

# Proceedings of the 16th Inter-Governmental Meeting (IGM)/ Scientific Planning Group (SPG) Meeting



*Cover Photo* - Taken at Pinnawela elephant orphanage in Sri Lanka (Photograph by Holly Ladd)

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## Message from the Director

The 16<sup>th</sup> joint Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting successfully convened in Colombo, Sri Lanka from 4–8 April 2011. This Meeting and the associated committee meetings that were held earlier were generously hosted by the Ministry of Environment, Sri Lanka.

The Meeting brought together about 80 participants, including delegates from APN member countries, invited experts in the field of Global Change (GC) and representatives from key partner organizations, to review the APN's work during 2010/11, and to shape its scientific and institutional pathways for 2011/12 towards the goal of successfully implementing APN's Third Strategic Plan (3SP) that was endorsed a year earlier at the 15<sup>th</sup> IGM/SPG Meeting.

Forty-one proposed new or continuing projects were approved for funding from 2011 to 2012 under the Annual Regional Call for Research Proposals (ARCP) and Scientific Capacity Development (CAPaBLE) Programmes. We hope that the findings and results of these research and capacity building projects will progress GC research in the region, strengthen interactions between the science community and policy-makers, and contribute to the IPCC Fifth Assessment.

Another outcome of the Meeting is the endorsement of a number of proposed new and continuing activities: 1) Biodiversity Gap Analysis and Future Activities; 2) International Conference on Planet Under Pressure; 3) Science-Policy Dialogue on Challenges of Global Change: Focusing in Southeast Asia; and 4) Proposal Development Training Workshops.

Three activities to strengthen APN's collaboration with the Hyogo Prefectural Government, Japan, were endorsed: 1) Cooperation with Mongolia on Reforestation Project; 2) The 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Coastal Seas (EMECS9); and 3) Satoyama—The New Commons in the Asia-Pacific Region.

The IGM also approved the Final Financial Report for 2009–2010, the Interim Financial Report for 2010–2011, and the Budget Plan for 2011–2012. With stronger support from donor countries of Japan, New Zealand, the Republic of Korea and the United States of America, the APN sees an increase in the resources allocated for science, policy and institutional activities, particularly for the CAPaBLE and ARCP programmes.

In a parallel session, the South Asia (SA) and Southeast (SEA) Asia Sub-Regional Committees (SRCs) discussed relevant issues of common importance at the sub-regional level and strategies for their future activities. Representatives of both SRCs reported the results of their respective discussions to the IGM. The hosts for both SRC Meetings for 2011/12 were identified.

A networking session was organized to provide the APN Membership, the GC community and the local science and policy communities in Sri Lanka an opportunity for informal dialogue and discussions. Sixteen young scientists had the opportunity to display and present their research work via poster presentations. The GC community also highlighted their work to the APN Membership and local young scientists through various information materials. From the 18 posters, the APN Members selected the best poster based on a set of criteria. This year's winning scientist, Dr. W.G.D. Lakmini from the Faculty of Agriculture, University of Ruhuna, Sri Lanka, was awarded the *Mitra Award for Global Change Research* and invited to provide a plenary presentation at the IGM. The winning poster and presentation are available in Section IV of the present proceedings.

The Meeting announced new Members of the IGM and SPG who were welcomed by all Members. Also announced were the new Members of the Steering Committee (SC) who will work closely with the Secretariat to guide the APN in the intersessional period between IGMs.

The Climate Synthesis Team reported to the Meeting the progress of the synthesis activity and plans ahead. The synthesis activity is seen as an effort to help prioritize research goals and programmes relating

to climate in the Asia-Pacific region, as well as to inform policy for mainstreaming climate-related knowledge in the decision-making process.

APN's Executive Science Officer provided updates on the Focused Activities launched in 2009 and 2010 for the IGM's information and discussion. The SPG and Capacity Development Committee (CDC) also reported to the IGM scientific activities carried out and respective plans for the year ahead.

The draft Data Sharing and Data Management Policy was presented to the IGM for further discussion. Building on the comments collected, Draft Version One was finalized and implemented in the 2011 Annual Calls for Proposals. The meeting agreed to review the Policy annually in subsequent IGM/SPG Meetings.

The Government of Indonesia confirmed its willingness to host the 17<sup>th</sup> IGM/SPG Meeting in 2012, which was welcomed by acclamation.

Let me take this opportunity to express my sincere gratitude for the active participation of the representatives from the GC community and various partner organizations of the 16<sup>th</sup> IGM/SPG Meeting. Your invaluable input will most definitely contribute to the success of the APN in its endeavours in 2011/12 and the years ahead. We highly value your opinion; therefore, your feedback on our progress in implementing the strategies outlined in the 3SP will be greatly appreciated. I look forward to APN's fruitful years ahead with confidence that we can rely on your collaboration and active involvement.

A handwritten signature in black ink, appearing to read 'T. Fujitsuka', with a long horizontal line extending from the bottom of the signature.

Tetsuro Fujitsuka  
Director  
APN Secretariat



#### **National Focal Points**

Bangladesh – CHOWDURY (18)  
 Bhutan – CHHOPEL (50)  
 Cambodia – SEM (46)  
 China – CHENGYONG (9)  
 Indonesia – BRATASIDA (30)  
 Japan – KAWASATO \* (20)  
 Malaysia – ISMAIL \* (28)  
 Mongolia – DASHZEVEG (51)  
 Nepal – PANT \* (24)  
 New Zealand - MATTHEWS (10)  
 Pakistan – KHAN  
 Republic of Korea – SEONG (27)  
 Russian Federation – LUTAENKO\* (3)  
 Sri Lanka – SAMARATUNGA (17)  
 Thailand – KESAWAWONG\*  
 USA – Brown (38)  
 Viet Nam – NGUYEN (52)

#### **Scientific Planning Group Members**

Bangladesh – MIAH (17)  
 Cambodia – CHUOP\* (47)  
 China – DONG (26)  
 Indonesia – ADININGSIH (29)  
 Malaysia – MOTEN (48)  
 Mongolia – JAMSRAN (49)  
 Nepal – SHRESTHA (22)  
 Pakistan – MUHAMMED (12)  
 Philippines – AMARO (45)  
 Russian Federation – STERIN (4)  
 Sri Lanka – SAMARASINGHE (8)  
 Thailand – BOONJAWAT (23)  
 Viet Nam – NGO (25)

#### **Invited Experts to SPG**

CGSS – KOSHY (53)  
 TEACOM – AILIKUN (54)

#### **Invited Experts to CDC**

ATREE – NAGENDRA  
 UNU – HERATH (36)

#### **Honoured Guests**

Gov. of Sri Lanka – YAPA (15)  
 Gov. of Sri Lanka – AMARAWEEERA (60)  
 Gov. of Sri Lanka – KADAR (13)

#### **Guests, Global Change Partners and Other Delegates**

ANUCCI – HEATH (5)  
 CCAFS/GECAFS – INGRAM (37)  
 ESSP – IGNACIUK (40)  
 GCP – DHAKAL (39)  
 Hyogo Pref. Gov. – SATOU (21)  
 IAI – BROWN (38)  
 ICSU-ROAP – JAYASURIYA (43)  
 Japan – KOBAYAKAWA (7)  
 Sri Lanka – JAYATILAKE (31)  
 Sri Lanka – WERAHERA (60)  
 Sri Lanka – PERERA  
 Sri Lanka – HEWAWASAN  
 Sri Lanka – BATUWITAGE (11)  
 Sri Lanka – W.M.T BANDARA  
 Sri Lanka – THILAK BANDARA  
 Sri Lanka – CHANDRASENA  
 Sri Lanka – IKBAL  
 Sri Lanka – JAYAWEEERA  
 Sri Lanka – MARAMBE (41)  
 Sri Lanka – PEIRIS  
 Sri Lanka – PERERA  
 Sri Lanka – RANJITH PREMALAR  
 Sri Lanka – SARATH PREMALAR (62)  
 Sri Lanka – PUSHPAKUMARA  
 Sri Lanka – RANASINGHE (63)  
 Sri Lanka – SENAVIRATHNE  
 Sri Lanka – SILVA  
 Sri Lanka - WEERAHEWA

#### **APN Secretariat**

FUJITSUKA (16)  
 CORALDE (59)  
 GARCIA (57)  
 IMANARI (58)  
 NYAMJAV (35)  
 STEVENSON (6)

*\*nFP or SPG alternate*



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# Section I

Chairperson's Summary and Attachments

# Chairperson's Summary

Delegates from Bangladesh, Bhutan, Cambodia, China, Indonesia, Japan, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea (ROK), Russian Federation, Sri Lanka, Thailand, United States of America (USA) and Viet Nam attended the Meeting. Invited experts, donors, observers and representatives from the following global change programmes were also represented at the Meeting: Australian National University - Climate Change Institute (ANU-CCI); Centre for Global Sustainability Studies (CGSS); CGIAR/ESSP's Climate Change Agriculture and Food Security Program (CAAFS)/Global Environmental Change and Food Security (GECAFS) Programs; Earth System Science Partnership (ESSP); Global Carbon Project (GCP); Global Change SysTem for Analysis, Research and Training – Temperate East Asia Regional Committee (START-TEACOM); Hyogo Prefectural Government; Inter-American Institute for Global Change Research (IAI); Monsoon Asia Integrated Regional Study (MAIRS); and United Nations University – Institute for Sustainability and Peace (UNU-ISP).

## Day One: Wednesday 6<sup>th</sup> April

### Session One: Opening Session

#### **Traditional Oil Lamp Ceremony**

As a symbol for hope and success, the Sri Lankan Delegation conducted a traditional Oil Lamp Ceremony for the honoured guests from Sri Lanka, the Steering Committee Chair, and the APN Secretariat Director.

#### **Welcome Remarks (I)**

The APN national Focal Point (nFP) for Sri Lanka and Secretary, Ministry of Environment, Dr. R.H.S. Samaratunga welcomed the participants to Sri Lanka and expressed his great pleasure to see the 16<sup>th</sup> IGM/SPG Meeting being held in Colombo.

In his note, Dr. Samaratunga stressed that it is imperative that we develop and enhance capacities of related systems to implement global environmental conventions. He noted that to facilitate implementation of these conventions at the national level, there is a need to carry out necessary research and facilitate such research. The outcome of such research should facilitate the decision-making process for the implementation of global agreements for the wellbeing of the people.

Dr. Samaratunga expressed his sincerest appreciation to all distinguished and honoured guests from different ministries of the Government of Sri Lanka. He also took the opportunity to express Sri Lanka's solidarity with the Japanese people in this difficult hour. He expressed his hope that, as a resilient nation, Japan will be able to overcome these hard times with tremendous vigour and courage.

Towards the end of his speech, Dr. Samaratunga thanked all the participants for their participation in the 16<sup>th</sup> IGM sessions, which should enhance their local capacities in Global Change Research on how to implement relevant research. He expressed his hope that the participants would be able to use the knowledge and experience gained through the 16<sup>th</sup> IGM and emphasized that their presence shows their commitment and importance to related research activities.

#### **Welcome Remarks (II)**

The APN Secretariat Director, Mr. Tetsuro Fujitsuka, welcomed all participants to the 16<sup>th</sup> IGM/SPG Meeting, particularly those nFPs and SPG Members attending for the first time. He expressed his sincere gratitude to the Government of Sri Lanka and to the City of Colombo for hosting the Meetings and for extending a warm welcome to the APN.

Following a brief history of the APN, the Secretariat Director noted the Network's unique characteristics in that both scientists and government officials work together for global environmental change (GEC)

research in the Asia-Pacific region. He highlighted the dedicated support of the APN member countries allowing scientists in the region to develop collaborative regional research projects under the Annual Regional Call for Research Proposals (ARCP) and capacity building projects under the Capacity Development Programme, CAPaBLE.

The Secretariat Director underscored the importance of the 16<sup>th</sup> IGM/SPG Meeting especially since the outcomes will determine research and capacity building projects that the APN will fund in the coming year. In doing so, the APN is expected to bear yet more precious fruit in the future.

Finally, he hoped for continued positive contributions and cooperation of all participants particularly from the APN Members throughout the next three days and beyond, for further success in the year ahead.

### **Opening Address by the Minister of Environment, Sri Lanka**

The Minister of Environment, Government of Sri Lanka, Hon. Anura Priyadarshana Yapa, provided opening remarks and welcomed participants to Sri Lanka and to the Inaugural Session of the APN 16<sup>th</sup> IGM/SPG Meeting.

The Minister took the opportunity to express his deepest sympathy from the Government of Sri Lanka and his country's solidarity on the tragedy that recently unfolded in Japan. He noted that as a nation that had suffered a devastating Tsunami in 2004, Sri Lankans are well aware of the destruction that a Tsunami can cause to life and property.

In his address, the Minister noted that the Asia-Pacific region is of special importance in understanding the nature and dimensions of global environmental problems. The region has a population of over 3 billion—over half of the World's total human population. Its economic growth rate is the highest of all regions in the world. At the same time, he noted that fourteen (14) countries in the region are classified as least developed countries (LDCs), including Nepal and Bangladesh.

The Minister emphasized that it is necessary to move forward by first looking back in order to understand the complex nature of the global, regional and local environmental problems that we are faced with and their impacts on human health and ecosystems. He added that as we are all aware, over the last century, human activities have contributed on a massive scale to global environmental change. Therefore, conducting research activities on long term global change in areas of climate, ocean and terrestrial systems and on related physical, chemical, biological and socioeconomic processes is of vital importance.

In this context, the Minister stressed that the APN, as an inter-governmental network, has the potential for promoting research that will lead to the strengthening of links between science and policy-making in the Asia-Pacific region. Furthermore, he emphasized that global change research activities have to be focused on global realities linking ecosystem degradation with the diversified socioeconomic activities and provide directions to the global community to make concerted efforts and take timely action to follow a new form of development that will preserve the dynamic equilibrium of the Earth, while also preserving the right of all living beings to equally share the Earth's resources while ensuring its carrying capacity.

Lastly, the Minister highlighted that it is essential to ensure that APN focus its research activities in aiming to promote the establishment of a new global environmental governance system based on the polluter pays principle in order to achieve expected and desired outcomes in global change research.

He hoped that this message would be taken beyond the 16<sup>th</sup> IGM, transforming present global realities through research, towards a sustainable future for all of us and for generations to come. Timely attention and collaboration at the global and regional levels are essential to achieving the expected results to ensure long-term sustainability of our common future. He wished that the deliberations of the meetings would be a success.

### **Participants' Introduction**

All participants introduced themselves and their affiliation.

## Group Photograph

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

## Session Two: Institutional Issues and Proposed Activities

### Election of Officers

Dr. R.H.S. Samaratunga, Secretary, Ministry of Environment, Sri Lanka and APN nFP for Sri Lanka, was nominated as Chair of the 16<sup>th</sup> IGM/SPG Meeting. This was accepted by acclamation.

Mr. Bayarbat Dashzeveg, Secretary for the National Committee to Combat Desertification, Ministry of Nature, Environment and Tourism, Mongolia, and APN nFP for Mongolia was nominated as Vice-Chair of the 16<sup>th</sup> IGM/SPG Meeting. This was accepted by acclamation.

### Item 1: Adoption of the Agenda

The elected Chair asked delegates to consider the agenda as presented. The agenda was subsequently adopted without change.

### Item 2: Highlights of 2010/11 Activities

The APN Steering Committee (SC) Chair and nFP for ROK, Mr. Suho Seong, reported on the major activities of the APN from April 2010 to March 2011 including the research and capacity development projects funded under the ARCP and CAPaBLE programmes as well as the comprehensive research projects of the CAPaBLE Phase III comprehensive research programme.

In addition, the SC Chair highlighted projects under the three (3) recent Special Calls for Proposals for focused activities in Scientific Capacity Building for Climate Impact and Vulnerability Assessments (SCBCIA); Ecosystems, Biodiversity and Land Use (EBLU), and Resources Utilization and Pathways for Sustainable Development (RUSD).

He recognized the efforts and increased workload of the SPG Members in reviewing proposals received by the APN which have been increasing over the past years noting that four (4) calls for proposals had been launched and reviewed by the SPG and CDC in 2010.

The SC Chair also reported on the APN Climate Synthesis and Gap Analysis Activities which include the two-year synthesis activity: *Climate in Asia and the Pacific* synthesizing the work of over 50 APN-funded climate projects and the APN Gap Analysis Scoping Workshop: Biodiversity and Ecosystems Services.

Furthermore, the SC Chair gave a brief note on the Sub-Regional Cooperation Meetings for South Asia (SA) and Southeast Asia (SEA) and noted that more information will be provided in various item papers. He further indicated that the APN had been represented at numerous project-related and other global change-related conferences, seminars and workshops at the national, regional and international levels such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), etc. In addition, the APN dedicated significant time on the formulation of its Operating Plan for 2010–2015.

For Communications and Outreach, the SC Chair emphasized that the APN is raising its profile by engaging in international global change events and annual dialogues organized by the UNFCCC and IPBES, etc. The APN also produced publications which are designed in-house, and has been communicating on a weekly basis with APN Members and subscribers to the APN Electronic Mailing List (EML).

The Programme Fellow for Communications and Development, Ms. Lizhier Coralde, gave an overview of the new APN website interface and highlighted the development since the APN's website was

developed. She demonstrated the dynamic and interactive nature of the new website and noted that developments would pursue for the next six (6) months.

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

The Secretariat Director reported on APN Membership and introduced new APN Members. He introduced new Members of the APN, including nFPs and SPG Members, reporting that eight (8) new nFPs and two (2) new SPG Members had been appointed since the 15<sup>th</sup> IGM/SPG Meeting. He also noted that two (2) new members would join the Secretariat to succeed the Communications and Development Officer and the Coordinator.

The Secretariat Director then went on to explain two (2) revisions to the Framework Document that had been approved by the 15<sup>th</sup> IGM in Busan, ROK, noting that these were revised to increase the number of Members serving on the SPG Sub-Committee (SPG-SC) and the Capacity Development Committee (CDC), each by one Member, to ensure that the increasing workload could be appropriately handled by the two (2) Committees. He sought IGM approval on the amended Framework Document.

The Chair opened the floor for discussion.

Following a discussion on the process for recruitment and its transparency, the APN Secretariat was asked for, and later produced, an email to the IGM showing that all Members were informed of the recruitment drive for staff in the APN Secretariat in a collective email.

*Action: Secretariat*

The APN Executive Science Officer, Dr. Linda Stevenson, informed the Members of the overall selection process and emphasized that the selected new staff of the APN Secretariat have not yet received their contracts and are still waiting for visas to enter Japan. As such, the 16<sup>th</sup> IGM/SPG Meeting seemed the most opportune time for the Secretariat to inform all Members of the status of staff recruitment.

Dr. Andrew Matthews, the nFP/SPG Member for New Zealand, stressed that staff recruited to the Secretariat are recruited for the sole purpose of working in an international secretariat and do not represent their respective countries.

The nFP for ROK suggested that the Secretariat have an informal discussion with delegates from China to confirm the procedures for recruitment.

*Action: Secretariat*

The nFP for ROK further proposed that Appendix 2 attached to the Framework Document listing the names and contact details of the present Members of the APN Secretariat should not be part of the Framework Document. He suggested removing the first sentence in 1(i) under the section Mandate of the Secretariat in the Framework Document and its referenced Appendix 2.

The nFP/SPG Member for New Zealand supported the recommendation by the nFP for ROK stressing that it is at the IGM where the opportunity to agree on changes to the Framework Document can be discussed.

The Chair reviewed the discussion that ensued and asked the Secretariat to take note of the suggestions.

The amendment was approved.

*Action: Secretariat*

### **Item 4: Operating Plan for the 3<sup>rd</sup> Strategic Phase**

The SPG Member for Malaysia, Dr. Subramanian Moten presented the Operating Plan for discussion and approval, noting that the Plan had been circulated to all APN Members prior to the IGM.

Under the Science Agenda, there are three main categories: core activities, one-off activities and new activities.

Core activities are priority activities that are implemented or organized annually. These core activities, further categorized under research, capacity development, science-policy and institutional arrangements, will be outlined in the yearly (annual) Operating Plan and developed further throughout the third strategic phase.

One-off activities are special activities that are implemented or organized considering emerging scientific issues, needs identified by the member countries, and availability of funds. Many activities under this category are off-shoots of other activities.

New activities, similar to one-off activities, are also special activities implemented or organized considering emerging scientific issues, needs identified by member countries and availability of funds. These activities, depending on the success of implementation and the level of relevance, may be considered as core activities.

Under the Institutional Agenda, sub-categories include: involvement of member countries; alignment with programmes of the global change community; financial resources; communications and outreach; and developing the network and institutional arrangement.

A plan covering 3 timescales spanning the third strategic phase from 2010-2015 is as follows:

- Short-term (April 2010 to March 2012),
- Medium-term (April 2012 to March 2014), and
- Long-term (April 2014 and beyond into 4<sup>th</sup> Strategic Phase)

The Chair opened the floor for discussion.

The nFP for Indonesia, Ms. Liana Bratasida, expressed her desire to engage more Indonesian scientists in APN and, for this reason, had invited some scientists from Indonesia to join the 16<sup>th</sup> IGM/SPG Meeting as observers. She requested the scientists to introduce themselves. She noted that Indonesia is strongly committed to the APN and expressed her hope that APN initiatives would be strengthened at the national level. She requested that the APN encourage strong involvement of experts and Members to various relevant international and regional events. This was welcomed by the Secretariat Director and the Members.

*Action: nFPs, SPG Members and Secretariat*

The nFP/SPG Member for New Zealand indicated that he was very impressed with Indonesia's strong commitment to the Network as evident by the interest and size of their Delegation. He further stressed that the idea of sharing the representative role and providing the opportunity not only to represent the country but also to represent through sub-regional committees and meetings was desirable and we should further explore how these opportunities can be enhanced, taking successful case studies into consideration as well.

The nFP for Indonesia further encouraged the SEA nFPs to promote the APN whenever they attend Ministerial Meetings, noting in particular that there are many opportunities to promote APN activities at ASEAN. She also encouraged the APN to seek engagement of Brunei and Singapore into the APN membership.

The Secretariat Director thanked the nFP for Indonesia for her active involvement and suggestions and encouraged all Members to provide additional information so further options for engaging Members and promoting the APN could be explored.

*Action: Members and Secretariat*

#### **Item 5: Proposed New (and continuing) Activities**

The Executive Science Officer provided a brief introduction on proposed new and continuing activities under the present Item and the budget requested for each of the five activities. The Chair then asked for the first paper to be presented to the delegates.

Biodiversity Gap Analysis – Dr. Andrew Matthews, nFP/SPG Member for New Zealand (IGM-SPG/16/05-01)

The nFP/SPG Member for New Zealand thanked the Members for the opportunity provided to him to present on the first proposed new activity. 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 United Nations Convention on Biological Diversity (UNCBD), but also to the United Nations Conference on Sustainable Development (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 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, UNU, ASEAN Centre for Biodiversity, GEOBON and other key organizations.

Following an open questionnaire to all participants, the gaps and priorities identified in the present document were the culmination of questionnaire responses and input from reputable scientists and experts on biodiversity and ecosystem services. 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 levels as well.

The Chair thanked the nFP/SPG Member for New Zealand for his presentation and invited comments from the Members.

The nFP for Indonesia asked whether any APN member countries were involved in the activity. The nFP/SPG Member for New Zealand noted that, while he did not have the list of participants with him, the Philippines, Cambodia and Mongolia were part of the working group. This was further confirmed by Dr. Marcial Amaro, SPG Member for the Philippines. He also noted that the ASEAN Centre for Biodiversity was involved in the workshop.

The nFP for Indonesia asked for clarification on future steps following the workshop. Referring to the slides, the nFP/SPG Member for New Zealand responded that the priority for the months ahead is to refine the existing draft report and explore other opportunities for developing an action plan.

The nFP for the USA, Mr. Louis Brown, expressed that this development is an excellent opportunity for scientists and agencies in the region to address regional problems. He noted too that he was pleased to see participation in the workshop included representation from ICSU, DIVERSITAS, GEOBON and the ASEAN Centre for Biodiversity.

