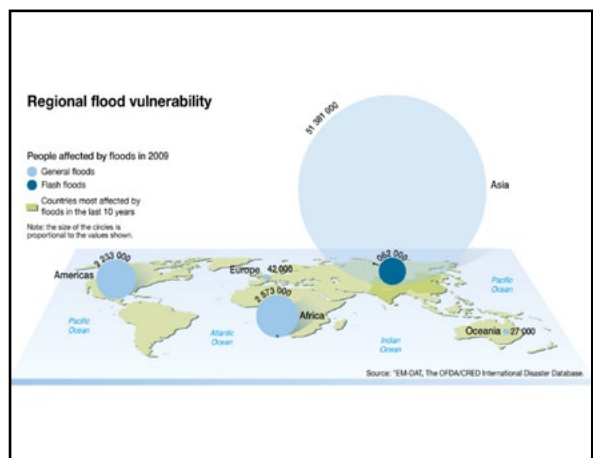
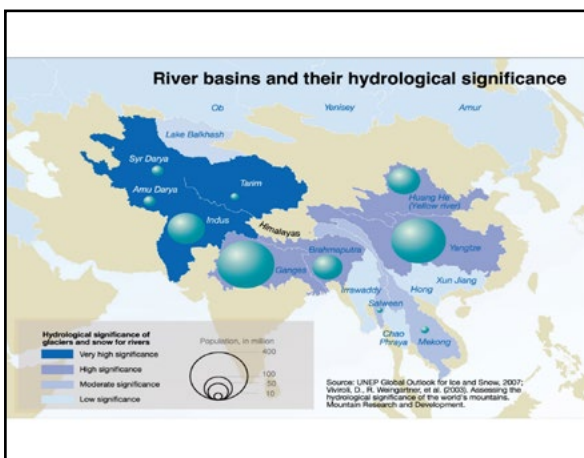
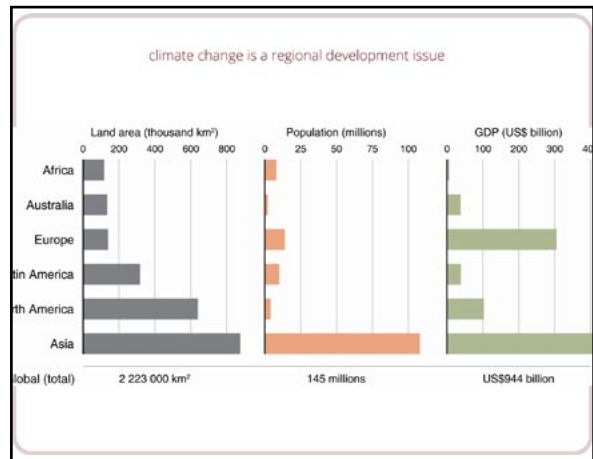
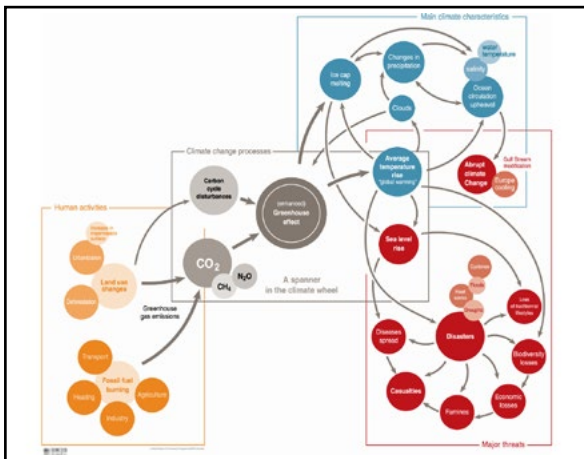


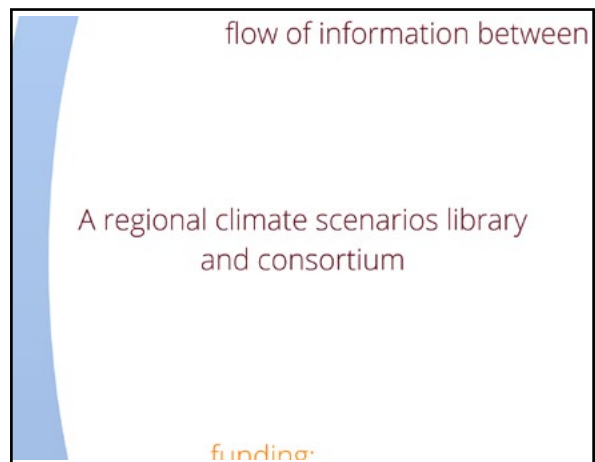
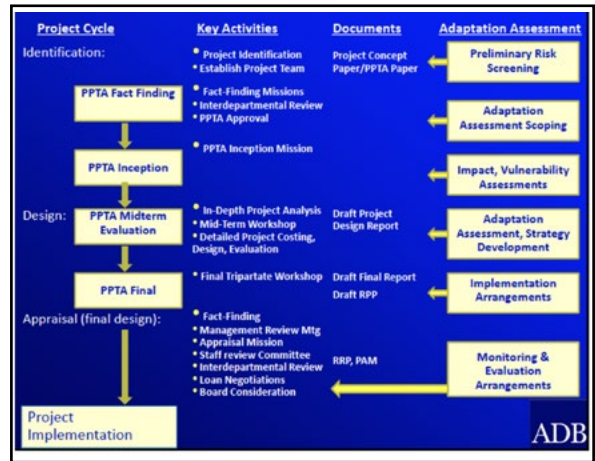
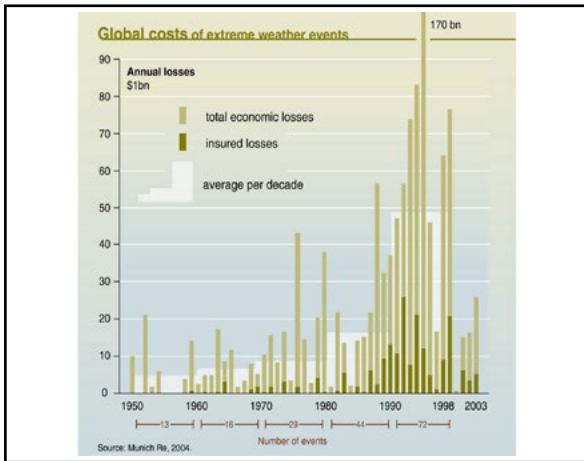
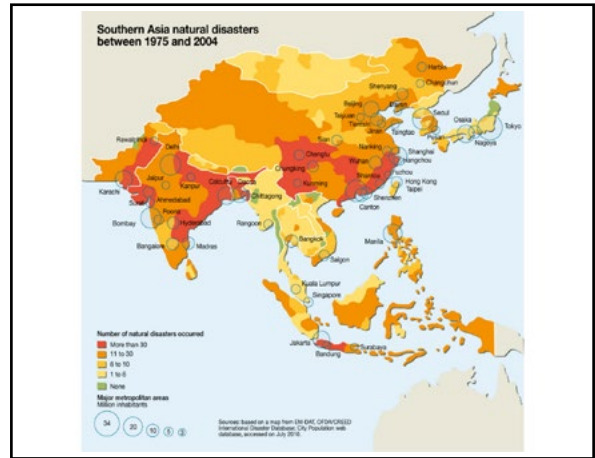
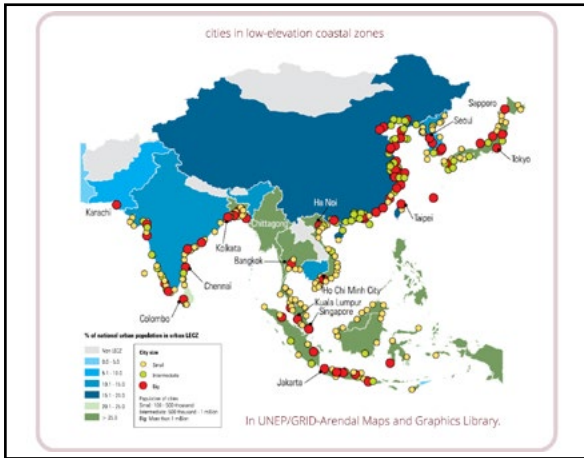