The SPG Member for Pakistan, Dr. Amir Muhammad, noted that in terms of the implementation of the activity, biodiversity conservation should be generally agreed upon. In the development process, the primary concern is poverty alleviation, food security, green technology, etc. He suggested that in the development process of the countries within the region which are desperate to develop economically, biodiversity issues should be explicitly addressed so that the impacts on biodiversity are considered hand-in-hand with development.

The nFP/SPG Member for New Zealand emphasized that the discussion facilitated at the workshop highlighted that, while the entire Asia-Pacific region was addressed, it was quite clear among the participants that a “one-size-fits-all” approach is not appropriate. The workshop recognized that while there are many similarities in approach not only in topography, geography, cultural knowledge and the



various socio-economic groupings and sub-groupings in the use of particular ecosystems, the processes pursued are diverse and, as a result, the themes that emerged from the workshop attempted to capture all of these.

The nFP for Indonesia asked whether it was possible to conduct a gap analysis at the sub-regional level among the APN Members. The nFP/SPG Member for New Zealand noted that the workshop itself discussed a range of relevant issues at the broader Asia-Pacific level, and re-emphasized that the workshop participants recognized the inappropriateness of a one-size-fits-all approach. The Executive Science Officer suggested that Sub-Regional Committees (SRCs) review the Gap Analysis Report during their respective SRC Meetings and provide additional input to the Framework.

The proposed activity to allocate US\$40,000 and develop the framework further for presentation at the 17<sup>th</sup> IGM was approved.

*Action: Secretariat and Members involved*

The Chair closed the session and invited the participants to reconvene after lunch at 13:30. He further informed that his colleague, the nFP alternate for Sri Lanka, Ms. Leela Padmini Batuwitige, would take on the role of Chairperson from the afternoon session until the end of the Meeting.

International Conference on Planet Under Pressure (PuP) – Dr. John Ingram, Executive Officer, Global Environmental Change and Food Systems (GECAFS) (IGM-SPG/16/05-02)

The Chair invited Dr. John Ingram, Executive Officer of the Former Global Environmental Change and Food Systems (GECAFS) Programme to present on International Conference on Planet Under Pressure (PuP): New Knowledge towards Solutions (London, 26–29 March 2012).

In his presentation, Dr. Ingram highlighted that the PuP Conference will provide a major opportunity to link global change science in a two-way engagement with a broad range of stakeholders working towards global sustainability. He discussed the key aims of the conference, scientific themes, conference flow and selection process, and those who would be involved.

He highlighted the key persons being invited to participate in the event which they hope will provide a stronger incentive to bridge the gap between science and policy. He talked of several opportunities to participate in the event through vis-à-vis one of the almost one hundred planned parallel sessions, e-participation, posters, etc.

Dr. Ingram discussed the challenge of engaging the developing world to ensure that the best global change researchers and other stakeholders from the developing world participate in sufficient strength and from a wide range of nations to allow clear benefits and solutions to emerge and to add credibility to the conference achievements. He outlined several options to address the challenge and emphasized that during the abstract submission process, a voluntary mentoring service would be implemented to strengthen the capacity of developing-country scientists interested in presenting an oral or poster presentation at the conference.

On closing, he outlined a number of partnership opportunities for APN through involvement of APN projects, project leaders, alumni and member participation at the conference. He also noted the opportunity for the APN to be involved in the selection process according to its own set criteria for developing country participation from the Asia-Pacific region.

The Chair opened the floor for discussion, a summary of which is presented under Item 8.

Science-Policy Dialogue on Challenges of Global Change: Focusing in Southeast Asia (SEA) (IGM-SPG/16/05-03)

The Executive Science Officer presented on a proposed Science-Policy Dialogue noting that it would be in partnership with START. The aim of the activity is to foster a series of Regional Science-Policy Forums that promote informed decision-making on actions to reduce GEC vulnerability and promote

adaptation strategies. Forum discussion and exercises will investigate recent advances in a specific aspect of global change science and application of those advances within the policy arena.

In view of the upcoming UNFCCC COP in Durban Africa (late 2011), the “Planet Under Pressure” Conference (ICSU and GEC Programmes, May 2012), and the RIO+20 Conference (June 2012), it is opportune for START and APN to organize and conduct the first such science-policy forum/dialogue focused on Southeast Asia, though participants from the broader APN region may be considered depending upon discussions between START and APN and available funding from both partners.

She also noted that the first dialogue could be strategically planned back-to-back with the interim Steering Committee meeting, suggesting dates from Monday 10<sup>th</sup> to Friday 15<sup>th</sup> October, 2011. She also asked the SEA-SRC to discuss the possibility of securing an SEA host country and venue during their SEAR-SRC Meeting.

Finally, she requested that the IGM consider approving the activity and allocating US\$90,000 (US\$60,000 from the NSF contribution to the APN). This was approved.

*Action: SEA-SRC, Secretariat*

Proposal Development Training Workshop (PDTW) and Young Land-Ocean Interaction in the Coastal Zones (LOICZ) (IGM-SPG/16/05-04)

The Executive Science Officer gave a presentation on the Proposal Development Training Workshops (PDTWs) being requested for approval as a continuing activity for 2011/12.

Noting the background of the PDTWs in that 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, early-career scientists are provided with opportunities to develop their knowledge and capabilities in global change research through the CAPaBLE programme. In addition, and since 2008, the APN has been conducting PDTWs in various parts of the region. Most recently, these were held in Shanghai, New York, Kobe, Manila and Pune back-to-back with other important meetings that brought together international participants.

Dr. Stevenson noted that the recent PDTW workshops that were held back-to-back with the APN SRC Meetings had been successful not only in developing the capacity of early-career scientists to submit stronger proposals to the APN for funding, but also in empowering members and developing their knowledge in the various steps involved in the calls for proposals processes.

She then went on to request that the IGM endorse a budget of US\$50,000 to conduct the following PDTWs:

- One back-to-back with the APN 3<sup>rd</sup> SA-SRC meeting
- One back-to-back with the APN 4<sup>th</sup> SEA-SRC meeting
- A Temperate East Asia PDTW should one be requested by the Members.
- One during the Young LOICZ Forum (YLF) in Yantai, China.

Proposal Development Training Workshop (PDTWs) and Young Land-Ocean Interaction in the Coastal Zones (LOICZ) was approved at US\$50,000

*Action: Secretariat and SPG Sub-Regional Committees*

Hyogo Activities: Cooperation with Mongolia on Reforestation Project (IGM-SPG/16/05-05-01)

The Secretariat Director introduced the next proposed new activity by providing background information and noted that the impact caused by climate change on Mongolia's society, economy, forest restoration, etc. should be considered as an environmental issue involving the nation's citizens. It is necessary to host a local symposium with citizens' participation in an effort to widely publicize efforts to develop new technologies and raise awareness of local citizens, etc. about forest protection.

Against this backdrop, it is desirable to (i) widely publicize to citizens, researchers, engineers, etc. the future impact of climate change in countries located in forest-steppe zones at 50 degrees north latitude (including Mongolia) and the impact, etc. of yellow sand from the Gobi Desert to neighbouring regions and (ii) promote collaboration and network building through technical education programs and discussions at training workshops with participation by Japanese and Russian researchers, etc.

For this purpose the Secretariat Director requested a budget of US\$20,000. This was approved.

*Action: Secretariat*

Hyogo Activities: 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Coastal Seas (EMECS9) (IGM-SPG/16/05-05-02)

The Secretariat Director went on to explain the strong partnership and support of the APN to the EMECS Centre, also hosted by the Hyogo Prefecture. The Secretariat Director explained that the purpose of the EMECS9 conference is to improve the ability to manage enclosed or semi-enclosed coastal seas in all their ecological, economic, and cultural dimensions. The conference is expected to cross barriers of discipline and culture by bringing together experts and stakeholders from different backgrounds to share information, insights and lessons learned. The EMECS9 Conference will be held in Baltimore, Maryland USA, 28-31 August 2011. The APN activities will include conference support, sponsorship and a collaborative side event with EMECS and the international global change community.

As for the side event it has been suggested that this focus on Vulnerability and Risk Management of Enclosed Coastal Seas Home to Asian Megacities: potentially Bangkok, Dhaka, Kobe-Osaka and Tianjin. The side event will look at the added vulnerability of enclosed coastal seas that are home to megacities, and how this risk and vulnerability is exacerbated by socio-economic pressures (increasing population, urbanization, pollution and environmental degradation) as well as climate change (flooding, storm surges, coastal erosion and sea-level rise). This will be developed further with key experts and members from the suggested countries.

The Secretariat proposed that US\$35,000 be allocated for this activity. This was approved.

*Action: Secretariat*

Hyogo Activities: APN-DIVERSITAS-HYOGO-IHDP-UNU on Mosaic Landscapes: The New Commons in the Asia-Pacific Region (IGM-SPG/16/05-05-03)

The Secretariat Director introduced a third proposed Hyogo Activity on Mosaic Landscapes (Satoyama). He explained that the notion of the new commons introduces a level of complexity for the governance of these systems. The mosaic nature of satoyama implies a combination of different ecosystem types with a myriad of different tenure systems overseeing the access and use of these ecosystems. These can range from private, communal and public land tenure systems for the ownership of the land.

The rights to the ecosystem services offered by the mosaic of ecosystem types offers a bigger challenge. The bundle of ecosystem services offered by the mosaic landscape of satoyama is used by a variety of different uses ranging from local communities living within the vicinity of satoyama landscapes to users living at a distance from these landscapes.

Moreover, many of the ecosystem services are public goods in nature which implies that users cannot be excluded from the use of ecosystem services such as flood regulation, pollination and water purification to name a few.

For the activity, three workshops are envisaged to bring together a core group of experts from Japan and the international scientific community. These workshops will be jointly organized by the APN, DIVERSITAS and IHDP and the workshops will draw on case studies in Japan (Hyogo) and other countries in the Asia Pacific region that have mosaic-type landscapes.

In his presentation, the Secretariat Director requested a budget of US\$50,000 for 2011/12 with an additional US\$50,000 for 2012/13 depending on the progress of the activity in its first year.

The Chair opened the floor and an active discussion ensued. In particular, the following were highlighted:

Dr. Tsogtbaatar Jamsran, SPG Member for Mongolia expressed his deep appreciation and gratitude to the Hyogo Prefectural Government, noting too that the first Hyogo activity presented had also been tentatively discussed at the UNCBD COP10 held in Nagoya, Japan in October 2010. During that time, there was an interest to conduct activity not only in Mongolia but in other countries with satoyama-like landscapes.

The nFP for ROK in referring to the SPG Member for Mongolia's comments also acknowledged the Hyogo Prefectural Government's strong contribution to the APN. Also for the benefit of the Members, he expressed his desire to reference the term "satoyama" in English. The Secretariat suggests that satoyama be referred to as "Mosaic Landscape" as referenced in the proposed activity.

For the EMECS9 side event, the second Hyogo activity, the nFP for China asked who would be involved from Tianjin in the activity. The Secretariat Director informed that there has been no planning or consultation regarding the Cities involved and that Tianjin was being considered. He invited the nFP for China to be involved in selecting a relevant person from Tianjin.

The nFP for Indonesia asked for clarification as to who would be the target audience for the New Commons Activity, to which the Secretariat Director replied that this would be discussed at a scoping meeting in November 2011 among the main organizations involved: IHDP, DIVERSITAS, HYOGO, UNU and the APN.

The APN-DIVERSITAS-HYOGO-IHDP-UNU on Mosaic Landscapes: The New Commons in the Asia-Pacific Region was approved at US\$50,000: An additional US\$50,000 for 2012/13 will depend on progress of the activity in its first year.

*Action: Secretariat*

### Session Three: Finance and Resources

Before the 16<sup>th</sup> IGM convened Session Three, the Chair invited the nFP for Indonesia to provide some information on *Sustainable Consumption and Production: Leading to Green Business, from Local Initiative to Global Winner* that will be held in Yogyakarta, Indonesia from 9–11 November 2011 as outlined in the document distributed among the participants. The nFP for Indonesia invited one of the Indonesian delegates to explain further and encouraged all delegates to attend the meeting. Following no comments from the floor, the Chair suggested moving to the next item.

#### **Item 6: Financial Reporting**

The Secretariat Executive Manager, Mr. Yukihiro Imanari, presented the Final Financial Report for 2009/10 for approval by the 16th IGM and the Interim Financial Report for 2010/11.

In his presentation, the Executive Manager noted that in order to provide a detailed explanation for the figures in the spreadsheets provided, he added some explanatory notes attached to the Final Financial Report for 2009/10 and Interim Financial Report 2010/11. He further explained that the Final Financial Report was reviewed by the Steering Committee the previous day.

The Executive Manager thanked the donor countries for their continued support and stressed that in-kind contributions of member governments, including Hyogo Prefecture Government and co-funding/fund matching as well as in-kind contributions from APN-funded projects and activities are crucial for the APN to fully implement and manage its activities.

Furthermore, the Executive Manager informed that with the increased contribution from the MOEJ, the APN was able to launch two Special Calls for Proposals for Focused Activities, in which seven new projects had been selected.

The Chair opened the floor for discussion and sought approval of the Final Financial Report for 2009/2010 and the Interim Financial Report for 2010/11. The documents were approved.

*Action: Secretariat*

### **Item 7: Resource Development**

The Secretariat Director briefly updated the Members on the progress in implementing the Resource Development Strategy and sought input on how to strengthen resource development of the APN. The Secretariat Director provided a brief history of APN revenue over the last seven (7) years and acknowledged the substantial increase in resources. He noted, however, that there could be no guarantee of the same level of funding from Japan in 2012 due to the recent devastating earthquake in the Tohoku region. In this sense, contributions for 2012 from Japan may be affected.

While the floor was opened for discussion, no comments were made by the delegates. The Chair thanked the existing donors of the APN for their strong financial contributions.

### **Item 8: Budget Plan (2011/12)**

The Executive Manager presented the APN 2011/12 proposed budget plan for discussion and endorsement by the Members, noting that the total revenue for the next fiscal year is expected to be US\$3,619,000 with US\$3,422,000 allocated for science, policy and institutional activities; US\$125,000 for administrative costs; and US\$72,000 for reimbursement for services.

He acknowledged the continuous support of the donor countries of Japan, New Zealand, ROK and the USA. He then explained that the MOEJ will provide the same level of funding as the previous year although no special call for focused activities are expected. Hence, the amount allocated for Science, Policy, and Institutional activities has increased, particularly for the CAPaBLE and ARCP programmes.

The Chair opened the floor for discussion.

The nFP for Bhutan, Mr. G. Karma Chhopel, asked for clarification on when the Planet Under Pressure Conference would take place, to which Dr. Ingram responded as 26–29 March, 2012. The nFP for Bhutan informed that a similar event at the sub-regional level will take place in Bhutan in collaboration with Nepal, Bangladesh and India and he hoped there would be potential for collaboration.

Prof. Kanayathu Koshy, Invited Expert to the SPG, asked if education for sustainable development is included in the thematic areas of the conference, to which Dr. Ingram responded positively that at least one session proposal has been submitted that addresses this.

The nFP for the USA sought clarification as to how the US\$100,000 that the Conference Organizers had requested from the APN would be allocated. He suggested that, assuming that the great majority of these funds would be used for support of scientists to participate in the Conference, these funds might best be awarded by the APN itself as a response to an announcement of opportunity widely distributed by the APN throughout the region.

Dr. Ingram stressed that the conference is seeking to attract funds to support participation of the best scientists in the region but stressed also that young scientist participation is also a priority.

Following up on Prof. Koshy's comments, the nFP/SPG Member for New Zealand advised Dr. Ingram to carefully consider the session on education that is being planned at the Conference to ensure its relevance for education and sustainability.

The nFP for Indonesia asked for some clarification regarding the funds allocated for the PuP Conference and Rio+20 as it did not seem clear from the report presented. She specifically requested information on the selection process for the PuP Conference.

In reference to the presentation under Item 5 by Dr. Ingram, the Executive Manager noted that the allocated US\$100,000 would be maximized for developing country participation. He further noted that, while no activity has yet been planned for Rio+20, the Secretariat will need earlier preparation to ensure maximum visibility and, as a result, some funds are being requested from the 2011/12 budget.

The Executive Science Officer further emphasized that the funds allocated for the PuP Conference would be to maximize participation of scientists from developing member countries in the Asia-Pacific region. With regard to the process, she stressed that the selection committee had not yet been established but the intention was to involve APN Members, particularly the SPG Co-Chairs, thus allowing the APN to ensure that appropriate criteria for selection of participants with APN funds would be in place.

The SPG Member for Indonesia, Dr. Erna Sri Adiningsih suggested, and it was subsequently agreed, that the SPG Co-Chairs formulate a draft that will be circulated among the SPG Members for comments and approval. On behalf of the SPG, she further noted that, despite the heavy burden on the SPG, this was a task that the SPG would be willing to undertake.

The nFP for the USA referred to a question he had posed earlier to Dr. Ingram regarding the selection process. In particular, he asked who would disburse the APN funds and who would be involved in the process. It was further noted that scientific merit and regional distribution should be considered in the criteria.

The nFP/SPG Member for New Zealand suggested that mid-career and leading researchers participate in the conference.

The nFP for Indonesia asked for clarification on how the allocated amount of US\$100,000 was decided. The Secretariat responded that US\$2,500 was multiplied by 40 persons, totalling US\$100,000.

The SPG Member for Thailand, Dr. Jariya Boonjawat, suggested involving the project leaders of APN-funded projects to showcase the outcome of APN's investment rather than inviting early-career scientists. This could then be taken to the Rio+20 Earth Summit in June 2012.

The Secretariat Director expressed his appreciation to the SPG Co-Chairs and asked the IGM Members for suggestions.

The nFP for ROK suggested that the SPG Co-Chairs and the Secretariat discuss the item outside of the official meeting and develop specific criteria which will be communicated among the SPG Members.

The APN, recognizing the importance of this Conference for the region and for the Network, approved US\$100,000 with the condition that the paper submitted to the APN by the Conference organizers be developed further to include specific criteria (through consultation with the SPG) for selection of developing country participants and the understanding that the costs for assuring the APN's "visibility" at the Conference would be very small.

*Action: SPG and Secretariat*

The nFP for ROK expressed that the contribution of the Government of ROK might be increased again and he could provide information when he gets back to his Ministry. This was welcomed and highly appreciated by all delegates.

The nFP/SPG Member for New Zealand asked for some explanation regarding the budget item on Posts for Science, Policy and Institutional Affairs; specifically on whether the Secretariat will be able to adequately manage the increased activities assigned particularly in light of decreased staffing and salary resources. He further suggested that the funds allocated for Secretariat posts are not in accordance with the workload needed to cover the tasks presented efficiently.

The nFP for the USA also highlighted that, in the proposed budget, although the budget for staff has been reduced, the travel budget has increased, which implies that there will be greater travel commitment for staff in the year ahead because of several important events.

The APN Secretariat Director responded to both delegates noting that he would encourage all Members to represent the APN in various meetings that they might already be attending so as to share the workload. This was welcomed by both the Secretariat and the Members.

*Action: Secretariat and Members*

With further discussion regarding issues of Secretariat health and sharing the burden of the workload among the APN Members, as well as responding to the request from the nFP for ROK to distribute the travel calendar among the APN Members, the Secretariat Director confirmed his confidence that the Secretariat can perform the work proposed for the year ahead.

The budget for 2011/12 was subsequently approved.

*Action: Steering Committee, Secretariat*

#### Session Four: Parallel and Networking Session

##### **Item 9: Background on SRC Activities**

The Secretariat Coordinator, Ms. Kristine Garcia talked briefly on the SRC updates highlighting the successful conduct of the 2<sup>nd</sup> SA-SRC Meeting and the 3<sup>rd</sup> SEA-SRC Meeting which were conducted in Pune, India and Manila, Philippines respectively in the previous year.

She noted that while it is expected that only SEA-SRC and SA-SRC Member countries will convene into their respective sub-regional groups, member countries of other sub-regional groups, namely Temperate East Asia and Oceania and the Pacific, are provided as well the opportunity to convene and discuss any developments since the 14<sup>th</sup> IGM/SPG Meeting in Kuala Lumpur, Malaysia, where they decided not to establish sub-regional committees.

Ms. Garcia proceeded in providing procedural information and logistical arrangements for the break-out session. Other member countries were invited to proceed to the Networking Session and the nFPs, with assistance from their respective country SPG Members, were asked to score the 16 posters submitted by young scientists from various institutions in Sri Lanka.

Before formally closing the IGM session, the Chair reminded the SA and SEA Members to gather in their respective groupings for sub-regional discussions to discuss issues of mutual importance and the way forward for the sub-regional committees.

##### **NETWORKING SESSION: Global Change Community Exhibit and Young Sri Lankan Scientists Poster Session**

The session provided the APN Membership, the GC community and the local science and policy communities in Sri Lanka a networking and informal dialogue opportunity. Sixteen (16) young scientists had the opportunity to display and present their research work via poster presentations. The GC community also displayed their work to the APN Membership and local Sri Lankan young scientists through various publications.

Posters were judged by the APN Members based on a set of criteria and the winning poster was announced on Day 2 under Session Six.

The winning young scientist had the opportunity to provide more information on his work through a 20-minute PowerPoint presentation on Day 3 under Item 21. The winning presentation is included in the present Proceedings.



**Item 10: Parallel Sessions: SRC**

Two meetings of the SA and SEA SRCs convened and reports are outlined under Items 15 and 16, respectively.

## Day Two: Thursday 7<sup>th</sup> April

### Session Five: Scientific Affairs

The Chair opened the session and, upon a request from the nFP/SPG Member for New Zealand, asked the members if a change in the order of agenda items could be made, i.e., he suggested that Item 20 be brought forward and Item 11 moved back to day three. This was because the present SC Chair had to leave the meeting and return to urgent business back in his home country. This was accepted by the Members.

**Item 20: Election of New SC Members**

The SC Chair reported the process taken so far regards the nomination of candidates and the procedure for election. The SC Chair informed that the SPG had nominated Dr. Erna Sri Adiningsih, SPG Member for Indonesia and Dr. Madan Lall Shrestha, SPG Member for Nepal were elected as new SPG Co-Chairs for an additional one-year term and a two-year term, respectively. This was welcomed with acclamation.

The SC Chair then provided background information that the IGM needs to elect three nFPs from the IGM delegates.

The nFP for Mongolia, as an outgoing SC member, nominated the nFPs of Cambodia, Sri Lanka and the ROK as new SC members. The nFP for Japan supported the nominations, followed by the nFPs for Indonesia and Thailand.

The IGM accepted the nominations with acclamation and it was suggested from the floor that the new SC meet during the break immediately following the Item.

*Action: Steering Committee*

**Item 12: Report on APN Focused Activities**

The Executive Science Officer provided updates on projects funded under the APN Focused Activities, launched in 2009 and 2010 respectively.

She explained the background of the first set of focused activities, which addressed improving the scientific capacity of developing countries in the Asia-Pacific region to conduct impact and vulnerability assessments and to support informed decisions on how best to reduce the risks associated with climate change in developing countries of the region.

Following the launch of a special call for proposals for focused activities in May 2009, the APN Secretariat received 82 Letters of Intent. In consultation with the APN SPG-SC and CDC and with endorsement by the APN Steering Committee, seven (7) projects were approved. Currently the SCBCIA projects are already providing results of their activities. Four (4) projects have successfully completed and three (3) projects are implementing their activities under no-cost extensions. A scientific article and project updates produced from SCBCIA activities are featured in the new APN Science Bulletin published in March 2011.

Moving on to the next set of focused activities, which was endorsed at the 15<sup>th</sup> IGM/SPG Meeting, two calls for proposals were launched under two scientific themes of the APN Science Agenda, namely *Ecosystems, Biodiversity and Land-Use (EBLU)*; and *Resource Utilization and Pathways for Sustainable Development (RUSD)*. Forty-four (44) Expressions of Interest (EOI) for EBLU and thirty-one (31) for RUSD were submitted to the APN Secretariat. In consultation with the APN SPG-SC and CDC and endorsement by

APN Steering Committee, seven (7) projects were funded according to the funds available. These projects began their activities in January 2011 and progress will be reported to the 17<sup>th</sup> IGM/SPG Meeting.