# A CLIMATE SCENARIOS LIBRARY AND CONSORTIUM FOR SUPPORTING ADAPTATION IN THE ASIA PACIFIC — CHISTINE CHAN



climate change priorities:  
 clean energy  
 sustainable transport and  
 urban development  
 land use/forest management  
 policies, governance, capacity





**Nairobi Work Programme:**

"Given the considerable disconnect between the efforts being undertaken by scientists, policy makers and practitioners and fragmentation in actions, finding effective ways of disseminating information has become **extremely urgent** and important to ensure alignment and constructive flow of information between various stakeholders."

**recommendations of WCRP:**

- partnership to combine science-driven research with user needs
- data distribution with CMIP5 level of detailed documentation
- communication of best practices to prevent misuse of information

**main points:**

- create a regional network, not a new institution
- inventory existing climate models
- data facility and clearinghouse
- high resolution climate projections
- outputs from multiple models
- well documented: uncertainties, limitations of data, user's guides

nat

- well documented: uncertainties, limitations of data, user's guides

**proposed products:**

- data portal
- hi-res downscaled GCM outputs for priority domains
- derived products
- GCM boundary conditions for regional downscaling
- documentation of model skill and performance

development finance and  
assistance institutions  
national governments

**audience:**

- development finance and assistance institutions
- national governments
- NGOs involved in planning and implementation of climate change adaptation projects
- other stakeholders: scientists and modeling centers

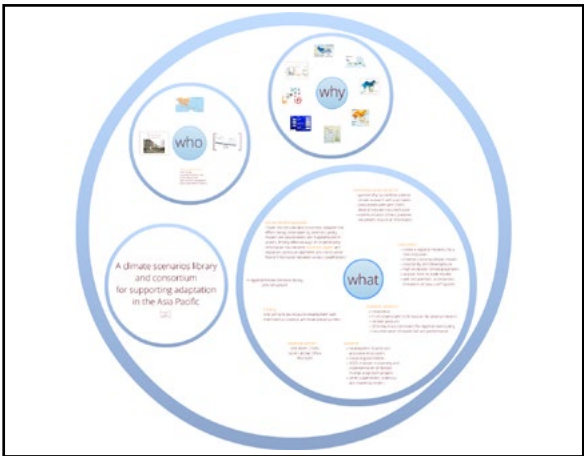
**potential partners:**

MRI KMRI CSIRO  
NCAR UK Met Office  
IITM ADPC

ional climate scenarios library  
and consortium

**funding:**  
ADB will facilitate resource development with  
international, bilateral, and multilateral partners

**potential partners:**  
MRI KMRI CSIRO



# A CONCEPT OF LOW CARBON ASIA RESEARCH NETWORK (LoCARNET) — TOMOKO ISHIKAWA

LCS-RNet

## A concept of Low Carbon Asia Research Network (LoCARNET)

Interactive Session I: Science-Policy  
 “Low Carbon Development, Green Growth and the lead up to Rio+20”

17th IGM/SPG Meeting of APN

14 March 2012, Jakarta, Indonesia

Tomoko Ishikawa  
 LCS-RNet Secretariat, IGES

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LCS-RNet

## What is LCS-RNet?

- Stands for “International Research Network for Low-Carbon Societies”.
- Established in 2009 on the initiative of the G8 Environment Ministers’ Meeting.
- Researchers’ network which dedicates to governmental policy making processes to promote Low Carbon Societies.
- Composed of 7 countries and 16 research institutes.
- Secretariat: Institute for Global Environmental Strategies (IGES)
- Annual Meeting:  
 2009 in Bologna, October 2009 hosted by Italy  
 2010 in Berlin, September 2010 hosted by Germany  
 2011 in Paris, October 2011 hosted by France  
 2012 in Oxford, September 2012 hosted by UK