*Action: Secretariat*

### **Item 13: Report on SPG and CDC Activities**

On behalf of the SPG and the Capacity Development Committee (CDC), the SPG Co-Chair and SPG Member for Indonesia, with support from CDC Member and SPG Member for New Zealand, reported scientific activities to the IGM, particularly under the ARCP and CAPaBLE Programmes, conducted in 2010/11 and SPG and CDC activities in 2011/12 and beyond.

For the benefit of those participants new to the APN, the SPG Co-Chair discussed in brief the overall review process of the Calls for Proposals and emphasized that the SPG is continuously exploring ways to further streamline the review process.

She also noted that a number of important issues had been raised at the SPG Pre-Meeting held on 5<sup>th</sup> April. This included the Science Agenda under the Operating Plan, the APN Climate Synthesis and APN Institutional Policies, which were discussed or would be discussed in detail under different item papers.

In her presentation, under project management, she said that APN 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 in order to maximize the dissemination of project information and outputs and further promote the APN. This also addresses the APN's Institutional Policies on Data Management to encourage open access to and/or sharing of data and to strengthen data distribution.

Moving on, the SPG Co-Chair highlighted the first issue of the new APN Science Bulletin noting that it was published following the implementation of the APN third strategic phase (2010-2015) to specifically address the need to ensure that the work of the APN reaches all stakeholders, including the science, policy and civil society communities.

The SPG Co-Chair also noted that the SPG had elected a new SPG Co-Chair for a two-year term, the SPG Member for Nepal and her position was renewed for another year considering that Dr. Tupas, former SPG Member for the USA, had stepped down prematurely. Two new Members for the SPG Sub-Committee (SPG-SC) were elected for a two-year term, the SPG Member for Philippines, Mr. Marcial C. AMARO Jr., and the SPG Member for Sri Lanka, Mr. G.B. Samarasinghe. The SPG Co-Chair thanked the SPG Members for the USA and Bangladesh for their dedicated service to the SPG and in APN in general.

As for issues beyond April 2010, the following was noted:

- Launch an Annual Call for Proposals for ARCP activities
- Launch an Annual Call for Proposals for Capacity Building activities
- Define successful scientific capacity building criteria
- Discuss, develop and implement the framework devised from the Biodiversity Gap Analysis
- Implement the 3-year Phase IV of the comprehensive research element of the CAPaBLE programme

The Chair opened the floor for comments.

The nFP for the USA expressed that he was very impressed with the new Science Bulletin publication and its format noting that those not familiar with the APN's programme of activities were likely to be very impressed by this document and the very important science that it represents.

*Action: SPG, CDC and Secretariat*

#### **Item 14: New Policies on Data Sharing and Data Management and Reviewer Conflict of Interest**

The SPG Co-Chair from Indonesia and the nFP/SPG Member for New Zealand presented the new Policies for further discussion noting that the policies were circulated to all APN Members prior to the IGM. A summary of the discussions that ensued are provided:

##### 14-1: Data Sharing and Data Management Policy

- While data sharing and data management are very important issues, encouragement needs to be implemented. It is difficult to encourage data sharing of APN-Funded Data when there is a serious non-compliance section in the present draft policy.
- When a proponent submits a proposal they need to agree to follow the data management plan. In this context, if a country cannot share data requested by a proponent, then the proposed activities are not implementable.
- We should assume (but confirm) that Projects Leaders will be aware of their institutional and/or national policies and be generally aware if there may be a conflict.
- Addressing non-compliance is very difficult in any policy like this because you need to strike a balance and provide the Project Leader every opportunity to become compliant and then re-instate that person.

Further discussions ensued on how the policy could be implemented by the APN and the following was agreed:

- The draft presented to the 16<sup>th</sup> IGM would be retained by the Secretariat and referred to as Draft Version Zero (0). This draft (0) is not to be implemented.
- A Draft Version One (1) is to be developed that essentially removes the entire text under 2C; replacing it with the following text:
  - The SPG will be charged with issues of non-compliance and report to the IGM on an annual basis regarding the implementation of Draft Version One and continue to recommend revisions as necessary until a robust policy is in place.

This approach was accepted and a Draft Version One will be implemented in the 2011 Annual Calls for Proposals and reviewed annually.

*Action: SPG and Secretariat*

##### 14-1: Conflict of Interest Policy

The SPG Member for Indonesia and SPG Co-Chair explained that the revised Conflict of Interest Policy applies to the Members and Invited Experts of the Scientific Planning Group (SPG), any additional reviewers whom the SPG Members might involve in its review of proposals, SPG-approved reviewers from the APN external reviewer database, and members of the Inter-Governmental Meeting (IGM).

Following an explanation of the Policy, the Chair opened the floor for discussion, in which the following points were noted:

- The present Conflict of Interest document has undergone several revisions over a period of years and all members were provided the opportunity to go through and comment on the document.
- The document is necessary to ensure a robust and transparent review process and to give confidence to the APN donor community.

Following the discussion, the following points were agreed and approved by the IGM:

- Another sentence after the second last paragraph is to be included: "If the reviewer disagrees with the SPG-SC decision, then he/she can appeal to the Steering Committee."
- Definitions are to be provided for the terms Proponent, Collaborator and Reviewer at the end of the document.

*Action: SPG-SC, Secretariat*

The APN expressed its great appreciation to the SPG and its Co-Chairs for its outstanding efforts in completing these two very complex and challenging draft institutional policies.

## Session Six: Science Session with Global Partners

The APN works closely to build strong scientific and institutional relationships with the global change programmes, networks and key organizations. Under this session, the guests and observers from the global change research community participating in the APN 16<sup>th</sup> IGM/SPG Meeting presented on current and future activities of their respective institutions, programmes and networks. The presentations highlighted strategies/approaches to further strengthen partnerships between APN and the international global change research community.

### **Emerging Science Issues in Sri Lanka**

In his presentation, the SPG Member for Sri Lanka and Director General of Meteorology, Mr. G.B. Samarasinghe talked about how Sri Lanka has witnessed extreme weather conditions leading to much research on climate and climate change. He identified awareness and education of the public at large to climate change as the top emerging issue.

Other emerging issues are change of biodiversity with climate change and human involvement; impact on the change of mangroves distribution, species composition, zonation; effect of extreme temperatures on agriculture; change of seasonal climates; coastal erosion with sea level rise.

### **Inter-American Institute for Global Change Research 2011: Science Synthesis and Policy Relevance**

Before he began his talk, the nFP for the USA expressed the regret of Dr. Holm Tiessen, Executive Director of IAI, for not being able to attend this Meeting. He thanked IAI and APN for providing the opportunity to represent IAI.

In his talk, the IAI representative noted that the IAI is embarking on a synthesis effort of the past 5 years of science across the disciplines and across sectoral applications as it completes the current programme of collaborative research networks and its associated grants for the human dimensions of global change.

### **Earth System Sciences Partnership (ESSP)**

ESSP Science Officer, Dr. Ada Ignaciuk expressed her appreciation for the APN for the opportunity provided to present at the APN Annual Meeting.

Dr. Ignaciuk commented that while some structural changes are expected to happen on the arena of Global Environmental Change programmes and the Earth System Science Partnership (ESSP), the extent of those changes is not yet determined.

In her presentation, Dr. Ignaciuk highlighted strategies to further strengthen the partnership between APN and ESSP. She expressed her optimism on any opportunities of collaboration with APN as they consider APN one of their key partners in the Asia-Pacific region.

### **Climate Change, Agriculture and Food Security (CCAFS)**

Dr. John Ingram, CCAFS Scenarios Leader thanked the APN for the opportunity to present at the IGM. He presented on the CGIAR Research Programme “Climate Change, Agriculture and Food Security (CCAFS)” which builds on the new strategic collaboration between the Consultative Group on International Agricultural Research (CGIAR) and the Earth System Science Partnership (ESSP). He highlighted four research themes of the Programme that include: Theme 1 – Adaptation to Progressive Climate Change; Theme 2 – Adaptation through Managing Climate Risk; Theme 3 – Pro-poor Climate Change Mitigation; and Theme 4 – Integration for Decision Making.

He also discussed several opportunities and avenues in which APN and CCAFS could collaborate.

## Day Three: Friday 8<sup>th</sup> April

### Session Seven: SRC and Mitra Award for Global Change Research

#### Item 16: Report from Southeast Asia SRC

The SPG Member for Philippines, on behalf of the SEA Sub-Regional Committee (SEA-SRC) reported to the IGM updates on SEA-SRC activities and plans.

Considering the limited time, the Members agreed to review the main action points identified at the 3<sup>rd</sup> SEA-SRC Meeting in the Chairperson's summary as follows:

- To cascade the information from policy level to community level, the SPG Member for Thailand, Dr. Jariya Boonjawat, will prepare a concept note focusing on the related discussion under this bullet and circulate to all by email. Deadline for completing the concept note is on January 15, 2011. The nFP for Indonesia suggested having a definite timeline (New deadline: 30 April 2011).
- The SEA-SRC Members exchanged views and agreed that a concept note on a Downscaling Training Workshop for the SEA region be drafted by the Thailand SPG Member with assistance from the nFP for Lao PDR. Deadline for completing the concept note is on January 15, 2011. (New deadline: 30 April 2011).
- The Members also need to see the two (2) concept papers and follow-up the activities proposed by Prof. Fuchs to come up with a collective decision on whether a new activity will be conducted back-to-back with the PDTW and SEA-SRC Meeting similar to what the SA group did. The SPG Member for Indonesia, Dr. Erna Sri Adiningsih, will have a draft of the concept note to be re-circulated by 30 April 2011.

The Members agreed that the other outstanding issues identified at the 3<sup>rd</sup> SEA-SRC Meeting will be discussed at the 4<sup>th</sup> SEA-SRC Meeting.

The SPG Member for Philippines highlighted that the SEA-SRC Members considered several options in planning the date of the 4<sup>th</sup> SEA-SRC Meeting. While it is difficult to consider the suggestion of the APN Secretariat to hold the next meeting back-to-back with the 'Science-Policy Dialogue on Challenges of Global Change: Focusing in Southeast Asia' due to conflict of schedule of the Members, they agreed to explore the option of holding the 4<sup>th</sup> SEA-SRC Meeting back-to-back with a Proposal Development Training Workshop and/or a Climate Downscaling Training Workshop.

The SEA-SRC Members agreed to hold the 4<sup>th</sup> SEA-SRC Meeting and back-to-back activities in Viet Nam to be hosted by the (proposed) SPG Member for Viet Nam, Dr. Kim Chi Ngo, on a date to be identified between 25 July and 5 August, 2011.

*Action: Secretariat, Viet Nam Members and SEA-SRC*

On ending his presentation, he reiterated their discussion on tentatively holding the Science-Policy Dialogue (as proposed by APN/START) in Cambodia, noting that it would be strategic to consider back-to-back with an ASEAN Ministers Meeting. Referring to the Dialogue, the nFP for Cambodia, Mr. Sem Sundara, informed the participants that he will try his best to host the event.

*Action: Secretariat, nFP Cambodia*

The (proposed) SPG Member for Viet Nam expressed her support to host the next 4<sup>th</sup> SEA-SRC Meeting noting her interest to increase the involvement of scientists from her country in APN activities. In addition, she hoped that more participants from Lao PDR, Cambodia and Viet Nam will be able to join the next SEA-SRC Meeting and its back-to-back activities.

The Chair opened the floor for discussion.

The nFP for the USA requested more information on the two (2) concept papers and follow-up of the activities proposed by Prof. Fuchs.

The SPG Member for Indonesia responded that the papers were the outset of a visit of Prof. Fuchs in Indonesia. The concept papers included proposed activities to enhance climate change adaptation in urban planning. As the SEA-SRC Members realized that it is important for the sub-region, they plan to develop and submit to APN this concept paper in time for the next IGM approval.

The nFP/SPG Member for New Zealand, noting the importance of the activities proposed by Prof. Fuchs, asked the SEA-SRC Members about the mechanism that they would likely use for this proposed activity.

Adding to the comments from the nFP/SPG Member for New Zealand, the Executive Science Officer informed that during the SEA-SRC Ad Hoc Meeting, she discussed with the SEA-SRC Members the timeline and mechanism the Secretariat undertakes when proposing new activities to the IGM.

The nFP/SPG Member for New Zealand stressed that he did not see this as a new activity but rather a modification of an existing activity that needs endorsement; noting too his concern about the transparency of the process and the need to ensure there is no backdoor mechanism through which a member can obtain funds from the APN.

The SPG Members for Indonesia and Philippines responded that the current concept papers were work in progress and the SEA-SRC did not yet have a concrete idea on how to progress with this activity.

#### **Item 15: Report from South Asia SRC**

On behalf of the SA-SRC, the SPG Member for Sri Lanka reported the updates on activities and plans of the sub-region.

The SPG Member for Sri Lanka discussed that the SA-SRC Members agreed to focus on subjects that regional nations are strongly interested in. The SA group members have agreed to focus on the following tentative issues:

- Water related issues: Melting Glaciers in Himalaya Areas and Water Resources Management.
- Agriculture: Food and Crop Production Strategies; Adaptation to Climate Change in the Region; and Agriculture Land-Use Issues Under Changing Climate Scenario
- Health: Possible Survey of Climate Induced Diseases in Relation to Climatic Change
- Urbanization and Human Development Issues: Human Issues of Urbanization, Megacities, Migration; and Urbanization and Emerging Socio-Economic Issues Caused by Global Environmental Changes in the Region

With regard to the next (3<sup>rd</sup>) SA-SRC Meeting, the SA-SRC Members agreed to hold the next meeting in the Kingdom of Bhutan but may also consider Nepal in case of Bhutan's unavailability in early November 2011. The SA-SRC plans to develop a regional research proposal through APN and the PDTW workshop.

*Action: Secretariat, SA-SRC Members*

#### **Item 17: Discussion on SRC Development**

The Chair facilitated a discussion on SRC development particularly for other sub-regions.

The nFP for Indonesia suggested that there is a need to have a clear direction in proposing and conducting sub-regional activities. She suggested following the existing mechanism through the ARCP and CAPaBLE programmes. She noted that occasionally there is an allocation of funding that the IGM needs to approve. She encouraged being transparent on allocating funding in proposed new activities.

The nFP/SPG Member for New Zealand agreed that we 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.

The SPG Member for Pakistan, Dr. Amir Muhammed suggested the APN Steering Committee review and revive the relationship between APN and START regional centres.

The Executive Science Officer responded that the APN Secretariat had the opportunity to host START Executive Director, Dr. Hassan Virji, in January 2011 where the issues raised by the SPG Member for Pakistan were discussed.

The Chair recommended discussing the suggestions from the nFP for Indonesia and SPG Member for Pakistan at the Steering Committee Meeting to accommodate their concerns.

*Action: Steering Committee*

#### **Item 18: Mitra Awardee Presentation**

The Chair introduced the winning poster presenter, Dr. W.G.D. Lakmini, from the Faculty of Agriculture, University of Ruhuna, Sri Lanka and invited her to deliver a presentation on her research work as described in the winning poster.

The Vice-Chair presented the winner with “*The Mitra Award for Global Change Research.*” The abstract of Dr. Lakmini's presentation on Plant Mediator to Tackle Climate Change is outlined below.

*The current rate of climate change predicts that plants will become subject to increasing extremes of environmental stress. Rapid population increases in developing countries also demand higher yields from crop production, often from sub-optimal agricultural areas. Genetic engineering can help meet these needs through the development of crops with greater stress tolerance. Mediator is a transcriptional co-activator which conveys DNA bound transcriptional regulators and enhancers to the general RNA polymerase II transcription machinery and mediator genes have recently been identified in plants. So far their presence has shown regulation of plant stress tolerance by controlling transcription of stress genes.*

The Poster and the presentation will be posted on the APN website and appended in the formal proceedings of the 16<sup>th</sup> IGM/SPG Meeting which is now a work in progress).

### Session Eight: Directions of the APN and Scientific Priorities

#### **Item 19: ARCP and CAPaBLE Recommendations for Funding**

##### 19-1: 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 2011/2012 was US\$1,240,000.

Ten (10) multi-year projects were recommended for continuation in 2011/12 following highly satisfactory progress in their first year activities. He further highlighted that 19 proposals were considered for funding recommendation, which included a pre-screening of summary proposals by the SPG-SC, 12 (11 new and 1 seed grant) of which were recommended to the IGM for funding.

The recommended allocation is outlined in the table below:

<b>ARCP Proposals and Continuing Multi-Year Projects</b>	
<b>10 continuing multi-year projects (3 projects do not have funding requirements)</b>	<b>US\$305,270</b>
<b>12 new projects</b>	<b>US\$ 905,550</b>
<b>Contingency Fund</b>	<b>US\$ 29,180</b>

The Chair opened the floor for discussion.



The nFP for the USA inquired how much funding is expected in the next fiscal year to fund continuing projects from this year and last year.

The nFP/SPG Member for New Zealand emphasized that due to increased funding allocated for new ARCP projects compared to previous years, the SPG recommended to award the full amount requested to some projects to avoid too large a mortgage in the following fiscal year. However, he noted that the APN will retain funds for the subsequent years until satisfactory progress has been reported to the APN for the first year of activities. He noted that only US\$76,250 would be required next year for the continuation of projects approved this year.

The Chair sought for 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 programme.

*Action: Secretariat (for implementation of new projects)*

#### 19-2: CAPaBLE Recommendations

The nFP/SPG Member for New Zealand on behalf of the SPG and CDC reported that a total of US\$916,000 was available for CAPaBLE activities in FY 2011/2012. Of this amount, US\$663,000 was available for new CAPaBLE capacity development projects and US\$55,000 for continuing multi-year capacity development projects. In addition, US\$120,000 was available for continuing multi-year projects under Phase III of the comprehensive research element of the CAPaBLE programme. Furthermore, an amount of US\$78,000 is allocated for Phase IV CRPs should a Call for CRPs be launched this year.

However, noting the SPG's recommendation to terminate CRP2010-01CMY-Weber for various reasons, an additional amount of US\$95,000 (*US\$ 45,000 allocated for year 3 and US\$ 50,000 awarded for year 2*) is available. Of this amount, US\$22,000 was added towards Phase IV of CRP and the remaining US\$78,000 was made available for new CAPaBLE capacity building projects. This brings the total funds available for Phase IV CRP to US\$100,000 and total funds available for new CAPaBLE capacity building projects to US\$741,000. With this, the new total funds available for CAPaBLE activities in FY 2011/2012 was US\$966,000

Before proceeding with his presentation, the nFP/SPG Member for New Zealand explained that the funds awarded to projects cannot be used for salaries of those involved in the projects.

Recommendations for two (2) continuing capacity development and two (2) comprehensive research multi-year projects were presented to the IGM for approval. Of the 18 new CAPaBLE proposals considered, 16 were recommended for funding, one of which is a seed grant.

<b>CAPaBLE Proposals and Continuing Multi-Year Projects</b>	
<b>2 continuing multi-year Capacity Development Projects</b>	<b>US\$ 70,000</b>
<b>1 continuing multi-year Comprehensive Research Projects</b>	<b>US\$ 70,000</b>
<b>Phase IV CRP</b>	<b>US\$ 100,000</b>
<b>16 new projects</b>	<b>US\$ 689,000</b>
<b>Contingency fund</b>	<b>US\$ 37,000</b>
<b>TOTAL</b>	<b>US\$966,000</b>

The Chair opened the floor for discussion.

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

The nFP for the USA expressed his appreciation to all SPG Members for their generous support, hard work and cooperation in implementing the review process over the last year. He said that SPG Members provided very clear cases on what projects the APN should support.

The Chair also expressed the same appreciation and asked the participants to acknowledge the SPG and Secretariat for their efficient work.

*Action: Secretariat (for implementation of new projects)*

#### **Item 11: Report on APN Synthesis Activity**

On behalf of the APN Climate Synthesis Team, Dr. Wenjie Dong, SPG Member for China, reported to the IGM the progress of the synthesis activity and future plans.

The SPG Member for China noted as background information that the purpose of this activity is to undertake a synthesis and review of all APN supported projects in which climate is featured as a major theme. This would allow for the identification of knowledge gaps and help prioritize research goals and programmes relating to climate in the Asia-Pacific region, as well as, provide knowledge on climate issues for policy- and decision-making.

Updates were provided particularly on the timeline and expected deliverables from the Climate Synthesis.

The Chair opened the floor for discussion.

The nFP for Indonesia requested further information on the process of how the Climate Synthesis Team plans to have the APN Climate Synthesis Report cited in the IPCC AR5.

The Executive Science Officer responded that the APN Climate Synthesis *per se* had the opportunity to have several IPCC AR5 authors involved in the initiative.

Adding, the nFP for Indonesia asked whether APN Climate Synthesis Team had made contact with the IPCC Secretariat and notified them of the Synthesis Report.

The nFP/SPG Member for New Zealand also suggested that whether the report is cited will be decided by the authors of the IPCC AR5. The Climate Synthesis Team will provide the IPCC AR5 authors with the synthesis report, making them aware of the activity.

The SPG Member for China responded that, as one of the IPCC AR5 authors, he will have the chance to cite a number of available resources at the first zero-order draft of the Assessment Report.

The SPG Member for Pakistan complimented the APN for this endeavour as he sees that climate projects funded by the APN are very worthy of being recognized in this form.

The SPG Member for Thailand suggested that a similar activity be conducted at the sub-regional level. This could be a better way of informing policy-makers.

The Executive Science Officer responded that one of the follow-up activities to the Synthesis Report (she requested participants to refer to an attachment in the item papers) is to have a special issue of a journal/academic book. The Climate Synthesis team, together with other authors, had identified a section in the follow-up activity that is devoted to climate modelling projections and regional downscaling. She further informed the Meeting that the scientists involved are very much aware and involved in different regional downscaling activities such as CORDEX, APCC, etc. The Climate Synthesis Team recognizes that regional downscaling is a crucial and relevant topic to be included in follow-up activity.

The SPG Member for Viet Nam asked why integrated waste management was not included in any paragraph of the climate synthesis. The Executive Science Officer noted that for the current synthesis report only those projects that were completed under the theme of climate are included. At the established

cut-off date for completed projects, there was no integrated waste management project funded by the APN.

The members thanked the SPG Member for China for his presentation noting that the Meeting looked forward to seeing the fruits of the Climate Synthesis Team's labour.

*Action: Secretariat and Climate Synthesis Team*

#### **Item 21: Promoting Science and Strengthening Engagement with International Communities**

Aimed to facilitate the promotion of science and strengthening engagements with international communities, six (6) presentations from APN sub-regions including the Oceania and Pacific, South Asia, Southeast Asia, and Temperate East Asia, a presentation from Dr. Alexander Sterin, SPG Member for the Russian Federation and the US Global Change Research Program were delivered. All presenters thanked the APN for the opportunity.

Further information is as follows:

The nFP for Sri Lanka reported on behalf of South Asia. He reported on the APN projects in the region. The challenge is to develop programs on important areas. He discussed the ways to address these issues which are to create awareness, capacity building and to improve the networking of scientists. He then shared the experiences and steps they took in the past concerning the three(3) aforementioned areas and the Climate Change Adaptation Strategy they developed for Sri Lanka from 2011 to 2016.

Mr. Sundara Sem, the nFP for Cambodia reported on behalf of Southeast Asia. He briefly discussed what science is and the important role being played by the APN in the region. He enumerated points that should be taken into consideration in promoting science and strengthening the engagement with the international communities in the region.

Mr. Chengyong Sun, the nFP for China, reported on behalf of Temperate East Asia. He expressed his thanks to Sri Lanka for hosting the meeting. He discussed the relationship of science and development. For a long time, China has focused their attention on addressing the issue of climate change. Many scientific research projects have been funded by different national programmes to understand the mechanism, mitigation and adaptation of climate change and the eventuality of achieving sustainable development. He enumerated the outputs such as publications and data sharing platforms they developed related to climate change research. Great importance was also stressed upon international cooperation. He discussed the challenges that China are facing as a result of their development. He encouraged everyone to help each other to have a better world.

The nFP/SPG Member for New Zealand gave a presentation entitled "Oceania and the Pacific Perspective". He said that the issues being faced in their region are the same with the others; however, their main problem is human resource. They often lack the skilled individuals and time to engage in these issues locally and/or internationally. He then stressed the issue of sustainable development and urbanization noting the separation in a philosophical sense from those that live in urban environments and those that live in rural areas. The APN can play an important role, particularly in capacity development and training which are extremely useful and relevant. This is especially relevant in the support of pilot projects that can be duplicated which would be an efficient use of APN resources.

The nFP for the USA reported on the USGCRP's Strategic Plan from 2011-2020. He explained the main goals, mission, vision and future plan of the document. The goals are the same as the goals of APN. He noted that the USGCRP effort is emphasizing an "end-to-end" approach from fundamental research to societal decision support and that this approach parallels in many ways the approach currently being implemented by the APN. The new Plan will emphasize "observing, understanding and predicting integrated systems"; "informing response strategies" will be a key objective of the plan; future integrative modelling will involve both the natural and social sciences and will include technology as well; and international cooperation is expected to be an important component of the Plan. This effort is well under way and the new Strategic Plan is expected to be released by the end of 2011.

The SPG Member for the Russian Federation announced an upcoming conference on Adaptation of Climate Change International Scientific Conference to be held in Moscow 9-11 November 2011. He asked the members to check the website [www.pacc2011.ru](http://www.pacc2011.ru) for more information.

The SPG Member for Bangladesh, Dr. Md. Giashuddin Miah, commented that, in the report given by Mr. Anura Jayatilake, human resource development needs to be included as one of the problems facing Sri Lanka. The Sri Lankan delegates clarified that this was actually considered and is included in the sub-sections of the report.

The nFP/SPG Member for New Zealand encouraged Members to engage in a dialogue with a focused outcome and on what we might learn from the process.

The nFP for China further suggested that the next IGM allocate one half day to engage in an active dialogue, which was supported by the Chair.

*Action: nFPs, SPG Members, Secretariat*

### **Item 22: Hosting of IGMs**

The Government of Indonesia through the nFP for Indonesia confirmed its willingness to host the 17<sup>th</sup> IGM/SPG Meeting in 2012. This was accepted by acclamation. Concerning the host country for the 18<sup>th</sup> IGM/SPG Meeting, Member countries were asked to consider this and contact the Secretariat should their respective countries be interested.

*Action: nFPs, SPG Members, Secretariat*

### **Item 23: 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 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 16<sup>th</sup> IGM. The final summary will also include a list of action points as an attachment.

### **Final Remarks and Joint IGM/SPG Closing**

The Secretariat Director expressed his heartfelt thanks to the delegates for attending the Meeting in the beautiful city of Colombo. He thanked the Ministry of Environment, Sri Lanka for hosting and for the support in organizing the meetings. Special thanks were extended to the Chair and Vice-Chair for the management of the meeting and the concise wrap-ups. He finally expressed his gratitude to the Secretariat Members for their assistance and cooperation.

The Chair thanked the nFPs, the SPG Members, invited experts, guests and observers for their very thoughtful and positive contributions to the Meeting. He expressed his thanks to the Secretariat for the support that they had provided throughout the Meeting.

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# 2011/2012 CAPaBLE Projects

Attachment III– 2011/2012 CAPaBLE Projects

Project Reference Number	Title of Proposed Project	Proponent, Institution and Country	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	Funding (US\$)
								2011/2012 awarded
<b>CBA2011-01CMY-Kawai</b>	Capacity Building of Biodiversity Research in the Coastal Zones of the Asia Pacific Region: Phycology Taxonomy Analysis Training Using Genetic Marker	Prof. Hiroshi Kawai, EMECS Secretariat & Kobe University Research Center for Inland Seas, JAPAN	<a href="mailto:furukawa@emecs.or.jp">furukawa@emecs.or.jp</a> ; <a href="mailto:kawai@kobe-u.ac.jp">kawai@kobe-u.ac.jp</a> ; <a href="mailto:kawai@kobe-u.ac.jp">kawai@kobe-u.ac.jp</a>	Ecosystems, Biodiversity and Land Use	Capacity building/training for young researchers from the developing Asia Pacific on biological identification analysis using genetic marker in the field of phycology taxonomy to contribute in each country's biodiversity conservation.	Japan, Korea, Australia, China, Russia, Taiwan, Philippines, Indonesia, India, Malaysia and New Zealand	2 years	30,000
<b>CBA2011-02CMY-Kaihotsu</b>	Drought Monitoring System Development by Integrating In-situ Data, Satellite Data and Numerical Model Output	Prof. Ichiro Kaihotsu, Hiroshima University, JAPAN	<a href="mailto:kaihotsu@hiroshima-u.ac.jp">kaihotsu@hiroshima-u.ac.jp</a>	Climate; Use of Resources and Pathways to Sustainable Development	Improving the drought monitoring capability in various Asian countries such as Bangladesh, China, Nepal, Mongolia, Philippines, Pakistan, Thailand, and Vietnam and setting up a drought monitoring and research network in related Asian countries.	Japan, Bangladesh, China, Nepal, Philippines, Pakistan, Thailand and Viet Nam	2 years	40,000
<b>CBA2011-03NSY-WCRP</b>	WCRP Open Science Conference: Climate Research in Service to Society	Prof. Guoxiong WU LASG, Institute of Atmospheric Physics, Chinese Academy of Science CHINA	<a href="mailto:gxwu@lasg.iap.ac.cn">gxwu@lasg.iap.ac.cn</a> ; <a href="mailto:RBoscolo@wmo.int">RBoscolo@wmo.int</a>	CC&V	The WCRP OSC will facilitate active dialogue and discussion among the diverse international climate change research community that is necessary to address cross-cutting challenges and identify opportunities to further improve attribution and prediction of climate variability and change on global and regional scales, all of which is required to support climate adaptation, mitigation and risk management measures.	China, USA, Japan, Australia, Open to all APN member countries	1 year	60,000
<b>CBA2011-04NSY-IHDP</b>	IHDP Training Workshops on Asian Development Pathways in the Context of Transitions Towards a "Green Economy"	Dr. Anantha Kumar DURAIAPPAH International Human Dimensions Programme IHDP	<a href="mailto:duraiappah@ihdp.unu.edu">duraiappah@ihdp.unu.edu</a>	CCI, SPL	The proposed training workshops will build capacity to conduct research on two central themes of the human dimensions of global environmental change ("Green Economy" and "Institutions and Governance"). It will also allow participants to explore ways and means how to transform scientific input for policy processes such as UNFCCC 2012 and how to use practitioners input for the formulation and implementation of research projects.	India, Korea, China, Japan, USA, Australia, open to APN member countries	1 year	60,000

<b>CBA2011-05NSY-Schang</b>	National Dialogues on Adapting Biodiversity Management to Climate Change	Dr. Scott SCHANG Environmental Law Institute UNITED STATES OF AMERICA	<a href="mailto:schang@eli.org">schang@eli.org</a>	CC&V, EBLU, SPL	Aims to hold two “National Dialogues,” one in Bhutan and one in Viet Nam, to bring together scientists, policymakers, and stakeholders to collaborate on ensuring biodiversity law, policy, and management in these countries is adaptable to climate change.	USA, Bhutan, Viet Nam	1 year and 4 months	40,000
<b>CBA2011-06NSY-LOICZ</b>	Young LOICZ Forum 2011: Capacity Building in the Asia-Pacific Region	Dr. Cheng TANG Yantai Institute of Coastal Zone Research (YIC) Chinese Academy of Sciences CHINA	<a href="mailto:ctang@yic.ac.cn">ctang@yic.ac.cn</a>	CATMD, CCI	The Young LOICZ Forum – a well-elaborated capacity building programme for early career scientists from Asia-Pacific countries and integral part of the LOICZ OSC 2011 in Yantai, China – offers young people the opportunity to learn more about pressures and drivers in coastal areas and to better define their future professional role in coastal management. Comprehensive educational activities provide the next generation of scientists and decision makers with relevant knowledge and practical skills, opportunities to interact and network with their peers, and to transfer and apply global change mitigation measures and sustainable coastal zone management in the Asia-Pacific region.	China, Australia, India, Japan, New Zealand, Philippines, Singapore, USA, Vietnam (Open to all APN member countries)	1 year	30,000
<b>CBA2011-07NMY-Abawi</b>	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	<a href="mailto:y.abawi@bom.gov.au">y.abawi@bom.gov.au</a> <a href="mailto:yahya.abawi@usq.edu.au">yahya.abawi@usq.edu.au</a>	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	1.5 years	70,000
<b>CBA2011-08NSY-Baker</b>	Towards engagement in the United Nations Regular Process for Global Assessment of the Marine Environment: Strengthening Capacity of Developing Countries in the Seas of East Asia	Dr Elaine BAKER UNEP GRID-Arendal /The University of Sydney AUSTRALIA	<a href="mailto:elaine.baker@sydney.edu.au">elaine.baker@sydney.edu.au</a>	CCI, SPL	Comprehensive collection of new data is often prohibitively costly, however, often data does exist - locked away in formats or archives inaccessible to the decision maker. The proposed activity would be the initial phase of a programme of work aiming to build capacity within countries to increase access to and appropriate use of existing data - enabling countries to be ready to contribute to global assessment processes as well as addressing EBM and MSP challenges.	Australia, Cambodia, PRChina, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Thailand, Viet Nam	1 year	40,000



<b>CBA2011-09NSY-Aligaen</b>	Climate Change Integrated Education Model: Building Adaptive Capacity for the Next Generation (Malaysia, Indonesia, Thailand, Philippines and Lao PDR)	Mr. Julito C. ALIGAEN Southeast Asian Ministers of Education Organization Regional Education Center for Science and Math (SEAMEO RECSAM) MALAYSIA	<a href="mailto:juli_aligaen@recsam.edu.my">juli_aligaen@recsam.edu.my</a>	CC&V, CCI	Aims to integrate climate change issues across learning areas to inform and develop the young people of today to be responsible enough to manage their own future.	Malaysia, Indonesia, Thailand, Philippines, Lao PDR	1 year	40,000
<b>CBA2011-10NSY-Ngari</b>	International Workshop on Climate and Oceanic Fisheries	Mr. Arona NGARI Cook Islands Meteorological Service COOK ISLANDS	<a href="mailto:angari@met.gov.cu">angari@met.gov.cu</a>	CC&V, CATMD, RUSD	An international workshop will be held 3-5 October 2011 in Rarotonga, Cook Islands to identify the effects of climate and climate variability, and evaluate the impacts of 21st century climate change, on oceanic fisheries.	Cook Islands, Australia, Cambodia, China, Fiji, India, Indonesia, Japan, Kiribati, Malaysia, New Zealand, Samoa, Philippines, Russian Federation, United States, Viet Nam	1 year	40,000
<b>CBA2011-11NSY-Tienhaara</b>	Climate Change Governance in the Asia-Pacific Region: Agency, Accountability and Adaptiveness	Dr. Kyla TIENHAARA Regulatory Institutions Network, College of Asia & the Pacific, Australian National University AUSTRALIA	<a href="mailto:Kyla.Tienhaara@anu.edu.au">Kyla.Tienhaara@anu.edu.au</a>	CC&V	The proposed workshop is primarily aimed at building the capacity of early career researchers in the Asia-Pacific region to contribute to academic and policy debates about the development of efficient, equitable and accountable governance to respond to climate change. The workshop will also serve as an important networking opportunity and platform to initiate and combine momentum for new research on responses to climate change and earth system governance.	Australia, Open to all APN member countries	1 year	32,000
<b>CBA2011-12NMY-Hasson</b>	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 Ul HASSON Global Change Impact Studies Centre PAKISTAN	<a href="mailto:shabeh.hasson@cisc.org.pk">shabeh.hasson@cisc.org.pk</a> <a href="mailto:shabeh@gmail.com">shabeh@gmail.com</a>	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	90,000

<b>CBA2011-13NSY-Tolentino</b>	Institutionalizing Agroforestry as a Climate Change Adaptation Strategy through Local Capacity and Policy Development in Southeast Asia	Dr. Lutgarda TOLENTINO Philippine Agroforestry Education and Research Network PHILIPPINES	<a href="mailto:secretariat@pafer.n.org.ph">secretariat@pafer.n.org.ph</a> <a href="mailto:lt2003@yahoo.com">lt2003@yahoo.com</a>	EBLU	This project aims to strengthen the capacities of junior lecturers engaged in agroforestry education programs, and community development workers/agricultural technicians involved in the research and extension programs at the local/community levels, and mainstream agroforestry in the development programs of the local government units/agencies in each of the six collaborating countries in Southeast Asia.	Philippines, Lao PDR, Viet Nam, Malaysia, Thailand, Indonesia	1 year	35,000
<b>CBA2011-14NSY-Ng</b>	Water Safety from Source to Tap – Strategies and Implementations	Assoc. Prof. How Yong NG Centre for Water Research, Division of Environmental Science and Engineering National University of Singapore SINGAPORE	<a href="mailto:csenghy@nus.edu.sg">csenghy@nus.edu.sg</a>	CC&V	Information sharing and technology transfer on sustainable water management strategies including source water quality assessment, treatment technologies and monitoring of emerging contaminants between Singapore and Sri Lanka. The project aims to develop a holistic approach to providing safe potable water for meeting the needs of a developing nation in the climate change era.	Singapore, Sri Lanka	1 year	30,000
<b>CBA2011-15NSY-Wagan</b>	Capability Enhancement of the Local Experts from State Universities and Colleges in Assessing Climate Change Vulnerability and Adaptive Capacity of Crop-based Farming Systems in Various Agroecological Settings	Dr. Amparo M. Wagan FSSRI-Agricultural Systems Cluster, College of Agriculture, UPLB PHILIPPINES	<a href="mailto:amwagan@uplb.edu.ph">amwagan@uplb.edu.ph</a> <a href="mailto:amparowagan@yahoo.com">amparowagan@yahoo.com</a>	CC&V, RUSD	The project is capability enhancement for crop specialists on climate change, vulnerability/adaptive capacity assessment of tropical fruit crop production areas in the Philippines.	Philippines, Thailand, Indonesia	1 year	37,000
<b>CBA2011-16NSY-Li</b>	Demonstration Study on Advancing Global Change Research Approaches Based on Inter-Agency Collaboration and Data Infrastructure of GENESI and GeoBrain	Prof. Guoqing LI The Centre for Earth Observation and Digital Earth CHINA	<a href="mailto:gqli@ceode.ac.cn">gqli@ceode.ac.cn</a>	EBLU, RUSD	The potential cost reductions for data searching, accessing and processing in GC research can greatly benefit scientists. New GCR approaches have been made possible from the evolution of data infrastructure under the GEOSS. Following the last APN project in 2009 on the introduction of such new data facilities and processes in Mongolia, this new proposal will focus on live demonstrations and study approaches from the rebuilding of some typical GCR study cases (lake-ice changing in China Tibet, land-cover changing in Mongolia).	China, Japan, Malaysia, Mongolia, Thailand, United States and a partner country outside the AP area (European Union)	1 year	40,000

CBA2011-17NSG-Devy	Building Partnerships for Developing a South Asian Canopy Science Research Program	Dr. M. Soubadra Devy Ashoka Trust for Research in Ecology and the Environment INDIA	<a href="mailto:soubadra@atree.org">soubadra@atree.org</a>	CC&V, EBLU	Asian forest canopies remain unexplored and there is an urgent need to draw the attention of the scientific community to this unique habitat. This proposal will conduct a regional workshop to bring experts in the region to build a network to facilitate cross site learnings of this emerging science to solve global environmental challenges particularly biodiversity conservation, climate change and landuse change in the Asian region.	India, Japan, Malaysia, Sri Lanka, Australia	1 year	15,000
CBA2011-18NSY-Peñalba	Awareness Raising and Capacity Building on Alternative Water Management for Communal Irrigator's Association in the Philippines	Dr. Linda PEÑALBA Institute of Agrarian and Rurban Development Studies, College of Public Affairs, University of the Philippines Los Baños PHILIPPINES	<a href="mailto:lmpeñalba@yahoo.com">lmpeñalba@yahoo.com</a>	CC&V, SPL	This proposed project, aims to improve farmers' awareness and skills in irrigation water management and extreme climate forecast application. It will engage the expertise of climate scientists, water management technologists, and local decision makers to bridge the gap between science-based water management techniques and farmers' practices.	Philippines	1 year	30,000
CRP2011-01CMY-Pereira	Strengthening Capacity for Policy Research on Mainstreaming Adaptation to Climate Change in Agriculture and Water Sectors	Dr. Joy Jacqueline Pereira, Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia (UKM), MALAYSIA	<a href="mailto:joy@ukm.my">joy@ukm.my</a>	climate change, adaptation, agriculture and water resources	Strengthening the research capacity on mainstreaming climate change adaptation concerns into agricultural and water policies and creating a consortium for adaptation policy research in Asia (ARNAP: Adaptation Research and Policy Network for Asia and the Pacific).	Malaysia, Viet Nam, India, Japan	3 years	70,000
							Total funds awarded	829,000
							Transferred to CRP IV	100,000
							Total funds available	966,000
							Contingency	37,000

## 2011/2012 ARCP Projects

Original Project/Proposal Reference Number	New Project Reference Number	Title	Project Leader	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	Funding (US\$)	
									2011/2012 Yearly award	2011/2012 Total Awarded
ARCP2010-04CMY-Wang	<b>ARCP2011-01CMY-Wang</b>	Building Asian Climate Change Scenarios by Multi-Regional Climate Models Ensemble	Dr. Shuyu Wang Institute of Atmospheric Physics, Chinese Academy of Sciences, CHINA	<a href="mailto:wsy@tea.ac.cn">wsy@tea.ac.cn</a>	Climate	Building of high resolution climate change scenarios for Asia for 2040-2070 using nine regional climate models' outputs. Development of the envelope analysis of ensemble for Asian regional climate projection with the full evaluation and assessment uncertainty originating from RCM downscaling.	China, ROK, Japan, Australia, USA, Thailand	3 years	40,050	40,050
ARCP2010-10NMY-Koike	<b>ARCP2011-02CMY-Koike</b>	River Management System Development in Asia Based on Data Integration and Analysis System (DIAS) under the GEOSS	Prof. Toshio Koike The University of Tokyo, JAPAN	<a href="mailto:tkoike@hydr.a.u-tokyo.ac.jp">tkoike@hydr.a.u-tokyo.ac.jp</a>	Climate; Use of Resources and Pathways to Sustainable Development; Crosscutting Issues and Science-Policy Linkages	The result of this project will enable (i) integrated data access and transfer among Asian National data management groups as well as between these groups and International data organizations such as WMO and UNESCO for the purpose of coordinating water cycle research in the Asian region, and (ii) improved transformation of observation information and scientific knowledge to water management policy in the Asian region.	18 member countries of AWCI	2 years	45,000 (from 2010/11 budget)	-
ARCP2010-11NMY-Asanuma	<b>ARCP2011-03CMY-Asanuma</b>	Intercomparison of Landsurface Process Modeling at Asian Drylands	Dr. Jun Asanuma Terrestrial Environment Research Center, University of Tsukuba, JAPAN	<a href="mailto:asanuma@suir.tsukuba.ac.jp">asanuma@suir.tsukuba.ac.jp</a>	Ecosystems, Biodiversity and Land Use; Changes in Atmospheric, Terrestrial and Marine Domains	This study aims to access uncertainties pertained to the prediction of landsurface environment using landsurface models (LSMs) and soil-plant-ecosystem models and to improve accuracies of the prediction through an intercomparison study with a suite of models and data from a selected set of well documented study sites from the dryland region.	Japan, USA, China, ROK, Mongolia, Australia and Pakistan	2 years	47,100	47,100

ARCP2010-12NMY-Uprety	<b>ARCP2011-04CMY-Uprety</b>	Community Based Forestry and Livelihoods in the Context of Climate Change Adaptation	Dr. Dharam Raj Uprety International Forestry Resources and Institutions (IFRI) and ForestAction, NEPAL	<a href="mailto:forestaction@wlink.com.np">forestaction@wlink.com.np</a> <a href="mailto:dharam.uprety@gmail.com">dharam.uprety@gmail.com</a>	Climate; Use of Resources and Pathways for Sustainable Development	Investigation on how climate change is affecting forest-dependent communities Asia-Pacific Region and the actual and potential adaptation measures that enable households, communities and networks to remain resilient in the changing contexts.	Nepal, Thailand and Viet Nam	2 years	39,980	39,980
ARCP2010-13NMY-Bae	<b>ARCP2011-05CMY-Bae</b>	Climate Change Impact Assessment on the Asia-Pacific Water Resources Under AWCI/GEOSS	Prof. Deg-Hyo Bae Sejong University, ROK	<a href="mailto:dhbae@sejong.ac.kr">dhbae@sejong.ac.kr</a>	Climate; Use of Resources and Pathways for Sustainable Development	Evaluation of the climate change impact assessments on water resources over the Asia-Pacific regions joining the Asian Water Cycle Initiative for the Global Earth Observation System of Systems (AWCI/GEOSS) and to promote the capacity building for climate change impact assessment.	ROK, Japan, Bangladesh and Pakistan, Bhutan	2 years	42,000 (from 2010/11 budget)	-
ARCP2010-14NMY-Li	<b>ARCP2011-06CMY-Li</b>	Analysis on Urban Land-Use Changes and its Impacts on Food Security in Different Asian Cities of Four Developing Countries Using Modified CA Model	Prof. Jianlong Li The Global Change Research Institute, College of Life Science, Nanjing University, CHINA	<a href="mailto:jlili2008@njuedu.cn">jlili2008@njuedu.cn</a> <a href="mailto:jianlongli@sinac.com.cn">jianlongli@sinac.com.cn</a>	Ecosystems, Biodiversity and Land Use	Assessment of changes on urban expansion and land use to agricultural production and food security in the three core cities of three developing countries using the CA model which analyses different urban land use patterns and the mechanism leading to food shortages.	China, Viet Nam, India, USA and Australia	2 years	37,250 (from 2010/11 budget)	-
ARCP2010-15NMY-Han	<b>ARCP2011-07CMY-Han</b>	The Impact of Spatial Parameters on GHG Emission: A Comparative Study between Cities in China and India	Dr. Sun Sheng Han The University of Melbourne, AUSTRALIA	<a href="mailto:sshan@unimelb.edu.au">sshan@unimelb.edu.au</a>	Use of Resources and Pathways for Sustainable Development; Land Use	Aims to examine the impacts of urban spatial parameters on greenhouse gas (GHG) emission at metropolitan, district and street levels in two cultural context to address a gap in linking urban spatial structure to low carbon economies.	Australia, China and India	2 years	38,440	38,440