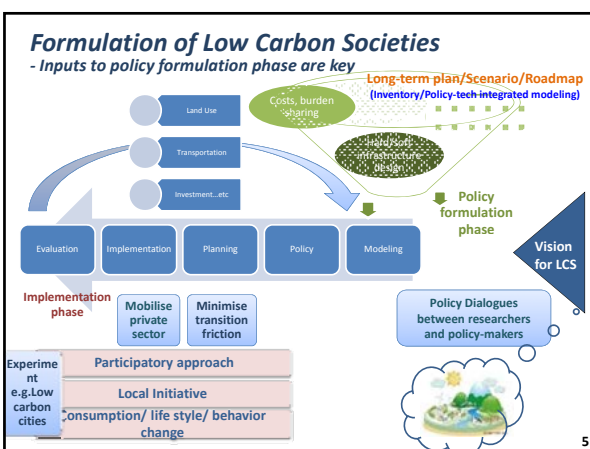
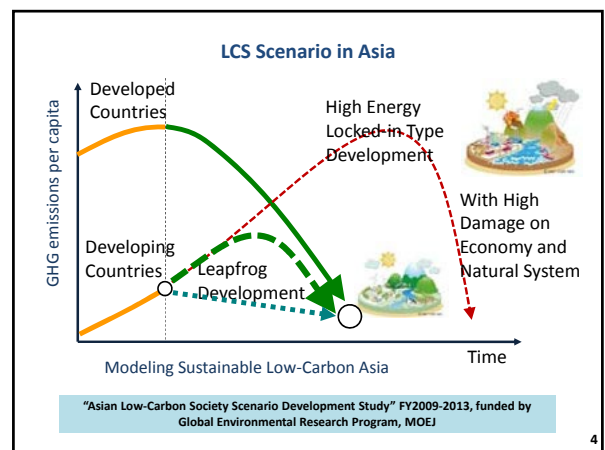
2

LCS-RNet

## LCS-RNet promotes;

- knowledge exchange and research cooperation amongst researchers/research institutes,
- sharing updated scientific knowledge and information on the various policy tools required to realise low-carbon societies,
- international dialogues among researchers, policy-makers and other stakeholders from different countries, in order to promote science and policy linkage, and,
- scientific inputs and recommendations in international climate change policy-making fora including G8, G20 and the UNFCCC COP’s.

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## LCS-RNet Activities in Asia: to improve national and local level capacity to facilitate development of science-based LCS policies

<Current Activities>

1. LCS model capacity-building Ws in collaboration with NIES, Kyoto University, etc
2. LCS-RNet Fellowship (Internship) programme
3. Dialogues between researchers/research institutes and policy-makers in order to identify research needs for LCS policies

Now we are planning to expand our activities in ways to;

- Establish a network /platform for the researchers/research institutes in this region who are deeply involved in policy-making process in this region for further strengthening knowledge-sharing, and
- Promote in-depth collaboration between IOs, Implementing agencies, donor agencies, international think-tanks, cities, NGOs, other networks etc, in order to help developing countries seek future potential opportunities e.g. developing investment plans, as a bridge/interface.