ARCP2010-16NMY-Huda	<b>ARCP2011-08CMY-Huda</b>	Food Security and Climate Change in the Asia-Pacific Region: Evaluating Mismatch between Crop Development and Water Availability	Prof. Samsul Huda University of Western Sydney, AUSTRALIA	<a href="mailto:s.huda@uws.edu.au">s.huda@uws.edu.au</a>	Climate; Use of Resources and Pathways for Sustainable Development	Investigation of the impact of climate change on the matching of crop phenology and water availability encompassing key sites in China, India and Australia to build the resilience of the community and the natural resources to cope with the future challenges including the increased climate variability resulting from climate change.	Australia, China and India	2 years	59,700	59,700
ARCP2010-17NMY-Towprayoon	<b>ARCP2011-09CMY-Towprayoon</b>	Strategic Rice Cultivation for Sustainable Low Carbon Society Development in South East Asia	Assoc. Prof. Dr. Sirintornthep Towprayoon King Mongkut's University of Technology, THAILAND	<a href="mailto:sirin@igsee.kmutt.ac.th">sirin@igsee.kmutt.ac.th</a>	Climate; Use of Resources and Pathways for Sustainable Development	Identification of strategic rice cultivation practices involving rotation with energy crops for mitigating GHGs, while enhancing capacity in energy production and long term soil carbon storage for sustainable agriculture in South East Asia (SEA).	Thailand, Indonesia and Japan	2 years	40,000	40,000
ARCP2010-18NMY-Lutaenko	<b>ARCP2011-10CMY-Lutaenko</b>	Coastal Marine Biodiversity of Viet Nam: Regional and Local Challenges and Coastal Zone Management for Sustainable Development	Dr. Konstantin Lutaenko Institute of Marine Biology, RUSSIAN FEDERATION	<a href="mailto:lutaenko@mail.primorye.ru">lutaenko@mail.primorye.ru</a> <a href="mailto:lutaenko@mail.ru">lutaenko@mail.ru</a>	Ecosystems, Biodiversity and Land Use	Biodiversity assessment in coral reef/tropical ecosystems in Viet Nam based on corals, mollusks, crustaceans and echinoderms; and development of methods of monitoring their status to find common patterns, understand temporal changes and their causes, and predict future modifications of the ecosystems/environments.	Russian Federation, Viet Nam and ROK	2 years	40,000	40,000
ARCP2010-FP10-Patra-Canadell	<b>ARCP2011-11NMY-Patra/Canadell</b>	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	<a href="mailto:prabir@jamstec.go.jp">prabir@jamstec.go.jp</a> <a href="mailto:pcp.canadell@csiro.au">pcp.canadell@csiro.au</a>	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	150,000

ARCP2010-FP07-Fortes	<b>ARCP2011-12NMY-Fortes</b>	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	<a href="mailto:migueldfortes@gmail.com">migueldfortes@gmail.com</a>	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	90,000
ARCP2010-FP17-Herath	<b>ARCP2011-13NMY-Herath</b>	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	<a href="mailto:herath@unu.edu">herath@unu.edu</a>	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	90,000
ARCP2010-FP08-Salik	<b>ARCP2011-14NMY-Salik</b>	Impact of Climate Change on Mangroves Ecosystem in South Asia	Mr. Kashif Majeed SALIK Global Change Impact Studies Centre (GCISC) PAKISTAN	<a href="mailto:kashif.majeed@gcisc.org.pk">kashif.majeed@gcisc.org.pk</a> <a href="mailto:kashif.salik@gmail.com">kashif.salik@gmail.com</a>	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	54,000	85,000
ARCP2010-FP09-Zhen	<b>ARCP2011-15NMY-Zhen</b>	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	<a href="mailto:zhenl@igsnr.ac.cn">zhenl@igsnr.ac.cn</a>	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, CO2 fixation and O2 release, water purification, and wild species habitat conservation) in two wetlands of international importance in China and Indonesia.	China, Japan, Indonesia, Bangladesh	2 years	53,000	90,000

ARCP2010- FP16-de Morais	<b>ARCP2011- 16NMY- IGBP</b>	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)	<a href="mailto:morais@igbp.kva.se">morais@igbp .kva.se</a>	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	90,000
ARCP2010- FP04- Mathukumalli	<b>ARCP2011- 17NMY- Mathukumalli</b>	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	<a href="mailto:mbkp@umd.edu">mbkp@umd. edu</a>	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	90,000
ARCP2010- FP12-Jung	<b>ARCP2011- 18NMY-Jung</b>	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	<a href="mailto:sukgeun.jung@gmail.com">sukgeun.jung @gmail.com</a>	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- 52oN; 121-143oE) by a working group composed of natural and socioeconomic scientists.	ROK, Russian Federation, Japan, China	2 years	47,000	76,000
ARCP2010- FP13- Koottatep	<b>ARCP2011- 19NSY- Koottatep</b>	Affordable Sanitation as an Adaptive Strategy to Emerging Waterborne Diseases due to Climate Change	Dr. Thammarat KOOTTATEP Asian Institute of Technology (AIT) THAILAND	<a href="mailto:thamarat@ait.ac.th">thamarat@ait .ac.th</a>	CC&V, CCI	The main goal of this study is to develop methodology for assessing sustainable sanitation systems and adaptive strategy to emerging waterborne diseases. Material Flow Analysis (MFA) will be firstly applied to determine the sanitation planning systems and monitoring program.	Thailand, Viet Nam, Lao PDR, Switzerland	1 year	44,550	44,550



ARCP2010-FP05-McEvoy	ARCP2011-20NSY-McEvoy	Assessment of Climate Change Risks and Adaptation Options for Secondary Cities in South-western Bangladesh and Central Vietnam	Dr. Darryn MCEVOY Global Cities Research Institute, Royal Melbourne Institute of Technology University AUSTRALIA	<a href="mailto:darryn.mcevoy@rmit.edu.au">darryn.mcevoy@rmit.edu.au</a>	CC&V	Aims to develop and test a methodology for the assessment of climate risks that is tailored to the needs of secondary cities of impoverished regions in Bangladesh and Vietnam, and draws explicitly on local knowledge and information.	Australia, Bangladesh, Viet Nam	1 year	43,000	43,000
ARCP2010-FP11-Manurung	ARCP2011-21NSY-Manurung	Reconstruction of Sea Level Change in Southeast Asia (RESELECASEA) Waters Using Combined Coastal Sea Level Data and Satellite Altimetry Data	Dr. Parluhutan MANURUNG National Coordinating for Survey and Mapping Agency (BAKOSURTANAL) INDONESIA	<a href="mailto:parluhutan@bakosurtanal.go.id">parluhutan@bakosurtanal.go.id</a>	CC&V, CATMD	Reconstruction of sea level change to investigate past and future characteristics of sea level affected by global warming in Southeast Asia using shallow-water specific methods. Result will be presented to our government and hopefully the result will help our government to make a policy related to effect of global climate change.	Indonesia, USA, Viet Nam, Italy	1 year	45,000	45,000
ARCP2010-FP02-Liu	ARCP2011-22NSG-Liu	The Impact of Global Warming on Ocean-atmosphere Feedback Strength at Tropical Indian Ocean	Dr. Lin LIU First Institute of Oceanography, State Oceanic Administration CHINA	<a href="mailto:liul@fio.org.cn">liul@fio.org.cn</a>	CC&V, CATMD	This project will examine the impact from global warming on ocean-atmosphere coupled event at tropical Indian Ocean, to answer the questions 1) to what degree global warming can impact India Ocean Dipole (IOD) event and 2) explain the physical mechanism that global warming impact on IOD event.	China, Malaysia, USA	1 year	12,000	12,000
								Total funds awarded in 2011/12		1,210,820
								Total funds available		1,240,000
								Contingency		29,180

## List of Major Action Points

### Item 3: APN Membership and Framework Document

**Action Point 1:** Following a discussion on the process for recruitment and its transparency, the APN Secretariat was asked for, and later produced, an email to the IGM showing that all Members were informed of the recruitment drive for staff in the APN Secretariat in a collective email. Action: Secretariat (completed)

**Action Point 2:** The Secretariat is to have an informal discussion with delegates from China to confirm the procedures for recruitment. Action: Secretariat

**Action Point 3:** The first sentence in 1(i) under the section Mandate of the Secretariat in the Framework Document and its referenced Appendix 2 is to be removed: Action: Secretariat

### Item 4: Operating Plan for the 3<sup>rd</sup> Strategic Phase

**Action Point 4:** APN is to encourage strong involvement of experts and Members to various relevant international and regional events. Action: Members and Secretariat

**Action Point 5:** Members are to provide information to the Secretariat on events relevant to the APN that are taking place in their respective countries in the future so further options for engaging Members and promoting the APN can be explored. Action: Members and Secretariat

### Item 5: Proposed New (and Continuing) Activities

**Action Point 6:** Develop the Biodiversity Gap Analysis Framework for presentation at the 17<sup>th</sup> IGM was approved. Action: Secretariat and Members involved

**Action Point 7:** Organise and hold a Science-Policy Dialogue on Challenges of Global Change in the week 10-15<sup>th</sup> October 2011 in a country in Southeast Asia and back-to-back with the 19<sup>th</sup> Steering Committee. Action: SEA-SRC, Secretariat

**Action Point 8:** Conduct PDTWs

- One back-to-back with the APN 3<sup>rd</sup> SA-SRC meeting
- One back-to-back with the APN 4<sup>th</sup> SEA-SRC meeting
- A Temperate East Asia PDTW should one be requested by the Members.
- One during the Young LOICZ Forum (YLF) in Yantai, China.

Action: SRCs, Secretariat

**Action Point 9:** Implement APN/Hyogo Activity - Cooperation with Mongolia on Reforestation Project. Action: Secretariat

**Action Point 10:** Implement APN/Hyogo Activity - 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Coastal Seas (EMECS 9). Action: Secretariat

**Action Point 11:** Implement APN/Hyogo Activity - APN-DIVERSITAS-HYOGO-IHDP-UNU on Mosaic Landscapes: The New Commons in the Asia-Pacific Region. Action: Secretariat

**Action Point 12:** Use common English term for “Satoyama” for the new activity under Action Point 11. Action: Secretariat

**Action Point 13:** In reference to Action Point 10, invite the nFP for China to be involved in selecting a relevant person from Tianjin who is familiar with enclosed coastal seas pressures of coastal urbanization.

Action: Secretariat

#### Item 8: Budget Plan (2011/12)

**Action Point 14:** Referring to Item 5 on proposed new activities, provide US\$100,000 for the Planet under Pressure conference with the condition that the paper submitted to the APN by the Conference organisers be developed further to include specific criteria (through consultation with the SPG) for selection of developing country participants and assuring the APN's "visibility" at the Conference would be very small. Action: SPG and Secretariat

**Action Point 15:** Encourage all Members to represent the APN in various meetings that they might already be attending so as to share the Secretariat workload. Action: Secretariat and Members

**Action Point 16:** Implement the 2011/12 approved budget. Action: Steering Committee, Secretariat

#### Item 20: Election of New SC Members

**Action Point 17:** The new SC are to meet during the break immediately following the Item. Action: Steering Committee (completed)

#### Item 12: Report on APN Focussed Activities

**Action Point 18:** Progress on EBLU and RUSD focussed activities are to be reported to the 17<sup>th</sup> IGM/SPG Meetings. Action: Secretariat

#### Item 13: Report on SPG and CDC Activities

**Action Point 20:** Launch an Annual Call for Proposals for ARCP activities. Action: Secretariat and SPG-SC

**Action Point 21:** Launch an Annual Call for Proposals for Capacity Building activities. Action: Secretariat and CDC.

**Action Point 22:** Define successful scientific capacity building criteria. Action: CDC and Secretariat

**Action Point 23:** Discuss, develop and implement the framework devised from the Biodiversity Gap Analysis. Action: Secretariat and Members

**Action Point 24:** Implement the 3-year Phase IV of the comprehensive research element of the CAPaBLE programme. Action: Secretariat and CDC.

#### Item 14: New Policies on Data Sharing & Data Management and Reviewer Conflict of Interest

**Action Point 25:** Data Sharing & Data Management: The draft presented to the 16<sup>th</sup> IGM is to be retained by the Secretariat and referred to as Draft Version Zero (0). This draft (0) is not to be implemented. Action: Secretariat

**Action Point 26:** Data Sharing & Data Management: A Draft Version One (1) is to be developed that essentially removes the entire text under 2C; replacing it with the following text: "The SPG will be charged with issues of non-compliance and report to the IGM on an annual basis regarding the implementation of Draft Version One and continue to recommend revisions as necessary until a robust policy is in place." Action: SPG, Secretariat

**Action Point 27:** Data Sharing & Data Management: Draft Version One is to be implemented in the 2011 Annual Calls for Proposals and reviewed annually. *Action: SPG and Secretariat*

**Action Point 28:** Conflict of Interest Policy: Another sentence after the second last paragraph is to be included: “If the reviewer disagrees with the SPG-SC decision, then he/she can appeal to the Steering Committee.” *Action: Secretariat*

**Action Point 29:** Conflict of Interest Policy: Definitions are to be provided for the terms Proponent, Collaborator and Reviewer at the end of the document. *Action: SPG-SC, Secretariat*

**Action Point 30:** The revised Conflict of Interest Policy is to be implemented in the 2011 Annual Calls for Proposals. *Action: Secretariat*

#### Item 16: Report from Southeast Asia SRCom

**Action Point 31:** To cascade the information from policy level to community level, the SPG Member for Thailand, Dr. Jariya Boonjawat, will prepare a concept note focussing on the related discussion under this bullet and circulate to all by email. Deadline for completing the concept note is on January 15, 2011. The national Focal Point for Indonesia, Ms. Liana Bratasida suggested to have a definite timeline (New deadline: 30 April 2011). *Action: SEA-SRC, Secretariat*

**Action Point 32:** The SEA-SRC Members exchanged views and agreed that a concept note on a Downscaling Training Workshop for the SEA region be drafted by the Thailand SPG Member with assistance from the nFP for Lao PDR. Deadline for completing the concept note is on January 15, 2011. (New deadline: 30 April 2011). *Action: SEA-SRC, Secretariat*

**Action Point 33:** The Members also need to see the two (2) concept papers and follow-up the activities proposed by Prof. Fuchs to come with a collective decision on whether a new activity will be conducted back-to-back with the PDTW and SEA-SRC Meeting similar to what the SA group did. The SPG Member for Indonesia, Dr. Erna Sri Adiningsih, will have a draft of the concept note to be re-circulated by 30 April 2011. *Action: SEA-SRC, Secretariat*

**Action Point 34:** The SEA-SRC Members agreed to hold the 4<sup>th</sup> SEA-SRC Meeting and back-to-back activities in Viet Nam to be hosted by the (proposed) SPG Member for Viet Nam, Dr. Kim Chi Ngo, on a date to be identified between 25 July–5 August, 2011. *Action: Secretariat, Viet Nam Members and SEA-SRC*

**Action Point 35:** Referring to the Science-Policy Dialogue, the nFP for Cambodia, Mr. Sem Sundara, informed the participants that he will try his best to host the event. *Action: Secretariat, nFP Cambodia*

#### Item 15: Report from South Asia SRCom

**Action Point 36:** The SA group members have agreed to focus on the following tentative issues:

- Water related issues: Melting Glaciers in Himalaya Areas and Water Resources Management.
- Agriculture: Food and Crop Production Strategies; Adaptation to Climate Change in the Region; and Agriculture Land-Use Issues Under Changing Climate Scenario
- Health: Possible Survey of Climate Induced Diseases in Relation to Climatic Change
- Urbanization and Human Development Issues: Human Issues of Urbanization, Megacities, Migration; and Urbanization and Emerging Socio-Economic Issues Caused by Global Environmental Changes in the Region

*Action: SA-SRC Members*

**Action Point 37:** The SA-SRC Members agreed to hold the 3<sup>rd</sup> SA-SRC Meeting in the Kingdom of Bhutan but may also consider Nepal in case of Bhutan’s unavailability in early November 2011. *Action: Secretariat, SA-SRC Members*

**Action Point 38:** The SA-SRC plans to develop a regional research proposal through APN and PDTW workshop. *Action: SA-SRC Members*

Item 17: Discussion on SRC Development

**Action Point 39:** In the steering Committee, discuss future 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. *Action: Steering Committee and Secretariat*

**Action Point 40:** In the Steering Committee, discuss ongoing and future collaboration with START, with a view to strengthening ties at the sub-regional levels. *Action: Steering Committee*

Item 19: ARCP and CAPaBLE Recommendations for Funding

**Action Point 41:** Implement ARCP projects in the table below: *Action: Secretariat*

ARCP Proposals and Continuing Multi-Year Projects	
10 continuing multi-year projects (3 projects do not have funding requirement)	US\$305,270
12 new projects	US\$ 905,550
Contingency Fund	US\$ 29,180

**Action Point 41:** Implement CAPaBLE projects in the table below: *Action: Secretariat*

CAPaBLE Proposals and Continuing Multi Year Projects	
2 continuing multi-year Capacity Development Projects	US\$ 70,000
1 continuing multi-year Comprehensive Research Projects	US\$ 70,000
Phase IV CRP	US\$ 100,000
16 new projects	US\$ 689,000
Contingency Fund	US\$ 37,000
<b>TOTAL</b>	<b>US\$966,000</b>

Item 11: Report on APN Synthesis Activity

**Action Point 42:** Continue Climate Synthesis activities until completion and report progress to the 17<sup>th</sup> IGM. *Action: Secretariat and Climate Synthesis Team*

Item 21: Promoting Science and Strengthening Engagement with the International Communities

**Action Point 43:** The APN is kindly asked to check the website [www.pacc2011.ru](http://www.pacc2011.ru) for more information on the conference “Problems of Adaptation to Climate Change.” Information will also be distributed to the APN EML, on the APN website and among APN membership. *Action: Secretariat, APN Members*

**Action Point 44:** In this IGM meetings, APN Members are encouraged to engage in a dialogue with a focussed outcome and on what APN might learn from the process. *Action: Secretariat, APN Members*

**Action Point 45:** The next IGM is to consider allocating one half day to engage in an active dialogue. *Action: Secretariat, Steering Committee, APN Members*

Item 22: Hosting of IGMs

**Action Point 46:** Concerning the host country for the 18<sup>th</sup> IGM/SPG Meetings, Member countries are to consider this and contact the Secretariat should their respective countries be interested. *Action: Secretariat, APN Members.*

# Section II

Opening and Welcome Remarks

## **Opening Remarks by Dr. R H S Samaratunga Secretary, Ministry of Environment, Sri Lanka**

Ayubowan and Good Morning,  
Hon. Anura Priyadarshna Yapa, Minister of Environment,  
Hon. Mahinda Amaraweera, Minister of Disaster Management,  
Hon. ARM Abdul Cader, Deputy Minister of Environment,  
Mr. Tetsuro Fujitsuka, Director of the APN Secretariat,  
Your Excellencies,  
Distinguished Delegates,  
Ladies and Gentlemen,

As the Secretary to the Ministry of Environment, Sri Lanka, it is with great pleasure to welcome all of you to the Inaugural Session of the 16<sup>th</sup> Inter Governmental Meeting (IGM)/ Scientific Planning Group (SPG) and Associated Committee Meetings of the Asia-Pacific Network for Global Change (APN). As the National Focal Point APN in Sri Lanka, I am honoured and privileged to welcome you this morning.

Distinguished Delegates,

The Asia-Pacific Network for Global Change Research (APN) is an Inter-Governmental Network whose primary objectives are; to foster global environmental change research in the Asia-Pacific region, increase developing country participation in such research and to strengthen links between the scientific community and policy makers. It promotes, encourages and supports research activities on long-term global changes in climate, ocean and terrestrial systems, and on related physical, chemical, biological and socio-economic process.

The Ministry of Environment is the National Focal Point APN and also many other Conventions relating to Environment. My Ministry is the National Focal Point for three Rio Conventions namely, Climate Change Convention, Biodiversity Convention, Convention to Combat Desertification and Kyoto and Bio safety Protocols and many other environmental related conventions. Therefore, as the National Focal Point for many environmental conventions, it is imperative that we develop and enhance capacities of the related systems to implement these global environmental conventions. to facilitate implementation of these conventions at national level , we need to carry out necessary research and to facilitate such research. The outcome of such research would facilitate our policy makers to arrive at decisions for the implementation of these global agreements for the well being of our people.

The Asia Pacific Network for Global Change known as APN which comprises more than 20 Governments in the Asia and the Pacific Region provides support for such research activities which has impacts at global level. The research related on long term global impacts in climate , ocean and terrestrial eco systems and also on related physical , chemical , biological and social systems changes takes precedence in this regard.

Hon. Anura Priyadarshana Yapa, Minister of Environment,

It is with great pleasure, I welcome you to the 16<sup>th</sup> Intergovernmental Meeting of the APN. Your presence here today sans your busy schedule, have given the leadership and the direction for us to initiate further actions and much needed research in this regard. As such your presence will show the dedication and commitment and the importance you attached to this process. I cordially welcome you for this session.

Hon. Mahinda Amaraweera, Minister of Disaster Management,

I am honoured to welcome you this morning to this meeting. Your presence today shows the importance you have attached to this subject. As the Minister responsible for Disaster Management, you always



handle the subjects and related events on disasters, such as floods and landslides, monsoons and cyclones, droughts and other extreme events. Your presence today shows the importance you have placed on related research on these events. As the National Focal Point for APN I welcome you today.

Hon. Abdul Cader, Deputy Minister of Environment,

I also welcome you Sir, this morning to this session, where your presence will give us strength and courage for our future activities in this area.

Mr. Tetsuro Fujitsuka, Director of the APN Secretariat

I am privileged to welcome you today for this meeting. After the tragic events of earthquake and tsunami your country experienced recently, it is indeed a welcome sight to see the cheerful faces of the Japanese people. I warmly welcome you to this session and I take this opportunity to express our solidarity with you and with the Japanese people in this difficult hour. We hope that as a resilient nation you will be able to overcome these hard times with much more vigor and courage. Your presence today, even in your difficult times, shows the importance you have attached to APN Process mainly on Global Change Research

Mr. G. B. Samarasinghe, the Director General of the Department of Metrology is the Scientific Planning Group or SPG member for Sri Lanka. He is responsible for directing and identifying the required and suitable research for Sri Lanka which has a global impact. It is a pleasure for me as the National focal point for APN to welcome you this morning to this session

Distinguished Delegates

I welcome all of our foreign delegates and resources for this important meeting. It is with thanks and welcomes all of you to this beautiful island of ours, Serendib of the Indian Ocean, Sri Lanka. After successfully eradicating the three decades of terrorism, Sri Lanka is now opening its doors for foreign investment for fast economic growth. Your presence in our country shall give us encouragement and confidence to look into a more brighter future with the support and backing of our regional friends. Therefore, you are cordially welcome and I hope that you will enjoy the warmth and friendliness of our people and enjoy the beauty of this country during your short stay.

Ladies and Gentlemen

I also warmly welcome all the local participants, the observers who are participating at this meeting. Your participation at these sessions will enhance our local capacities in the Global Change Research and on how to carry out required research for ours. I hope that that we would be able to use the knowledge and experience you gain through this workshop for implementing our future programs. I welcome all of you to this workshop.

Before winding up my speech, I would like to welcome all those who participate at this meeting. Your presence today shows your commitment and importance you attached in related research activities. You are welcomed to the workshop.

Further I especially welcome the personnel from the APN Secretariat specially Mr. Imanari and his supporting staff and all other resource persons who are present here with us.

Finally I would thank the officials of my ministry, officials of the Department of Metrology for making excellent arrangements in coordinating with the APN Secretariat mainly Mr. Imanari, the live wire behind this process and making all the necessary arrangements to hold this meeting here and I wish that you will have fruitful deliberations during these sessions.

Thank you.

## Opening Remarks by Tetsuro Fujitsuka, APN Secretariat Director

His Excellency Mr. Anura Priyadharshana Yapa, Minister of Environment, the Government of Sri Lanka, distinguished participants from member countries, international organisations, ladies and gentlemen;

Good morning. My name is Tetsuro Fujitsuka, and I am the Director of the APN Secretariat.

As the Director of the APN Secretariat, let me provide some welcome remarks on the occasion of the APN's 16<sup>th</sup> Inter-Governmental Meeting (IGM) and Scientific Planning Group (SPG) Meeting.

First, I would like to express my special thanks to all the participants, who are attending this Meeting far from their homeland.

Second, I would like to express my sincerest appreciation to Ministry of Environment, the Government of Sri Lanka, that is hosting this Meeting here in their beautiful country: both nature and people.

Also, I express my gratitude for the warm hearted and wonderful arrangement of this meeting by the Ministry of Environment and APN national focal point for Sri Lanka, Mr. R. H. SAMARATUNGA and APN SPG member for Sri Lanka, Mr. Gunavi Baladeva SAMARASINGHE.

Ladies and Gentlemen, now, as always in the past, we have many new members here with us this morning; we have eight (8) new national Focal Points (nFPs) from Bangladesh, Bhutan, China, Japan, Pakistan, Philippines, Sri Lanka, and Thailand; and two (2) new SPG Members from Bhutan and Viet Nam as well as several new officials working for the APN and colleagues representing global change scientific organisations as observers. I would like to welcome all of you to our network and to the APN.

For those new to us, let me briefly explain what the APN is all about and what we are supposed to do here in Colombo at the 16<sup>th</sup> IGM/SPG Meeting.

Responding to the proposal by the U.S.A. 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 located in Kobe, and is hosted by Hyogo Prefectural Government. Now, we as a network, have 22 member countries. With the financial contributions from Japan, the U.S.A., Australia, New Zealand and the Republic of Korea and Hyogo Prefectural Government, we have financially supported numerous scientific research and capacity building projects and activities over the past 15 years.

This morning we have a honorary participant from Hyogo Prefectural Government and in this occasion, I would like to introduce Mr. Keitaro SATO, Executive Chief Officer, Department of Environment, Hyogo Prefectural Government.

As I've said, the APN secretariat office is located in Kobe city. In 1995, Kobe city and southern area of Hyogo prefectural territory had been completely destroyed by the earthquake and a lot of people died. However, 15 years has passed and by the great effort of a lot of people, Kobe city and other areas were rehabilitated, reconstructed and renovated. It is very difficult to find now the mark of the earthquake.

Now, I must recall the earthquake in north east of Japan which occurred on 11<sup>th</sup> March. I'm sure you've heard of that. A lot of people died and are still missing because of the TSUNAMI. In these areas, since recorded history, they have experienced a lot of TSUNAMI but the recent TSUNAMI's scale was the biggest in the history.

However, I believe these areas should be recovered and renovated in the near future. Ladies and Gentlemen, I sincerely ask you to pray for the people in that area and also for the future.

Ladies and gentlemen;

The meeting from today will determine research and capacity building projects that the APN will fund in the coming year, and by so-doing, are expected to bear yet more precious fruit in the future. Talking about the future of the APN is another important topic of this IGM/SPG Meeting.

Ladies and gentlemen;

I look forward to your continued positive contributions and cooperation throughout the next three days and beyond, for further success in the year ahead. Also, I hope you can enjoy and learn about Colombo, and the beautiful country of Sri Lanka during your stay here. Thank you very much.

## **Opening Address by Hon Anura Priyadharashan Yapa, Minister of Environment, Government of Sri Lanka**

Hon. Mahinda Amaraweera M.P, Minister of Disaster Management  
Hon. A R M Abdul Kadar M. P., Deputy Minister of Environment  
Mr Tetsuro Fujitsuka, Director of the APN Secretariat  
Dr R H S Samarasinghe, Secretary, Ministry of Environment,  
Mr. G.B. Samarasinghe, Director General, Meteorology Department,  
Your Excellencies,  
Distinguished delegates,  
Ladies and Gentlemen,

First of all I take this opportunity to warmly welcome all of you to Sri Lanka, and to the Inaugural Session of the 16<sup>th</sup> IGM/SPG meetings of the Asia Pacific Network for Global Change. It is indeed a great honour and privilege for my Ministry as the National Focal Point for APN to host this important meeting in Colombo.

Dear Mr Fujitsuka, Director, APN Secretariat and all the Japanese delegates,

I take this opportunity to present our sympathies and express solidarity on the tragedy unfolded in Your country with the Japanese People and your Government. The images of the destruction caused by the earthquake and the subsequent Tsunami are unbelievable and astonishing in scope. As a nation which had suffered due to a devastating Tsunami in 2004, we are aware of the damages, a Tsunami could cause to life and property. The Japanese people have always shown a resilient spirit, we hope that you will be able to overcome all manner of problems associated with this.

Ladies and Gentlemen,

It is indeed a great pleasure to be associated with you at the Inaugural Session of the 16<sup>th</sup> Inter Governmental Meeting (IGM)/ Scientific Planning Group (SPG) Meeting and Associated Committee Meetings of Asia-Pacific Network for Global Change Research (APN).

Today , we are inaugurating this meeting at a very special juncture of our history. As a country we have been able to eliminate the 30 year long terrorism from our motherland under the able leadership of H E The President, Mahinada Rajapaksa, and the country has been liberated to carry forward our development efforts for the well being of the people of this country under the Mahinda Chintana – Idiri Dakma.

In the global context, our generation is living in an era where deteriorating environmental trends have far-reaching economic, social and health implications. A global change by making a paradigm shift away from the present unsustainable production and consumption practices is the only way forward to ensure the continued existence not only of humankind but also of the other living beings of the planet Earth.

The Asia and the Pacific Region is of special importance in understanding the nature and dimensions of global environmental problems. This Region has a population of over 3 billion – over half of the World's total human population. Its economic growth rate is the highest of any region in the world. At the same time it should be noted that 14 countries in the region are classified as being least developed, including those of Nepal and Bangladesh.

Ladies and Gentlemen,

It is necessary to move forward by first looking back in order to understand the complex nature of the global, regional and local environmental problems that we are faced with and their impacts on human

health and ecosystems. By doing so we get an idea of the nature and magnitude of the environmental changes brought about by manmade activities.

As we all are aware, over the last century, human activities have contributed on a massive scale to global environmental change. Therefore, conducting research activities on long-term global changes in climate, ocean and terrestrial systems and on related physical, chemical, biological and socio-economic processes is of vital importance.

In this context, the Asia-Pacific Network for Global Change Research (APN), as an inter-governmental network, has the potential for promoting research that would lead to the strengthening of links between science and policy making in the Asia-Pacific Region. In the context of the Asia and the Pacific Region in particular, there is a special need to focus on securing the stability of ecological systems while promoting socio-economic development.

Ladies and Gentlemen,

This year's at the 16<sup>th</sup> IGM of APN will discuss and approve new Policy on Data Sharing and Management and Policy on Reviewer Conflict of Interest. Continuing multi-year projects and new projects under the Annual Regional Call for Research Proposals (ARCP) and Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programmes will be recommended for funding and approval by the IGM.

Proposed new and continuing activities will also be presented and endorsed at the main IGM/SPG Meeting. Delegates from the APN member countries, invited experts in the field of global change, and representatives from key partner organizations are present here discuss the activities to be undertaken and supported by the APN from April 2011 to March 2012 and beyond.

Research activities for the global change have to be focused on these global realities linking ecosystem degradation with the diversified socio economic activists and provide directions to the global community to make concerted efforts and take timely action to follow a new form of development which preserve the dynamic equilibrium for the planet Earth, while preserving the right of all living beings to equally share resources of the planet Earth while ensuring its carrying capacity.

Therefore, it is essential to ensure that APN would focus its research activities aiming at promoting the establishment of a new global environmental governance system based on the polluter pays principle in order to achieve the expected outcome of the desired global change.

I hope this message would go out from this meeting, transforming present global realities through research to a sustainable future for all of us and for generations to come. Timely attention and collaboration at global and regional level is essential to achieve the expected results to ensure long term sustainability of our common future. I wish the deliberations of the meetings a success.

I also wish you a pleasant and enjoyable stay here and hope that you will get an opportunity to see some of the places on interest and beauty in our country during your stay here.

Thank you.



# **Section III**

Main Papers of the 16<sup>th</sup> APN IGM/SPg Meeting

# Timetable

Pre-Meetings: Monday 04 April		Pre-Meetings: Tuesday 05 April		Day One: Wednesday 06 April		Day Two: Thursday 07 April		Day Three: Friday 08 April	
Time	Item	Time	Item	Time	Item	Time	Item	Time	Item
10th Capacity Development Committee (CDC) Meeting		SPG Pre-Meeting		Session One: Opening Session		Session Five: Scientific Affairs		Session Seven: Sub-Regional Cooperation and Mitra Award for Global Change Research	
8:30-12:30 <i>(including coffee break)</i>	10th CDC Meeting to discuss CAPABLE issues and continuing CAPABLE multi-year projects and annual capacity-building CAPABLE proposals for recommendation to the SPG for funding: Members: Dr. E. Adiningsih, Prof. R. Fuchs, Dr. S. Herath, Dr. A. Matthews, Mr. S. Seong, Dr. H. Nagendra, Mr. Y. Matsuzawa, Dr. L. Tupas	8:30-12:30 <i>(including coffee break)</i>	SPG Pre-Meeting (All SPG Country Members & SPG Expert Members, selected participants)	09:00-09:10 (10 mins) 09:10-09:20 (10 mins) 09:20-09:30 (10 mins) 09:30-09:50 (20 mins) 09:50-10:00 (10 mins) 10:00-10:20 (20 mins) 10:20-10:30 (10 mins) 10:30-10:50 <i>Tea/Coffee Break</i>	Traditional Oil Lamp Ceremony Welcome Remarks from APN nFP for Sri Lanka Welcome Remarks from APN Secretariat Director Participants' Introduction Opening Address by Hon. Minister Group Photograph Election of Chair and Vice-Chair	09:00-09:20 (20 mins) 09:20-09:40 (20 mins) 09:40-10:20 (40 mins) <b>10:20-10:40 (20 mins)</b> 10:40-11:10 (30 mins)	<b>Item 11:</b> Report on APN Synthesis Activities (LS and WD) <b>Item 12:</b> Report on APN Focussed Activities (LS) <b>Item 13:</b> Report on SPG & CDC 2010/11 Activities (EA and AM) <i>Tea/Coffee Break</i> <b>Item 14:</b> New Policies on Data Sharing/Management and Reviewer Conflict of Interest (SS and EA)	09:00-09:20 (20 mins) 09:20-09:40 (20 mins) 09:40-10:00 (20 mins) 10:00-10:20 (20 mins) <b>10:20-10:40 (20 mins)</b>	<b>Item 15:</b> Sub-Regional Cooperation: Report from South Asia SRCom <b>Item 16:</b> Sub-Regional Cooperation: Report from Southeast Asia SRCom <b>Item 17:</b> Discussion on SRC Development (particularly for other sub-regions) <b>Item 18:</b> Mitra Awardee Presentation <i>Tea/Coffee Break</i>
				Session Two: Institutional Issues and Proposed Activities		Session Six: Science Session with GC Partners		Session Eight: Directions of the APN and Scientific Priorities	
				10:50-11:00 (10 mins) 11:00-11:30 (30 mins) 11:30-11:50 (20 mins) 11:50-12:20 (30 mins) <b>12:20-13:30 (1 hr, 10 mins)</b> 13:30-14:40 (1 hr, 10 mins)	<b>Item 1:</b> Adoption of the Agenda <b>Item 2:</b> Highlights of 2010/11 Activities (SS and Secretariat representative) <b>Item 3:</b> APN Membership and Framework Document (TF) <b>Item 4:</b> Operating Plan for the 3rd Strategic Phase (SM and YI) <i>Lunch</i> <b>Item 5:</b> Proposed New Activities (2011/12) 1. Biodiversity Gap Analysis (AM) 2. Int'l Conference on Planet Under Pressure (JI) 3. Science-Policy Dialogue on Challenges of GC (tbd) 4. PDTW and Young LOICZ Forum(LS) 5. Hyogo Activities (TF)	11:10-12:20 (1 hr, 10 mins) 12:20-12:30 (10 mins) <b>12:30-13:30 (1 hr)</b>  			

This timetable will be supplemented with detailed daily agendas, which explain each of the items in detail and whether the items are for the attention of the IGM only, SPG only, or both the IGM/SPG.

6th SPG Sub-Committee Mtg.
10th CDC Meeting
SPG Pre-Meeting

17th & 18th SC Meetings
16th IGM/SPG Meeting
tour

Networking Session with refreshments
Host Science Session



# Agenda

## Day One: Wednesday 6<sup>th</sup> April

Session One: Opening Session		Document Reference (action)
09:00-09:10 (IGM/SPG)	<b>Traditional Oil Lamp Ceremony</b> Lighting the Traditional Oil Lamp by the Honored Guests and the APN Secretariat	
09:10-09:20 (IGM/SPG)	<b>Welcome Remarks</b> The APN national Focal Point (nFP) for Sri Lanka, Dr. R.H.S. Samaratunga will provide welcome remarks and welcome the participants.	
09:20-09:30 (IGM/SPG)	<b>Welcome Remarks</b> The APN Secretariat Director, Mr. Tetsuro Fujitsuka will welcome participants and propose that the participants introduce themselves.	
09:30-09:50 (IGM/SPG)	<b>Participants' Introduction</b> All participants, via a tour de table, will introduce themselves and their affiliation.	
09:50-10:00 (IGM/SPG)	<b>Opening Address by Hon. Minister</b> The Minister of Environment, Hon. Anura Priyadharshana Yapa, the Minister of Sri Lanka, will provide opening remarks and welcome participants.	
10:00-10:20 (IGM/SPG)	<b>Group Photograph</b> All members, experts, guests and staff have a group photograph taken.	
10:20-10:30 (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>	
10:30-10:50	<i>Tea/Coffee Break</i>	
Session Two: Institutional Issues and Proposed Activities		
10:50-11:00 (IGM/SPG)	<b>Item 1: Adoption of the Agenda</b> The elected Chair of the meeting will seek adoption of the agenda. Items of Any Other Business (AOB) may be raised.	<b>Item1:</b> <b>IGM-SPG/16/01</b> (for adoption)
11:00-11:30 (IGM/SPG)	<b>Item 2: Highlights of 2010/11 Activities</b> The APN Steering Committee (SC) Chair and nFP for the Republic of Korea (ROK), Mr. Suho Seong with support from the Secretariat Director will report on the major activities of the APN from April 2010 to March 2011.	<b>Item2:</b> <b>IGM-SPG/16/02</b> <b>IGM-SPG/16/02-App1</b> <b>IGM-SPG/16/02-App2</b> <b>IGM-SPG/16/02- App3</b> (for information)

11:30-11:50  
(IGM/SPG)

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

Mr. Fujitsuka will report on APN Membership and introduce new APN Members. He will also seek IGM approval on the amended Framework Document.

11:50-12:20  
(IGM/SPG)

**Item 4: Operating Plan for the 3<sup>rd</sup> Strategic Phase**

The Scientific Planning Group (SPG) Member for Malaysia, Dr. Subramaniam Moten and Secretariat Executive Manager, Mr. Yukihiro Imanari, will present the Operating Plan for discussion and approval noting that the Plan was basically circulated to all APN Members prior to the IGM.

12:20-13:30

*Lunch*

13:30-14:40  
(IGM/SPG)

**Item 5: Proposed New (and continuing) Activities**

A number of proposed new activities for 2011/12 will be presented for discussion and approval.

1. Biodiversity Gap Analysis – *Dr. Andrew Matthews, nFP/SPG Member for New Zealand – 15min*
2. International Conference on Planet Under Pressure – *Dr. John Ingram, Executive Officer, Global Environmental Change and Food Systems (GECAPS) – 15min*
3. Science-Policy Dialogue on Challenges of Global Change: Focussing in Southeast Asia (SEA) – *TBD on behalf of Global Change System for Analysis, Research and Training (START) – 15min*
4. Proposal Development Training Workshop (PDTW) and Young Land-Ocean Interaction in the Coastal Zones (LOICZ) Forum – *Dr. Linda Stevenson, Executive Science Officer, APN Secretariat – 10min*
5. Hyogo Activities: Cooperation with Mongolia on Reforestation Project, 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Coastal Seas (EMECS 9) – *Mr. Fujitsuka, Mr. Masakazu Furukawa, Director, International EMECS Center (tentative) 15 min*

14:40-15:00

*Tea/ Coffee Break*

**Session Three: Finance and Resources**

15:00-15:20  
(SPG observes)

**Item 6: Financial Reporting**

Mr. Imanari will present a final financial report for 2009/10 for approval by the IGM and a draft financial report for 2010/11. SPG members, experts and guests observe this session.

**Item 3:**

**IGM/16/03-01**

(for information)

**IGM/16/03-02**

(for approval)

**IGM/16/03-03**

(for information)

**Item 4:**

**IGM-SPG/16/04**

(for discussion and approval)

**Item 5:**

**IGM-SPG/16/05-01**

**IGM-SPG/16/05-02**

**IGM-SPG/16/05-03**

**IGM-SPG/16/05-04**

**IGM-SPG/16/05-05**

(for discussion and approval)

**Item 6:**

**IGM-SPG/16/06-1**

(for approval)

**IGM-SPG/16/06-2**

(for information)

15:20-15:50  
(IGM/SPG)

**Item 7: Resources Development**

Mr. Imanari will briefly update the members on the progress in implementing the Resources Development Strategy and seek input and comments on strengthening the implementation.

15:50-16:10  
(SPG observes)

**Item 8: Budget Plan (2011/12)**

Mr. Imanari will propose the APN 2011/12 budget plan for discussion and approval. SPG members, experts and guests observe this session.

**Session Four: Parallel and Networking Session**

16:10-16:20  
(IGM/SPG)

**Item 9: Background on SRC Activities**

The APN Secretariat Coordinator, Ms. Kristine Garcia will provide a brief background of Sub-Regional Cooperation (SRC).

16:20-17:30  
(IGM/SPG)

**Item 10: Parallel Sessions: SRC**

The members will group into their respective sub-regions to discuss issues of mutual importance and the way forward for the sub-regional committees.

17:00-19:00

**NETWORKING SESSION: Global Change  
Community Exhibit and Young Sri Lankan Scientists  
Poster Session** (see separate sheet for more info)

19:00

*Free time*

20:00

*Dinner*

**Item 7:**  
**IGM-SPG/16/07**  
(for discussion)

**Item 8:**  
**IGM-SPG/16/08**  
(for discussion and approval)

**Item 9:**  
**IGM-SPG/16/09**  
(for information)

**Item 10:**  
**IGM-SPG/16/10**  
(for information)  
**Agendas**  
(for adoption and discussion)

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

## Day Two: Thursday 7<sup>th</sup> April

Session Five: Scientific Affairs		Document Reference (action)
09:00-9:20 (IGM/SPG)	<b>Item 11: Report on APN Synthesis Activity</b> On behalf of the APN Climate Synthesis Team, Dr. Stevenson and Dr. Wenjie Dong, SPG Member for China, will report to the IGM the progress of the synthesis activity and plans ahead.	<b>Item 11:</b> <b>IGM-SPG/16/11</b> (for information and discussion)
09:20-9:40 (IGM/SPG)	<b>Item 12: Report on APN Focussed Activities</b> Dr. Stevenson will provide updates on the projects under the APN Focussed Activities.	<b>Item 12:</b> <b>IGM-SPG/16/12</b> (for information and discussion)
09:40-10:20 (IGM/SPG)	<b>Item 13: Report on SPG and CDC Activities</b> On behalf of the SPG and the Capacity Development Committee (CDC), the SPG Co-Chair, Dr. Erna Adiningsih (SPG Member for Indonesia), with support from CDC member, Dr. Andrew Matthews, will report to the IGM the scientific activities, particularly under the Annual Regional Call for Research Proposals (ARCP) and Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programmes conducted in 2010/11 and SPG and CDC activities in 2011/12 and beyond.	<b>Item 13:</b> <b>IGM-SPG/16/13</b> (for information and discussion)
10:20-10:40	<i>Tea/ Coffee Break</i>	
10:40-11:10 IGM/SPG)	<b>Item 14: New Policies on Data Sharing &amp; Data Management and Reviewer Conflict of Interest</b> The SC Chair and SPG Co-Chair will present the new Policies for further discussion noting that the policies were circulated to all APN Members prior to the IGM. Following discussion, the IGM Chair or Vice Chair will seek IGM approval.	<b>Item 14:</b> <b>IGM-SPG/16/14-01</b> <b>IGM-SPG/16/14-02</b> (for discussion and approval)
Session Six: Science Session with Global Change Partners		
11:10-12:20	This session will accommodate 4 presentations for 15 minutes per presentation (with 10 minutes for discussion). <b><u>Presenters</u></b> <ol style="list-style-type: none"> <li>Emerging Science Issues in Sri Lanka – <i>Mr. G.B. Samarasinghe</i></li> <li>Inter-American Institute for Global Change Research (LAI) – <i>Mr. Louis Brown</i></li> <li>Climate Change, Agriculture and Food Security (CCFAS) – <i>Dr. John Ingram</i></li> <li>Earth System Science Partnership (ESSP – <i>Dr. Ada Ignaciuk</i></li> </ol>	
12:20-12:30	<b>Announcement of Best Poster</b> The IGM Chair or Vice-Chair will announce the Winning Young Scientist. On Day 3 (Item 18), he/she will receive his/her award and have the opportunity to provide a 20-minute plenary presentation.	
12:30-13:30	<i>Lunch</i>	

*13:30-18:30                      Tour hosted by the Sri Lankan Government*

*19:30                              Dinner*

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

Day Three: Friday 8<sup>th</sup> April

Session Seven: SRC and Mitra Award for Global Change Research		Document Reference (action)
09:00-9:20 (IGM/SPG)	<b>Item 15: 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 15:</b> <b>IGM-SPG/16/15</b> (for information and discussion)
09:20-9:40 (IGM/SPG)	<b>Item 16: 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 16:</b> <b>IGM-SPG/16/16</b> (for information and discussion)
09:40-10:00 (IGM/SPG)	<b>Item 17: Discussion on SRC Development</b> The Chair and Vice-Chair will facilitate the discussion on SRC development particularly for other sub-regions.	<b>Item 17:</b> <b>IGM-SPG/16/17</b> (for discussion)
10:00-10:20 (IGM/SPG and guests/observers)	<b>Item 18: 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 18:</b> <b>IGM-SPG/16/18</b> (for information)
10:20-10:40	<i>Tea/Coffee Break</i>	
Session Eight: Directions of the APN and Scientific Priorities		
10:40-11:40 (SPG Observes)	<b>Item 19: ARCP and CAPaBLE Recommendations for Funding</b> On behalf of the SPG and CDC, the SPG Co-Chair, with assistance from a member of the CDC, 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 19:</b> <b>IGM-SPG/16/19-01</b> <b>IGM-SPG/16/19-02</b> (for discussion and approval)
11:40-12:00 (IGM/SPG)	<b>Item 20: Election of New SC Members</b> The SC Chair will report the process taken so far regards the nomination of candidates then the election will follow.	<b>Item 20:</b> <b>IGM-SPG/16/20-01 IGM-SPG/16/20-02</b> <b>IGM-SPG/16/20-03</b> (for information)
12:00-13:00	<i>Lunch</i>	<b>IGM-SPG/16/20-04</b> (for discussion and election)
13:00-15:30 (IGM/SPG and guests/observers)	<b>Item 21: Promoting Science and Strengthening Engagement with the International Communities</b> This session will accommodate presentations from 4 nFPs representing the sub-regions followed by brainstorming/discussion with the global change communities. 1. Oceania and Pacific – <i>Dr. Andrew Matthews, nFP New Zealand</i> 2. South Asia – <i>Dr. Samaritunga, nFP Sri Lanka</i> 3. Southeast Asia – <i>Mr. Sundara Sem, nFP Cambodia</i> 4. Temperate East Asia– <i>Mr. Sun Chengyong, nFP China</i>	<b>Item 21:</b> <b>IGM-SPG/16/21</b> (for information and discussion)

15:30-15:50

*Tea/Coffee Break*

<b>Session Nine: AOB and Closing Session</b>		<b>Document Reference</b> (action)
15:50-16:10 (IGM/SPG)	<b>Item 22: Hosting of IGMs</b> Mr. Fujitsuka, will announce/discuss hosts for the 17 <sup>th</sup> and 18 <sup>th</sup> IGMs.	<b>Item 22:</b> <b>IGM-SPG/16/22</b> (for information)
16:10-17:00 (IGM/SPG)	<b>Item 23: Chairperson's Summary</b> Members will review and discuss the draft Chairperson's Summary.	<b>Item 23:</b> <b>IGM-SPG/16/23</b> (for discussion and adoption)
17:00 (IGM/SPG)	<b>AOB, Final Remarks and Closing</b> Chair and Secretariat Director will make closing remarks. Secretariat will provide logistical details, if any.	

----- END OF DAY THREE -----

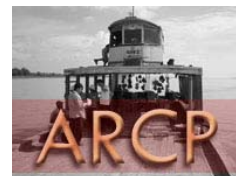
# Highlights of 2010-2011 Activities

## Summary of Activities since 15<sup>th</sup> IGM/SPG Meeting

This paper provides a number of key highlights in the work undertaken by the APN since the 15<sup>th</sup> IGM/SPG Meeting in Busan, Republic of Korea.