→ LoCARNET

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### Collaboration with ADB

Co-organise regional capacity building workshop/consultation meeting  
 "Strengthening Planning Capacity for Low Carbon Growth in Developing Asia"

- Participants
  - Policy-makers and Officials from Indonesia, Viet Nam, Malaysia, Thailand, and Philippines, Experts, NGOs...
- Project objectives
  - Customise low-carbon growth planning framework that is transparent, flexible and user-friendly
  - Help develop/update low-carbon roadmap
  - Provide tools and training to enhance the capacity of relevant agencies/institutions to maintain and utilise models and database
- Backgrounds – why do we co-organise?
  - Provide basic training
  - Set-up country teams for country-level activities
  - Provide platform for knowledge sharing and regional interface
- Contributions from LCS-RNet
  - Dispatching LCS-RNet/AIM experts

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### Collaboration with JICA/NIES

Concept of "Knowledge Platform for Low Carbon Development"

- "Knowledge Platform for Low Carbon Development" aims to;
- help developing countries create and implement low-carbon and resilient development strategies compatible with their development goals, and
  - provide opportunities for researchers/research institutes, policy makers and development practitioners to;
    - 1) **originate and share** policy-oriented research skills and outputs,
    - 2) **digest and translate** research outputs and best practices into policy proposals, and
    - 3) **train and assist** policymakers to create and implement strategies.
  - Hold a joint side-event at the "East Asia Low Carbon Growth Partnership Dialogue" to be held in coming April in Japan
  - Make substantial inputs to JICA's project to train/assist ASEAN policy makers, etc... (ex. Dispatching LCS-RNet/AIM experts as lecturers)

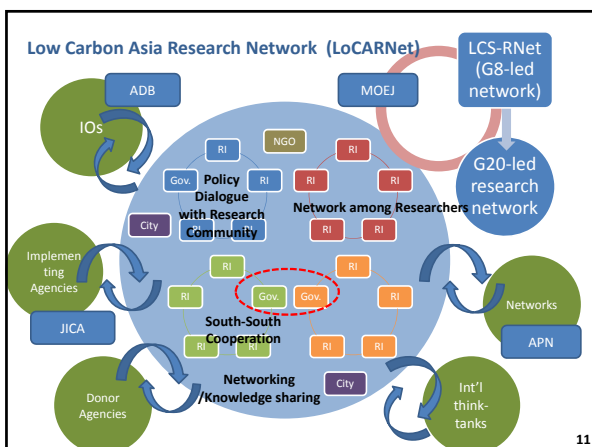
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### APN and LoCARNet (ARNLCD) – Potential Collaboration

- Background
  - At the 10th ASEAN+3 EMM in Phnom Penh, Cambodia, on 19 October 2011, "Asia Research Network for Low Carbon Development (ARNLCD)" was proposed for its establishment by LCS-RNet.
  - At the ASEAN+3 EMM, some countries asked for coordination between ARNLCD and APN, particularly in the context of research activities.
  - APN and LCS-RNet have sought a possibility of collaboration.
- Examples of potential collaboration activities/programme
  - regional research (e.g. study on RE...)
  - capacity development (e.g. co-organise fellowship programme...)
  - communication activities (e.g. co-organise policy dialogues...)

### LoCARNet – What is the difference from APN?

- LoCARNet will be a platform for knowledge sharing and capacity building, composed of researchers and research institutes that are deeply and scientifically involved in low-carbon development policy processes in this region.
- The mandate of this network will be to strengthen the scientific base for low-carbon development policies in the region by proactively exchanging the knowledge rooted in the region among policy makers and researchers.
- This network will be a self-independent, autonomous research network, operated through voluntary initiatives by researchers in each country.



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Thank you very much for your attention!



LCS-RNet Secretariat  
<http://lcs-met.org/index.html>

c/o Institute for Global Environmental Strategies (IGES)  
 2108-11 Kamiyamaguchi, Hayama, Kanagawa 240-0115, Japan

E-mail: [lcs-rnet@iges.or.jp](mailto:lcs-rnet@iges.or.jp)  
 Fax: +81 (0)46 855 3809

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LCS-R Net International Research Network for Low Carbon Societies

## Ten Key Findings in Asia (1)

**1. Strong Commitments of Governments towards LCS**

- Governments are considering LCS as an opportunity.
- Governments are showing a strong policy signal towards LCS.
- Governments are willing to develop science-based policy-making.