### Project Management

1. Annual Regional Call for Research Proposals (ARCP) Programme: supporting/managing 18 projects (11 new and 7 continuing) projects – *Scientific activities under ARCP to be discussed under Item 13*



2. Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries Programme (CAPaBLE): supporting/managing 13 new and 2 continuing capacity building (CBs) projects, 2 continuing comprehensive research projects (CRPs) projects – *Scientific activities under CAPaBLE to be discussed under Item 13*

3. Scientific Capacity Building for Climate Impact and Vulnerability Assessments (SCBCIA): supporting/managing 7 projects – *updates to be discussed under Item 12*

4. Focussed Activity: Ecosystems, Biodiversity and Land Use (EBLU): supporting/managing 5 projects – *updates to be discussed under Item 12*



5. Focussed Activity: Resources Utilisation and Pathways for Sustainable Development (RUSD): supporting/managing 2 projects – *updates to be discussed under Item 12*

### Calls for Proposals

6. Launched the 2010 Special Call for Proposals in 2 Focussed Activities: EBLU and RUSD. Seventy-five (75) Expressions of Interest were received – *to be discussed under Item 12*
7. Launched the 2010 APN Annual Calls for Proposals under ARCP and CAPaBLE Programmes (received 62 Letters of Intent and 58 summary proposals) – *to be discussed under Item 13*



### Synthesis and Gap Analysis Activities

8. Completed a Scoping Meeting, Author's Workshop, and Synthesis Meeting for the two-year synthesis activity: *Climate in Asia and the Pacific* synthesising the work of over 50 APN-funded climate projects – *progress to be discussed under Item 11*
9. Organised the APN Gap Analysis Scoping Workshop: Biodiversity and Ecosystems Services in the Asia-Pacific Region, 13-15 February 2011, Tokyo, Japan 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 – *outcomes of the scoping workshop and future plans will be reported and discussed under Item 5*



### Sub-Regional Cooperation

10. Organised the South Asia Sub-Regional Cooperation (SA-SRC) Meeting and the Training Workshop on Downscaling of South Asian Climate Projections back-to-back with the Proposal Development Training Workshop (PDTW), 1-5 November 2010, Pune, India – *outcomes will be reported under Item 15*



11. Organised the APN 3<sup>rd</sup> Southeast Asia (SEA) SRC Meeting back-to-back with the PDTW, 8-12 November 2010, Manila, Philippines – *outcomes will be reported under Item 16*

### Science-Policy

#### Contribution to the International Year of Biodiversity (IYB) and a strong partner of the United Nations Convention on Biological Diversity (UNCBD)

12. Organised the APN/Hyogo International Symposium: Coexistence with Nature ~ Biodiversity and People – Hyogo Dialogue for the Future, 9 September 2010 – *for details, refer to APN Newsletter 2010 3<sup>rd</sup> Quarter Edition (released on November 2010)*
13. Organised the following activities CDB 10<sup>th</sup> Meeting of the Conference of the Parties (COP10), 18-29 October 2010, Nagoya, Japan– *for details, refer to APN Newsletter 2010 3<sup>rd</sup> Quarter Edition (released on November 2010)*
  - Side-event: Biodiversity Interactive Forum, 24 October 2010
  - Side-event: Towards Biodiversity Conservation and Sustainable Development of Forests in the Asia-Pacific Region, 25 October 2010
  - Side-event: Hyogo Prefecture's Biodiversity Conservation Efforts, 26 October 2010
  - Exhibition booth at the Biodiversity Interactive Fair, 18-29 October 2010



New webpage developed to highlight APN's biodiversity activities and products as contribution to UNCBD COP 10 and the International Year of Biodiversity

#### Interaction with Science-Policy Bodies

14. Engaged in a dialogue with the global change community on emerging scientific findings and other developments in climate change research activities at the 32<sup>nd</sup> Session of the Subsidiary Body for Scientific and Technological Advice (SBSTA32), 3 June 2010, Bonn, Germany – *for details, refer to APN Newsletter 2010 Summer Edition (released on July 2010)*
15. Attended the 3<sup>rd</sup> Ad-hoc Intergovernmental and Stakeholder Meeting of the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), 7-11 June 2010, Busan, Republic of Korea – *for details, refer to APN Newsletter 2010 Summer Edition (released on July 2010)*
16. Participated at the United Nations Framework Convention on Climate Change 16<sup>th</sup> Conference of the Parties (UNFCCC COP16), 29 November-10 December 2010, Cancun, Mexico – *for details, refer to APN Newsletter 2010 4<sup>th</sup> Quarter Edition (released on January 2011)*
  - SBSTA 33 Side-event: Updated Information on Emerging Scientific Findings and Research Outcomes
  - Joint International Council of Sciences (ICSU)/Earth System Science Partnership (ESSP) Side-event: Emerging Scientific Findings and Research Outcomes
17. Contributing to the Intergovernmental Panel on Climate Change (IPCC) and other policy processes and bodies through our scientific research, scientific capacity development and synthesis activities.

*Discussion on promoting science, strengthening engagement with key partner organisations, enhancing interaction with policy bodies, and aligning programmes with that of the global change science and policy communities will take place under Item 21.*

### **Communications and Outreach**

18. Produced publications and developed new communication tools that are science/policy-relevant. Refer to *IGM-SPG/16/02-App1* for the list of publications. A new website interface was launched in April 2010 and a dynamic website was launched in March 2011 (*APN Secretariat will present the newly launched website*). Refer also to *IGM-SPG/16/02-App3*.
19. Developed a 'Biodiversity Platform' webpage which provides access to a wide array of useful biodiversity-related information as contribution to the CBD-COP10, Nagoya, Japan, October 2010 and created a special webpage that highlights APN activities contributing to the IPCC
20. Regular updating and maintenance of the database, electronic mailing list and the APN website (English and Japanese)
21. Engaging in international global change events and annual dialogues organised by the UNFCCC and the IPCC and strengthening partnerships by communicating/collaborating closely with key organisations in the global change community (including core projects of the gc programmes) to: a) assure alignment of programmes, b) achieve shared goals; and c) maximise available resources to deliver the best possible results
22. Organising outreach activities: Members and Secretariat participated at various national and international fora. Refer to *IGM-SPG/16/02-App2* for the list of fora. In many events, presentations were delivered or/and exhibition booth was set up.

### **Strengthening APN Institutional Mechanisms**








23. Released the *Evaluation Report* of the review of APN's Second Strategic Phase (2005-2010) and the *APN 3<sup>rd</sup> Strategic Plan* (3SP) for the next five years (2010-2015)
24. Embarked on devising the APN Operating Plan for the third strategic phase based on the strategies outlined in the APN 3SP – *to be discussed under Item 4*
25. Maintaining and enhancing close communication among the APN organs and providing the APN Members with useful materials and updates for information and dissemination to their own networks
26. Convened the 16<sup>th</sup> Steering Committee Meeting, 30-31 August 2010, Kobe, Japan

## APN Membership

### New APN Members



Following the 15<sup>th</sup> Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting in Busan, Republic of Korea, new national Focal Points (nFP) and SPG Members for Bangladesh, Bhutan (nFP and SPG Member nominated for the first time), China, Japan, Pakistan, Philippines, Sri Lanka, Thailand, and Viet Nam were appointed. The following positions are vacant: nFP and SPG Member for Australia and Fiji.





FP	Former	New
<b>Bangladesh</b>	Mr. Martuza AHMED <i>Joint Secretary Administration Ministry of Environment and Forests</i>	 Mr. A.N. Shamsuddin CHOWDHURY <i>Joint Secretary Administration Ministry of Environment and Forests</i>
<b>Bhutan</b> <i>(appointed for the first time)</i>	Mr. G. Karma CHHOPEL <i>Head, Water Resources, National Environment Commission</i>	
<b>China</b>	 Mr. Xuedu LU <i>Deputy Director General National Climate Center China Meteorological Bureau</i>	 Mr. Sun CHENGYONG <i>Deputy Director General Department of Social Development Ministry of Science and Technology</i>

<p><b>Japan</b></p>	 <p>Mr. Hiroshi ONO <i>Director, Office for Global Environment Research, Ministry of the Environment</i></p>	 <p>Mr. Yutaka MATSUZAWA <i>Director, Office for Global Environment Research, Ministry of the Environment</i></p>
<p><b>Pakistan</b></p>	 <p>Ms. Neelofur HAFEEZ/ Mr. Momin AGHA <i>Deputy Secretary; Ministry of Environment</i></p>	<p>Mr. Syed HUSSAIN <i>Deputy Secretary Ministry of Environment</i></p>
<p><b>Philippines</b></p>	 <p>Mr. Samuel PEÑAFIEL <i>Executive Director, LAMP Department of Environment and Natural Resources (DENR)</i></p>	 <p>Mr. Eriberto ARGETE <i>Director, Planning and Policy Studies Office, Department of Environment and Natural Resources</i></p>
<p><b>Sri Lanka</b></p>	 <p>Mr. M.A.R.D. JAYATILLAKE <i>Secretary Ministry of Environment</i></p>	 <p>Dr. R.H.S. SAMARATUNGA <i>Secretary Ministry of Environment</i></p>

<b>Thailand</b>	Mr. Saksit TRIDECH <i>Permanent Secretary Ministry of Environment</i>	 Mr. Chote TRACHU <i>Permanent Secretary Ministry of Environment</i>
SPG	Former	New
<b>Bhutan</b> <i>(appointed for the first time)</i>	Ms. Peldon TSHERING <i>Head, Policy Coordination Services National Environment Commission</i>	
<b>Viet Nam</b>	Ms. Nga Mai NGOC <i>Specialist Biodiversity Conservation Agency</i>	Dr. Kim Chi NGO <i>Head, Research and Development Department on Natural Resources Processing and Environmental Protection</i>

### Changes in the APN Secretariat

Position	Former	New
<b>Administrative Assistant</b>	 Kanako Yamada	 Yuko Noda

<p><b>Administrative Manager</b></p>	 <p>Akihiro Shiomi</p>	<p>Masayuki Ishizu</p>
<p><b>Programme Officer for Communications and Development</b></p>	 <p>Perlyn Pulhin</p>	<p>Xiaojun Deng <i>from end of April</i></p>
<p><b>Coordinator (departs end April 2011)</b></p>	 <p>Kristine Garcia</p>	<p>Position not renewed</p>
<p><b>Programme Fellow for Science &amp; Institutional Affairs</b></p>		 <p>Azra Ratisya Binti Mohd.Raszi <i>from end of April</i></p>

# Amendments to the Framework Document

## - Composition of the SPG Sub-Committee

### 4. The SPG Sub-Committee

- convenes prior to the SPG meeting
- reviews and prioritises, with the cooperation of the Secretariat, ARCP proposals received for APN funding, for consideration by the SPG
- the SPG Sub-Committee Members are:
  - two SPG Co-Chairs (ex officio)
  - ~~two~~ three other SPG Members, elected by the SPG at its meeting in the previous year
- the SPG Sub-Committee may invite additional representatives to attend its meeting as observers

## - Composition of the Capacity Development Committee

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

- convenes prior to the SPG meeting
- reviews and prioritises, with the cooperation of the Secretariat, CAPaBLE proposals received for APN funding, for consideration by the SPG
- the CDC members are:
  - Steering Committee Chair (ex officio)
  - two SPG Co-Chairs (ex officio)
  - one donor representative
- the CDC may co-opt up to ~~three~~ 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
- the CDC may invite additional representatives to attend its meeting as observers.

## Appendices

- Appendix 1: Bhutan was added as a new APN member country
- Appendix 2: Change in the composition of the Secretariat

# 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. 2 Participation - iii

In particular, the SC guides the Secretariat in:

- iv. developing funding for the APN and its programmes and activities by encouraging member countries to contribute funds or in-kind support
- v. exploring potential funding from other sources, e.g., international agencies and the private sector
- vi. 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.
- ii. 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. The Secretariat is the principal administrative organ of the APN. The APN Secretariat address and contact details of the staff are listed in Appendix 2 (page 13).
- ii. 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.
- iii. 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.
- iv. The Secretariat operates under the administrative arrangement of the Institute for Global Environmental Strategies (IGES). For further information, refer to Appendix 3 (page 14).

## **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 4 (pages 15-18) 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.

The APN Secretariat is located at the APN Centre:

East Building, 4F  
1-5-2 Wakinohama Kaigan Dori  
Chuo-ku, Kobe, 651-0073  
JAPAN  
Tel: +81-78-230-8017  
Fax: +81-78-230-8018  
Email: [info@apn-gcr.org](mailto:info@apn-gcr.org)  
Website: <http://www.apn-gcr.org>

### The APN Secretariat

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#### **Mr. Masayuki ISHIZU**

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#### **Mr. Xiaojun DENG** (from end of April)

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**Appendix 3.**

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 4.

### **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:

- i. 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;
- ii. 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;
- iii. consideration and identification of research-driven capacity building of value to the APN; and
- iv. 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.



# Draft Operating Plan for the 3<sup>rd</sup> Strategic Phase (2010-2015)

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*The objective of this paper is to seek endorsement of the 16<sup>th</sup> Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting.*

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## Background

It is highlighted in the Evaluation Report of the second strategic phase that the APN's Operating Plan is seen by the members as continuing to provide an effective tool designed to ensure that APN's activities are implemented to meet the goals of the strategic plan. When the 3<sup>rd</sup> Strategic Plan (3SP) for the APN's third strategic phase (2010-2015) was endorsed at the 15<sup>th</sup> IGM/SPG Meeting held in Busan, Republic of Korea, March 2010, one of the action points identified is to develop the Operating Plan for the effective implementation of the activities and strategies outlined under the two main agendas of the 3SP. At the end of each year covered by the third strategic phase, the Steering Committee, with support from the APN Secretariat will evaluate APN's progress and achievements related to the annual operating plan.

## Process in Devising the Operating Plan and Progress to Date

With advice from Dr. Subramaniam Moten (SPG Member for Malaysia) and guidance/inputs from the 16<sup>th</sup> Steering Committee (SC) Meeting, August 2010 and South Asia (SA) and Southeast Asia (SEA) Sub-Regional Cooperation Meetings, November 2010, the Secretariat embarked on devising the APN's Operating Plan for the third strategic phase for endorsement at the 16<sup>th</sup> IGM/SPG Meeting that will convene in Colombo, Sri Lanka on April 2011.

The key components of this Operating Plan are as follows:

- **Deliverables:** strategies/activities that need to be implemented/organised
- **Movers:** responsible organs of the APN to focus and work on the strategies and activities that were identified
  - Secretariat
  - Steering Committee (SC)
  - Scientific Planning Group (SPG)
  - SPG Sub-Committee (SPG-SC)
  - Capacity Development Committee (CDC)
  - National Focal Points (nFP)
  - Sub-regional Committees (SRCOMs)
  - Ad hoc Resources Development Committee (Ad hoc RDC)
  - ALL (Secretariat, nFPs, SPG Members, SPG-SC, CDC, SRC-Coms)
- **Timeline:** target date/time to complete/deliver the expected outputs

Under the Science Agenda, there are three main categories: core activities, one-off activities and new activities. Core activities are priority activities that are implemented or organised annually. These activities, further categorised under research, capacity development, science-policy, and institutional arrangements, would compose all the Annual Operating Plan that will be developed during the third strategic phase.

One-off activities are special activities that are implemented or organised considering the emerging scientific issues, needs identified by the member countries, and availability of funds. Many activities under this category are usually off-shoot of another activity.

New activities, similar to one-off activities, are also special activities implemented or organised considering the emerging scientific issues, needs identified by the member countries, and availability of funds. These activities, depending on the success of implementation and strong relevance may be considered as core activities.

Under the Institutional Agenda, sub-categories include: involvement of member countries; alignment with programmes of the global change community; financial resources; communications and outreach; developing the network and institutional arrangement.

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### **Operating Plan for the Third Strategic Phase (2010-2015)**

A plan covering 3 timescales spanning the third strategic phase from 2010-2015 is as follows:

- Short-term (April 2010 to March 2012),
- Medium-term (April 2012 to March 2014) and
- Long-term (April 2014 and beyond into 4<sup>th</sup> Strategic Phase)

## SCIENCE AGENDA

### **1-Core Activities (short-term, medium-term and long-term): Annual activities unless specified**

#### **Research**

- Calls for proposals
- Management of new research projects
- Management of comprehensive research projects (CAPaBLE)
- Establish stronger collaborations with the core projects of the global change programmes in research activities

#### **Capacity Development**

- Call for proposals for CAPaBLE capacity building proposals
- Manage activities under CAPaBLE Programme
- Conduct Proposal Development Training Workshops
- Establish stronger collaboration with the core projects of the global programmes in capacity building activities.

#### **Science-Policy**

- Online fora will also be explored through more advanced communication software to promote stronger collaboration among groups of APN Network.
- Participate in high-level fora/dialogues such as UNFCCC, IPBES, etc
- Produce/update concise brochures of APN activities intended for policy-makers
- Continue to engage in science-policy discussions involving global change programmes and key partner organisations and disseminate relevant outcomes to stakeholders – ALL
- Encourage members to organise seminars where global change scientific results are presented to government officials
- Ensure that the results of related APN funded scientific research are published in peer-reviewed journals that would feed into Intergovernmental Panel on Climate Change (IPCC) Assessment Reports and other significant science-policy reports

#### **Institutional Arrangements**

- Revisit policies on Data Access and Management (DAM) and Conflict of Interest (every 3 to four years)
- Be proactive and diligent in reminding Project Leaders to report the progress and outcomes of their activities to the nFPs and SPG Members in their countries/sub-regions
- Update the list of scientific experts to maximise the reviewers in APN database

### **2-One-off Activities**

- Implement and manage projects under Focussed Areas
- Complete and publish Climate Synthesis activities

- Participate/engage actively at the Planet under Pressure Conference and Rio+20 Earth Summit, May 2012

### 3-New Activities

- Develop and implement a new Framework for Biodiversity and Ecosystems Services and conduct a scoping workshop to develop activities under this framework
- Produce additional Synthesis Report on topics of importance
- Produce Evaluation Report by the end of the 3<sup>rd</sup> strategic
- Develop specific criteria for evaluating the impacts of APN-funded activities– SC with support from Secretariat

- |  |
|--|
| <ul style="list-style-type: none"> <li>- To assess success of regional collaboration</li> <li>- To evaluate the impacts of capacity development activities</li> <li>- To determine the success of science-policy linkages</li> </ul> |
|--|

- Implement and manage Calls for Proposals in the following focussed areas (annually subject to funds availability and donors' areas of interest) - Secretariat for launching and overall management and members for dissemination and review process
- Publish report that lists all the APN-completed projects (include abstracts and group the projects according to scientific themes) under the third strategic phase
- Follow closely the activities of the ICSU visioning process and the transition phase of the global change programmes; the activities of the Belmont Forum in the year ahead.
- Become familiar and interact with the activities of the WCRP Cordex programme and its initiation in the Asia region.

## INSTITUTIONAL AGENDA

### 1- Involvement of Member Countries (Annual Activities unless specified)

- Engage member countries more actively to secure representation in both the nFP and SPG roles
- Encourage APN members to represent APN in various global change events that are taking place in their countries and plan how to showcase APN activities strategically (ongoing)
- Continue to produce brochures in vernacular languages and encourage other members to become more involved in this endeavour and also to submit intentions to the secretariat if they wish to conduct collaborative activities in certain cases
- Continue to send briefing materials to new members and also to provide members with more opportunities to communicate with project leaders and APN activities in their countries – Secretariat
- Inform nFPs and SPG Members, on a regular basis, about recent APN activities including project-related events and updates taking place in their respective countries/sub-regions
- Add a portal on the APN website that will serve as a forum where Members can exchange information and ideas. This portal could be later expanded and opened to the public– Secretariat

#### *Sub-Regional Cooperation*

- Encourage sub-regional groups to become more actively engaged in APN activities both under the Science and Institutional Agendas
- Evaluate the effectiveness of the SRC activities in assisting APN achieve its goals

### 2- Alignment with Programmes of the GC Community

- Regularly participate and contribute in activities being organised by the key organisations in the global change community
- Maintain close liaison and strengthen the relations with the global change programmes and explore better ways of collaboration in achieving shared goals

### **3- Financial Resources**

- Direct financial contributions from the Governments of the APN member countries
- In-kind contributions from the Governments of the APN member countries
- Direct financial support provided by external sources, such as foundations, funding agencies, and private sector, etc.

### **4- Communications and Outreach**

- Continue to produce and improve the communication tools
- Organise outreach activities
- Establish/strengthen partnerships and raise APN visibility

### **5- Developing the Network and Institutional Arrangements**

- New/revised institutional policy for Conflict of Interest (2010-2011)
- Seek expert advice on accounting procedures and find an appropriate way of presenting the budget, financial reports, etc
- Develop a set of metrics to transfer in-kind contributions into monetary value (from 2011) – SC/ad hoc RDC with Secretariat support
- Revise the framework document to reflect the changes in the composition of membership and/or roles of various committees – SC and Secretariat for IGM endorsement
- Continue the consultative process of engaging countries who wish to become APN member – SC and Secretariat for IGM endorsement
- Embark on the evaluation of the third strategic phase and formulation of the 4<sup>th</sup> Strategic Plan (2013-2015)
- Prepare the Evaluation Report of the third strategic phase
- Prepare the Strategic Plan for the fourth Strategic phase
- Evaluate and update the Annual Operating Plan (from 2011)

## Proposed New Activities

The present paper lists the proposed new activities and requested budget for the period April 2011 to March 2012. The five activities below will be presented independently and more information is available in the attached sub-item papers:

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**Paper: IGM-SPG/16/05-01: Biodiversity Gap Analysis & Future Activities**

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

Time Allocated: 20min

*Budget requested 2011/12: US\$40,000*

**Paper: IGM-SPG/16/05-02: International Conference on Planet Under Pressure** *Presented by: Dr. John Ingram, Executive Officer, Global Environmental Change and Food Systems (GECAFS)*

Time Allocated: 15min

*Budget requested 2011/12: US\$100,000*

**Paper: IGM-SPG/16/05-03: Science-Policy Dialogue on Challenges of Global Change: Focussing in Southeast Asia (SEA)**

*Presented by: Secretariat (TBA) on behalf of Global Change System for Analysis, Research and Training (START)*

Time Allocated: 15min

*Budget allocated 2011/12: US\$90,000*

**Paper: IGM-SPG/16/05-04: Proposal Development Training Workshops (PDTWs)**

- Young Land-Ocean Interaction in the Coastal Zones (LOICZ) Forum
- Back to Back with Sub-Regional Committee Meetings

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

Time Allocated: 10min

*Budget allocated 2011/12: US\$50,000*

**Paper: IGM-SPG/16/05-05: Proposed Hyogo Activities**

*Presented by: Mr. Tetsuro Fujitsuka, Director, APN Secretariat*

Time Allocated: 30min

- 05-05/01: Cooperation with Mongolia on Reforestation Project  
*Budget: US\$20,000*
- 05-05/02: 9<sup>th</sup> International Meeting on the Environmental Management of Enclosed Coastal Seas (EMECS 9)  
*Budget: US\$35,000*
- 05-05/03: Satoyama-Type Project: The New Commons  
*Budget: US\$50,000*

# APN Gap Analysis Report & Framework:

*Linking and Integrating Ecosystem Services and Biodiversity<sup>1</sup> with  
Green Growth & Sustainable Development*

## A.OVERALL RATIONALE

### Preamble

In April 2002, the Parties to the Convention on Biological Diversity ([www.cbd.int](http://www.cbd.int)) committed themselves to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth. This target was subsequently endorsed by the World Summit on Sustainable Development (WSSD) and the United Nations General Assembly and was incorporated as a new target under the Millennium Development Goals. However, while the 2010 CBD targets failed to be met, the United Nations capped its Biodiversity Year 2010 on a high note creating a new science policy platform to aid the reversing of the steep decline in biodiversity and ecosystem services. The new body is the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES; [www.ipbes.net](http://www.ipbes.net)) and was approved by Governments in June 2010 at a meeting in Busan, Republic of South Korea and finally approved at the UN headquarters in December 2010.