**2. Integrating Climate Change Actions into Development Plan**

- No common generalised approach/policy can be applicable to different country.
- Due to the different stages of development, various geopolitical, graphical conditions and emission sources, policies and target areas are varied and country-specific.
- Developing national and sectoral roadmaps is an effective approach to identify a course of actions required (Indonesia).
- Sound agriculture community is important for the national development plan to become a food commodity supplier to neighboring countries as well as to avoid problems of urbanisation in big cities by keeping people in the agriculture communities for some countries (Cambodia).
- Drawing a scenario reflecting development plans based on the data extended from the national GHG inventories may be a good approach for Cambodia (Cambodia).

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LCS-R Net International Research Network for Low Carbon Societies

## Ten Key Findings in Asia (2)

**3. A Few Priority Focus Areas**

- Energy and transportation: Priority areas are energy efficiency, demand side management, renewable energy, high speed, multi-modal and low carbon transport systems, and poly-centric type urban land use planning (Thailand).
- Policy makers strongly need credible, integrated, relevant research findings by researchers to support policy design (Cambodia).
- Forestry and peat land and land-use change, followed by the energy sector are given priority (Indonesia).
- Efforts at national, regional and local levels to foster low-carbon cities (Malaysia).

**4. Innovative Governance and Cross-Sector Collaboration**

- Coordination of land use and energy policies and supporting institutional arrangement is needed.
- Inter-ministerial coordination is needed.
- LCS policy needs to align with national development goals – sustainable natural resource management, better urban life, improved local environment, energy security, food security, better health, and growth in tourism industry.
- Mechanisms for cross-sector coordination are urgently required to allocate limited financial resources among multiple options, resolve possible cross-sector conflicts around land use policies, and facilitate integrated assessment approach.
- Harmonised policies and better coordination between central and local governments, as well as across sectors, are keys.

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LCS-R Net International Research Network for Low Carbon Societies

## Ten Key Findings in Asia (3)

**5. Importance of Sub-National Level Initiatives**

- Learning good practice from other countries is important when capacity is limited.
- Thai experience with CDM provides a good basis of city-based LCS approach –which is now developed as a national mechanism named “Crown standard” to identify low carbon cities (Thailand).
- Land use policy planning and policy coordination at the national and sub-national levels is important for the efficient use of resources (Cambodia).
- Mitigation in forestry sector: depend on the social system and local voluntary actions (Indonesia).
- Regional level is the key to strengthening ownership of knowledge and to accelerate the speed of development to foster the realisation of LCS (Malaysia).
- Energy source must be diversified by promoting locally produced renewable energy (particularly geo-thermal source and solar power).

**6. Science Policy Linkage**

- Holistic, multi-disciplinary research including use of integrated assessment models, new indicators to measure effects of low carbon policies, new institutions design and analysis, and so on, needs to be promoted.
- LCS research should be strengthened by providing greater financial and human resources for scientific support to policy makers.
- Cooperation between researchers and policy-makers is urgently required for research agenda setting.

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LCS-R Net International Research Network for Low Carbon Societies

## Ten Key Findings in Asia (4)

**7. Inventories - A Strong Basis for a Scientific Approach**

- Lack of reliable activity data is a barrier for developing LCS scenarios.
- Countries that develop reliable inventories could be in a good position for mitigation activities including CDM, and international negotiations.

**8. Innovative Technology and Effective Technology Transfer**

- Identification, deployment and dissemination of readily available low-carbon technologies should be prioritised in short-term.
- For energy supply – it is a way to improve the access to electricity promoting off-grid system using biofuels and other renewable energy.
- Technical know-how to support the localisation of such technologies, as well as infrastructure changes for LCS, are important.

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LCS-R Net International Research Network for Low Carbon Societies

## Ten Key Findings in Asia (5)

**9. Traditional Values to Promote LCS**

- LCS vision of Thailand is guided by the philosophy of ‘sufficiency economy’ that focuses on the community and the management of human and natural resources with sustainable manner (Thailand).
- The philosophy of “sufficiency economy” is expected to promote citizen awareness and grass roots action. This indicates an effective combination of top-down and bottom-up approaches to gain public support for the LCS policies (Thailand).
- Research for the localisation of technology is important for successful implementation of low carbon policies (Cambodia).
- Traditional values and practices are rich in tips for designing innovative lifestyles to enable low carbon development, while applicability to the modern context and different localities should be also carefully examined (Indonesia).
- Principles of traditional society, such as ‘sufficiency,’ ‘co-existence with nature,’ and ‘cooperation’ should be re-vitalised in the current development context (Indonesia).

**10. Mobilisation of Available Financing Schemes**

- Scaled-up financing from international sources is fundamental to achieving the Indonesian target. Available sources include national budgets, finances from international sources including ODA and multilateral schemes, private sectors, and NGOs (Indonesia).
- Involvement of private sector for financing LCS in Thailand can be attained by risk management schemes such as public private partnerships (PPP) (Thailand).

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# UN-CECAR: UNIVERSITY NETWORK FOR CLIMATE AND ECOSYSTEM CHANGE ADAPTATION RESEARCH — SRIKANTHA HERATH

## UN-CECAR

### University Network-Climate and Ecosystem Change Adaptation Research


Srikantha Herath  
Institute for Sustainability and Peace  
United Nations University  
16th March, 2012



Friday, March 16, 12

## Capacity Development for Climate Change

- Requires a range of inter-connected tasks
  - Selecting climate projections, downscaling these projections to local conditions, correcting them, analyzing resulting weather, then to estimate impacts on a given sector when the weather change, design adaptation plans to reduce adverse impacts and prioritizing based on economic considerations or risk management perspectives.
  - Existing methodologies for some, others new (red).
  - Address uncertainty, need to update .
  - Need research or studies to translate to local scale.



Friday, March 16, 12

## Target groups

- Researchers / Post graduate
  - Customizing global knowledge to suit local conditions supported by global experiences
  - New education programs to strengthen higher education
- Professional / Practitioners
  - Introducing new methods, tools, standards
  - Training programs: for many and in short time
- Administrative / Local governments
  - Over view of technology and science
  - Deliver key messages




Friday, March 16, 12

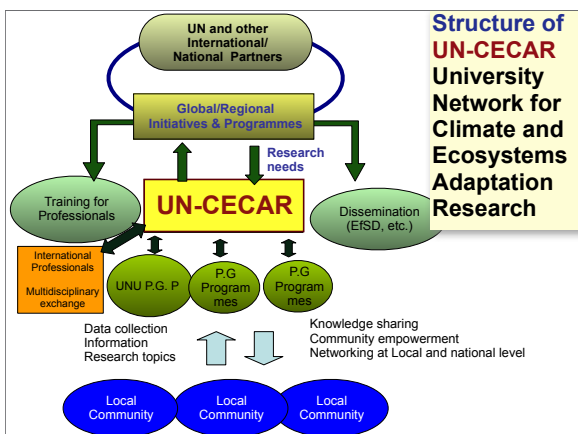
## Role of Higher Education in Adapting to Climate Change 2009 June

- **Multidisciplinary approach**
- **Share resources: Joint education and research development**
- **Sustainability and Adaptation: Climate and Eco Systems Change Adaptation Research (UN-CECAR)**

Tsinghua University, CHINA  
 University of Tokyo, JAPAN  
 UNU-Institute for Sustainability and Peace (secretariat), JAPAN  
 Waseda University, JAPAN  
 Yeungnam University, KOREA  
 Asian Institute of Technology, THAILAND  
 Chula Longkorn University, THAILAND  
 Gadjah Mada University, INDONESIA  
 National University of Malaysia, MALAYSIA  
 University of Philippines, PHILIPPINES  
 Viet Nam National University, VIET NAM  
 Australian National University, AUSTRALIA  
 Ritsumeikan Asia Pacific University, JAPAN  
 Indian Institute of Technology, INDIA  
 BUET, BANGLADESH  
 Institute of Engineering, NEPAL  
 University of Peradeniya, SRI LANKA  
 Chinese Academy of Forestry, CHINA  
 IRIS, JAPAN  
 Keio University, JAPAN  
 Kyoto University, JAPAN




Friday, March 16, 12



## Actions

- **Joint actions by UN-CECAR**
  - **Curriculum Development**
    - Three Themes (18 curriculum- modular):
      - Science of Climate and Ecosystems Change
      - Adaptation and Mitigation
      - Impacts and Vulnerabilities
    - **BUILDING RESILIENCE TO CLIMATE CHANGE**
  - **Joint Research Project Development (2 themes)**
    - Rapid Onset Changes; **Floods, Cyclones**
    - Slow Onset Changes; **Land degradation, Bio-diversity loss**
  - **Needs Assessment (4 countries)**
  - **Training Programs :**  
**Downscaling: Approaches and Applications**



Friday, March 16, 12

### UN-CECAR Postgraduate Courses: Building Resilience to Climate Change (1 & II)

- Science, Impacts and Vulnerability - I (nat. science)
- Approaches to adaptation - II (social science)
- Taught by partner university faculty and international experts.
- Students nominated by member uni, credits are transferred.
- Open to all, no tuition fee for member inst. often local support provided

- Held in 2010, 2011 and 2012
- Average class size 33

Friday, March 16, 12

### Combined with Applied Training

- Combined with hands on training with Remote Sensing (JAXA) GIS (AIT, Nippon Koei Co. and ESRI) applications for climate change analysis: Water and Food production.
- Special emphasis on Community Based Adaptation Planning and Implementation methods (Gadjah Mada University, Indonesia)

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UN-CECAR  
UNITED NATIONS UNIVERSITY  
UNU-ISP  
Institute for Sustainability and Peace

13 Sep 208X 17 UTC  
17 Sep 208X 21 UTC

University Network for Climate and Ecosystems Change Adaptation Research

### Training Programme on Climate Change Downscaling Approaches and Applications

9-14 November 2011

<http://cecar.unu.edu>

Friday, March 16, 12

### Downscaling Approaches

High-resolution global atmospheric model  
20km mesh  
Atmosphere  
SSi  
Boundary condition  
Predicted SST  
CMIP3 CGCM  
Multi-model

Weather Research and Forecasting (WRF) Model of NCAR, USA  
Meteorological Research Institute (MRI), JAPAN

**Statistical Downscaling**

$y = f(x)$   
Relation between large scale predictors from global models and small scale parameters (predictands)

Prof. Toshio Koike, University of Tokyo

Friday, March 16, 12

### Training module details

- 4 days common
  - Climatology: IIT, Delhi
  - **Dynamic Downscaling with WRF**, Dynamic Downscaling (WRF) by NCAR, implementation by University of Nebraska, USA
  - 20km Global model forecasts by MRI, Japan
  - Statistical downscaling by University of Tokyo
  - Risk Assessment and GIS (UNU, AIT, Nippon Koei)
- 2 day programmes (3)
  - Climate Extended, IDF and Extremes (UNU, UP, IHP)
  - Impact on rice production (UNU, IIT, TH, SL)
  - Flood Impacts (UNU, NK, TU, SL)
  - Communicating Results (ISET)

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UNU-ISP

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### Observations

- Post graduate sector can be the engine for rapid dissemination and customization of useful global knowledge, especially in the developing countries
- There is a great demand and potential to update knowledge dissemination and research through University higher education networks.
- **Financing these efforts remain the main challenge.** There should be a link between development funding and capacity development. It should engage the higher education sector, support national programs going beyond narrow project based approaches.

UN-CECAR  
UNITED NATIONS UNIVERSITY  
UNU-ISP

Friday, March 16, 12



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