*"IPBES represents a major breakthrough in terms of organizing a global response to the loss of living organisms and forests, freshwaters, coral reefs and other ecosystems that underpin all life - including economic life - on Earth," said Achim Steiner, Executive Director of the UN Environment Programme.*

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<sup>1</sup>," 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 UN CBD, but also to the UNCSD (specifically the 2002 WSSD's Johannesburg Plan of Implementation [JPOI]<sup>2</sup>) and its lead up to Rio+20<sup>3</sup>; 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

<sup>1</sup> Official launch will be on the International Day for Biological Diversity, 22<sup>nd</sup> May 2011: <http://www.cbd.int/doc/notifications/2011/ntf-2011-027-un-en.pdf>

<sup>2</sup> WSSD JPOI: [http://www.un.org/esa/sustdev/documents/WSSD\\_POI\\_PD/English/WSSD\\_PlanImpl.pdf](http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf)

<sup>3</sup> Rio+20 Summit, 4-6 June 2012: <http://www.uncsd2012.org/rio20/>

included participation from key experts from ICSU, DIVERSITAS, United Nations University and ASEAN ACB, GEOBON and other key organisations.

Following an open questionnaire to all participants, the gaps and priorities identified in the present document were the culmination of questionnaire responses and input from reputable scientists and experts on biodiversity and ecosystem services.

## B. GAPS AND PRIORITIES

Gaps and priorities outlined in this section are 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.

### B.I. Research

***Research Theme Area 1: Drivers and pressures for biodiversity change that influence ecosystem services (land-use change; climate change, etc.)***

#### **Introductory Statement**

Over the last 60 or more years, human society's pursuit of development has intensified resulting in the unsustainable and inequitable use of nature. While this has brought unprecedented economic growth for many countries in the Asia-Pacific region, it has also exerted tremendous pressures on all aspects of biological resources and the abilities of ecosystems to provide the broad range of fundamental natural services. The Global Biodiversity Outlook 3, (GBO3<sup>4</sup>), released in 2009, presented the critical state of the global biodiversity resources in spite of the expressed commitments by governments and intensified efforts over the last ten years to address this global concern. All levels of biodiversity continue to erode at rates way beyond nature's abilities to replenish them. The same GBO3 report identified the primary drivers of biodiversity loss. These are undeniably attributed to human activities, land use change and the physical modification of water resources and are the most significant factors for the continuing losses in biodiversity. It is projected, based on current evidence that climate change will add to the pressure points on an already overstressed resource base. Thus, societies in the region are confronted with the challenge of how to effectively respond to this very urgent issue at an appropriate scale.

#### **Rationale**

The full implications of the stresses exerted by human activities on the environment are not well understood. The conventional wisdom of biodiversity loss (at all levels of biological organisation) has focused largely on the most obvious and common services that ecosystems provide: provisioning for food and shelter. Many still do not fully understand or appreciate the complex dynamics between diversity in nature and ecosystem services. As a result, many initiatives designed and/or pursued to address biodiversity loss do not produce the desired results because the approaches fail to establish the links between ecosystems and biodiversity. The research agenda under this theme will seek to support efforts to address this particular gap of knowledge and understanding. It will support research initiatives that will, at a minimum, examine the following:

- The scale and intensity of drivers and pressures points for loss at various levels of biodiversity
- Methodologies and approaches for measuring aspects of biodiversity loss and estimating the economic and other values provided by ecosystem services; and
- Establishing the chain of cause and effect relationship of identified drivers of biodiversity loss (at specific levels of biological and ecological organisation).

<sup>4</sup> Global Biodiversity Outlook 3: <http://www.cbd.int/gbo3/ebook/>

For the purposes of the research relevant to this theme, biological diversity (biodiversity) is defined as in the Convention on Biological Diversity. Given the importance of ‘diversity’ at all levels of biological organisation, researchers will need to clearly describe at what level of biological organisation they propose to research and justify that level. The work should focus on diversity and its role in sustaining humans and human well-being.

### **Key Activity Areas (initial listing)**

- *Support in the articulation of biodiversity and ecosystem indices.*

*Narrative:* The ability to monitor and track changes of biodiversity and ecosystems depends largely on the having clear, measurable and trackable sets of indicators. There are existing sets of indicators that are currently being utilized in reporting progress of interventions on biodiversity. But these sets need further enhancement and in particular, linked to ecosystem services in order to provide clear picture of the effects and impacts of human activity on the ecosystems and biodiversity.

- Developing indices for biodiversity and ecosystem services for 2020 biodiversity targets;
- Improving monitoring mechanisms; and
- Traditional knowledge and culture in biodiversity conservation and management.
- Understanding the dynamics of land and land-use change on biodiversity resources and ecosystem services including the influence of climate change.

*Narrative:* While it is recognized that there have been a number of studies at the global level that projected the impacts of land and land-use change on biodiversity and connections to climate change, there is still a wide gap that establishes the connections of such dynamics in the Asia-Pacific region. Support is needed to build a robust body of work for the region that should provide solid basis for policy makers and implementers, which best actions can be taken to address this particular driver of biodiversity loss.

- Pollution-induced changes in relation to biodiversity loss (both inorganic and organic pollutants)
- Build on previous land-use change studies to better understand implications for biodiversity
- The interactions between natural disasters and climate change
- The relationship of biodiversity and climate change and vice-versa
- Linkages between blue-carbon and marine biodiversity;

### **Research Theme Area 2: Assessment of impacts of biodiversity loss and vulnerability to the shrinking of ecosystem services**

#### **Introductory statement**

Current knowledge and information for understanding the complex dynamics between biodiversity and ecosystem services does not highlight the critical importance of their connections. Most assessments undertaken using the current set of indicators have been developed based on area (e.g. how much forest is lost - in the case of landscapes) and the quantity of species (i.e. species richness), which are more relevant in provisioning services. While these indicators are essential, other equally valuable services, such as supporting, regulating and cultural service functions, need to be assessed, or at the very least accounted for as well. The Millennium Ecosystem Assessment<sup>5</sup> Report points out that, more often than not, the approach to enhancing one particular service of an ecosystem has a cost to other ecosystem services due to trade-offs. This complex relationship makes it difficult to actually determine the full cost and value of biodiversity loss and its impacts in the region at appropriate scales and levels.

#### **Rationale**

Viewed in this light, there is an urgent need for building the knowledge base that uses ecosystem services as the fundamental basis for assessing the state and condition of some levels of biodiversity resources; and integrating with it other measures such as species variability, function, quantity and distribution; in order to fully understand the role of biodiversity and the implications of its loss to human well-being. The need to build a robust knowledge base especially on the aspect of ecosystem services is imperative for the region. The region as cited earlier is home to unique biodiversity resources. But these resources are base for human development and economic activities. Support is needed to build a robust knowledge base by undertaking systematic and continuing assessments of the impacts of biodiversity loss to human

<sup>5</sup> Links to the various Millennium Assessment Reports: <http://www.maweb.org/en/Index.aspx>



societies. Initiatives should also be encouraged on undertaking vulnerability assessments of ecosystem services by human activities and identify measures that would minimize the impacts of such activities.

### **Key Activity Areas**

- Enhancing knowledge and understanding on the role of biodiversity in nature as a way of conferring ecosystem resilience and reducing vulnerabilities to extinction in the face of global environmental change
- Research that will identify and document ecological ‘tipping points’<sup>6</sup>
- Research that will illustrate the linkages between socio-cultural knowledge and livelihoods to different levels of biodiversity.
- Case studies that will support the work of international programmes on evaluation of changes in biodiversity and ecosystem services such as GEO-BON, but at the regional level (e.g. those that may be undertaken by AP-BON).

### **Research Theme Area 3: Model-based prediction of changes in biodiversity and ecosystem services**

#### **Introductory statement**

The overall objective of this research theme is to develop models to help assess the potential for future changes in biodiversity and ecosystem services in the Asia Pacific as a consequence of scenarios of global change (particularly land-use change, climate change, and species invasion). These models would further help to assess how alternative, spatially-explicit configurations of management responses might alter these outcomes and, in doing so, provide the basis for trading-off, and identifying co-benefits between, multiple ecosystem services and biodiversity values.

This work needs to make effective use of outputs from previous and on-going APN projects mapping and modelling land-use change, and needs to integrate site, landscape and historical effects of land use on biodiversity and ecosystem services. Wherever possible, developed models also need to incorporate best-available information about ecological thresholds or ‘tipping points,’ and link to coupled models of human-natural systems and relevant global modelling initiatives.

#### **Rationale**

This research theme is needed to help translate the findings and outputs from work conducted in themes 1 and 2 into quantitative, spatially-explicit assessments of the potential for future change in defined levels of, or aspects of, biodiversity and ecosystem services under scenarios of global change and management. This will thereby provide a stronger foundation for assessing the implications of alternative management responses considered in Theme 4. In this sense, Theme 3 provides the methodological connection that bridges the gap between the generation of fundamental information and understanding in Themes 1-2, and the application of this knowledge to planning and decision-making in Theme 4.

### **Key Activity Areas**

- Build spatially-explicit models for areas of interest within the Asia-Pacific region that enable the potential for future change in biodiversity and ecosystem services to be assessed as a function of plausible scenarios of change in land use, climate and invasive species. These models should, wherever possible: make effective use of outputs from APN projects mapping and modelling land-use change; integrate site-landscape-historical effects; and incorporate best-available information about ecological thresholds (tipping points).
- Extend these models to incorporate the potential consequences of spatially-explicit configurations of management responses (particularly those involving proactive changes in land, or sea, use), thereby providing an objective basis for assessing the relative expected benefit of alternative responses (or sets of responses) in terms of multiple values of diversity in nature and ecosystem-services (for use in trade-off and co-benefit analyses in Theme 4).

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<sup>6</sup> Tipping point (or threshold): *Wikipedia defines an ecological threshold as “a point at which a relatively small change in external conditions causes a rapid change in an ecosystem... when an ecological threshold has been passed, the ecosystem may no longer be able to return to its state.”*

- Establish links between these particular models and associated models of human-natural systems (thereby enabling consideration of more complex interactions and feedbacks between biodiversity, ecosystem services and other environmental, social and economic factors) and between these models and global-scale scenario modelling of biodiversity and ecosystem services (thereby allowing changes in aspects of biodiversity and ecosystem services in the Asia-Pacific region to be viewed within a broader global context, and allowing modelling from this region to help refine global modelling efforts).

#### **Research Theme 4: Adaptation, Response and Mitigation of the Depletion of Biodiversity and Ecosystems Services**

##### **Introductory statement**

Loss of diversity at all levels of biological organisation is an urgent and extremely important threat to human well being. Therefore, methods and approaches to mitigation are important priorities for research. In addition, it is well recognized that adaptation is important as it focuses on ways to cope and address the pressures on different aspects of biodiversity. There has been considerable emphasis on finding means for climate adaptation, but there has been less interest in understanding global change effects on aspects of biodiversity. Research needs to be developed that focuses on mitigation strategies, building on existing research on climate change dynamics and land use change forecasts.

##### **Rationale**

The Asia-Pacific region is a significant area for this kind of research. The pressures on many aspects of biodiversity, including man-made, are acutely high. Moreover, the long history of human adaptation of agriculture and forestry systems in the region has resulted in a wide range and abundance of culturally endowed nature. Society as a whole does not understand well the interrelationship between ‘natural’ diversity in nature and culturally endowed nature, and how pressures on both will affect human wellbeing and systems. In this Region, there is a need to develop a programme activity that is focused on adaptation and mitigation of losses in nature in both the natural and managed environments. Currently, we are not aware of any such research in Asia-Pacific region that addresses these issues. Land use transformation is the most important form of forest and other land-use and land-cover conversion.

##### **Key Activity Areas**

- *Elucidating Parsimony and Conflict between Carbon Management and Biodiversity Conservation as Key Mitigation Strategies*

*Narrative:* The development of strategies that mitigate climate change and decline in nature at all levels of biological organisation is an important priority in global change research. Yet interventions that maximize one may minimize or lessen the latter. For instance, land management for carbon using plantation species that sequester carbon quickly may not be a good strategy for nature conservation or restoration. On the other hand, strategies that emphasize conservation, such as assisted natural regeneration with native species, may delay the response to carbon removal from the atmosphere. Nonetheless, there may be opportunities to enhance carbon sequestration and nature at an optimal level, such that multiple mitigation benefits can be achieved. This area of research is aimed at understand these tradeoffs or mutual-benefits across the region, at various scales, geographies and landscape systems.

- Research focused on understanding better the interrelationships between actions and interventions that focus on increasing carbon stored in landscapes and flora across landscapes.
- Synthesis of approaches available to practitioners, land managers, policy makers etc that can maximize both carbon benefits and nature conservation. Best practices and novel approaches for “win strategies” development
- Integration of conservation attributes and activities into the emerging protocols for carbon management, such as REDD+. A/R in the CDM and agroforestry and other agricultural schemes.
- Development of broad integrated approaches that maximize a range of ecosystem services, beyond carbon sequestration together with nature conservation and management (e.g. Sustainable Forest Management that reduces local people’s impact on forest resources).

- *Integration of the human dimensions into action for biodiversity conservation and carbon management and other ecosystem services*

*Narrative:* The first (above) bullet under this theme focuses on advancing our understanding of tradeoffs between carbon-oriented interventions and biotic-oriented interventions. The present activity recognises the importance of considering the human dimensions of agriculture, forestry and fisheries. Research needs to be done that considers the livelihoods of land managers – people, communities and institutions who use the land and its resources – in a way that integrates these human dimensions into the strategies for mitigation. For example, agriculture and its expansion is one of the most important agents of ecosystem degradation and habitat change and fragmentation. Yet at the same time, agricultural land offers some of the best opportunities for mitigation of losses in diversity in nature and enhancement of livelihoods, through systems that incorporate biodiversity and ecosystem services. For instance multi-species agro-forestry systems can produce a range of natural capital and ecosystem goods and services that simultaneously increase some aspects of biodiversity, carbon stocks, and economic welfare. It can also reduce further pressures on existing ecosystems, including protected areas.

- Research focused on coupling an understanding of livelihood systems and their role and impact to/from efforts at nature conservation or interventions.
- Research focused on adaptive land management for agriculture and agro-forestry, and management of fisheries and other aquatic resources, that enhance and/or restore diversity in nature and enable improved livelihoods.
- Research focused on coupling nature conservation and management with low carbon management in agriculture, agro-forestry and aquatic production systems.
- Research that identifies and integrates social and cultural knowledge, local practices, traditional knowledge as measures for diversity at different levels of biological organisation support.

- *Research on restoration of biodiversity in disturbed or managed ecosystems*

*Narrative:* This activity is focused on understanding how human interventions can play an important and useful role in restoration of nature and ecosystem services that have heretofore been lost or degraded. This would be focused on both natural environments where human restoration could bring some of the critical elements of certain levels of biodiversity or ecosystem services back from their degraded states, even if the full range of ecosystem services that existed in the natural system cannot be recovered. One important element of this research area is to understand how intensively managed, but highly degraded, agro-ecosystems can be strengthened through restoration of and heterogeneous production systems.

- Supporting and testing, or application of existing: 1) ecological research to restore diversity in nature at different scales ; 2) land management research to restore diversity in managed systems at different scales; and 3) aquatic management research to restore diversity in fisheries and other freshwater and marine systems at different scales

- *Synthesis and outreach of best practices for Adaptation and Mitigation for Biodiversity and Ecosystem Services*

*Narrative:* There is a growing literature of experience and best practices in this field that is not being captured and organized. The result has been a considerable redundancy in research that could better be channelled into action. This area of research is clearly more application-oriented than the others, but it is important to begin to translate science into practice. This area of the program would focus primarily on a synthesis of practices that have been successful in this region and elsewhere and then a concerted effort focused on communication and outreach.

- Agroforestry and urban forestry at the local level, household initiatives, home gardens, community-based forest and other measures.
- Promoting healthy oceans, such as programs including UNEP Blue Carbon, MPAs etc
- Promotion of various practices for marine and terrestrial ecosystems, such as Mangroves for the Future, Seagrass Network, Integrated Coastal and River Basin Management, ESABII, AP BON, GEO BON, Satoyama, Satoumi, etc.
- REDD+
- Conservation areas and reserves
- Low ecological footprints

## B.II. Capacity Building

### Introductory statement

The well-being of every individual and the state of the global economy is intrinsically linked to sustainable and equitable use of biodiversity at all levels of biological organisation. However, overall there is a poor understanding of the value of biological diversity. Good science must be complemented by competent practitioners and highest standard of practice. Good science by itself is not enough to address the complex issues relating to the losses in and damage to diversity in nature. Capacity building, education and training needs to be associated with and built on APN research. In doing so, it is logical to also build modern understanding on traditional knowledge. There is a strong need to support more effective ways of awareness-raising, educational and training programmes.

### Rationale

To build on existing biological diversity science research, the scientific community must have strategic science communication mechanisms in order to assure that all stakeholders are properly informed.

### Key Activity Areas

- *Awareness-raising at all levels*
  - Research on the effectiveness of conservation education/awareness-raising and capacity building on diversity in nature at all levels of biological organisation.
  - Traditional knowledge and culture in nature conservation and management
  - Joint curriculum development or instructional material development so many teaching practitioners can learn from each other
  - Updating stakeholders on more recent developments in research on the fundamental importance of diversity in nature and ecosystems
  - Improving standards of professional environmental practice such as encouraging practitioners to be certified
  - Making more visible the connections between losses in diversity at all levels of biological organisation and human well being
- *Training*
  - Develop capacity for scenario-development tools, predictive modelling and systems analysis at various scales
  - Training to evaluate diversity and ecosystem services for incorporating into decision-making systems and models
- *Research on Effective Communication*
  - Promoting dialogues through different media
  - Communicating for adaptation and mitigation
  - Effectively disseminating information materials in local languages
  - Enhancing the appreciation of concepts related to the greening of the economy

## B.III. Science-Policy

### Introductory statement

The well-being of every individual and the state of economy is intrinsically linked to sustainable and equitable use of biodiversity at all levels of biological organization. However, as noted in B-II above and reiterated here, overall there is a poor understanding of the value of biological diversity. Good science must be complemented by competent practitioners and highest standards of practice. However good science by itself is not enough to address the complex issues relating to the losses in and damage to diversity in nature. Capacity building, education and training need to be built on APN research. In doing so, it is logical to build on traditional knowledge. Furthermore, there is evidence to support the need for more effective ways of awareness-raising, educational and training programmes.

### Rationale

There is an urgent need for better links between policies that would develop the science of conservation of diversity in nature, environmental and socio-economic development policies aimed at improving livelihoods and human wellbeing. There is also an urgent need for more effective ways of working collaboratively with the scientific community thereby ensuring that policy and management decisions are informed by best-available information and good understanding of uncertainties associated with scientific discoveries.

### Key Activity Areas

- Development of appropriate tools and processes to facilitate policy and decision-making based on complex scientific understanding
- Research to better understand the needs of policy-makers and the private sector on biodiversity and ecosystem services
- Research to understand better how to facilitate engagement and support of the private sector in education on biological diversity and nature conservation
- Promote research that is holistic, integrated and interdisciplinary in approach
- Enhance awareness of different types of uncertainties for model-based forecasts

## C. NEXT STEPS AND WAY FORWARD

*Some issues for consideration:*

- Establish a steering group and have a follow-up meeting to further develop the framework ***Linking and Integrating Ecosystem Services and Biodiversity with Green Growth & Sustainable Development***, integrate into APN's activities and establish mechanisms (under existing APN mechanisms) for funding from 2012;
- Update the endnotes of the APN 3SP that list the range of topics and activities that APN supports to help achieve its objectives;
- Regarding mechanisms for undertaking the activities under the framework, consider:
  - Establishing a 3 to 5-year framework under the ARCP programme: in line with the contents of the attached report.
  - Considering the CAPaBLE comprehensive research pillar with a fourth 3-to-5-year phase from 2012 to 2014 (or 2017)? (and/or as a Post Rio+20- initiative); and/or
  - Launching a Special Call for Proposals for Focussed Activities based on the above-mentioned research and key activity areas.

# Planet under Pressure Conference

26-29 March 2012, London, UK

John Ingram, Chair Local Organising Committee



[www.planetunderpressure2012.net](http://www.planetunderpressure2012.net)

## Background

The international Conference “Planet under Pressure: New knowledge towards solutions”(London, 26-29 March 2012) provides a major opportunity to link global-change science in a two-way engagement with the wide range of other stakeholders working towards global sustainability.

Based on the latest scientific evidence, the Conference will provide a comprehensive update of our knowledge of the Earth system, the pressure our planet is now under and a vision for the future. Drawing on our knowledge about the past, the present and future, the conference will focus attention on the latest research in climate science, ecosystem services, socioeconomic constraints and opportunities, land use, biodiversity loss, planetary thresholds, and food, water and energy security. It will examine governance across temporal and spatial scales, links with poverty alleviation, human well-being, and engineering and technological solutions. The conference aims to leave a strong legacy of new partnerships to help forge a sustainable future.

2500 delegates are anticipated representing a wide range of stakeholders including senior policymakers; leaders in the private sector (energy, water, food, finance, insurance, construction...); NGOs; development agencies; media; engineering and technology sectors; and researchers and academics from many disciplines across the natural and social sciences. Conference planning and outputs are being designed to feed directly into Rio+20.

The Conference is scientifically sponsored by DIVERSITAS, IGBP, IHDP, WCRP and ESSP. The international Scientific Organising Committee is co-chaired by Dr Lidia Brito (UNESCO; Head of Science Policy) and Dr Mark Stafford Smith (CSIRO Australia; Science Director, Climate Adaptation); the Chief Scientific Advisor is Elinor Ostrom, 2009 Nobel Laureate (Economics). Financial sponsorship is being actively sought, particularly regarding the major involvement of developing nations and core costs.

## APN's Role

The APN's 4<sup>th</sup> goal in the APN 3<sup>rd</sup> Strategic Plan (2010-2015): *Cooperating with other global change networks and organisations* and to assure alignment with this goal, the APN will sponsor the participation of developing-country scientists from the APN Membership. The APN will also have maximum visibility at the conference through a “Partnership Package,” that will, as a minimum, promote the APN's past and present activities with the GC community vis-à-vis an exhibit, logo display and verbal acknowledgment and visibility conference, website and other promotional materials.

**Budget Requested:** US\$100,000 (for APN developing-country participation)

# Science-Policy Dialogue on Challenges of Global Change: Focussing in Southeast Asia (SEA)

## Proposal for a START-APN Science-Policy Forum/Dialogue

### Rationale

In partnership with the APN, START proposes to sponsor a series of Regional Science-Policy Forum that promotes informed decision-making on actions to reduce GEC vulnerability and promote adaptation strategies. Forum discussion and exercises will investigate recent advances in a specific aspect of global change science and application of those advances within the policy arena.

In view of the upcoming UNFCCC COP in Durban Africa (late 2011), the “Planet Under Pressure” Conference (ICSU and GEC Programmes, May 2012), and the RIO+20 Conference (June 2012), it is opportune for START and APN to organize and conduct the first such S-P forum/dialogue focused on Southeast Asia, though participants from the broader APN region may be considered depending upon discussions between START and APN and available funding from both partners.

### When

We propose that the first S-P dialogue be conducted back to back with the APN Interim Steering Committee Meeting (late summer/early Autumn 2011). We also suggest that a leading APN national Focal point be engaged as Chair of the organizing/implementing committee for the first S-P Dialogue, with Dr. Anond Snidvongs (Director of START’s Southeast Asia Regional Center), Dr. Daniel Murdiyarso (member of START’s Scientific Steering Committee), and Dr. Nordin Hassan (Director of ICSU’s ROAP) as co-chairs of the session. Up to 3 other persons will be identified as members of the organizing committee. Representatives of START and APN Secretariats will also be members of this organizing committee.

### Agenda and participants

The Forum will feature leading scientists from the Asia-Pacific region who will review advances in GEC research with respect to a specific topic or topics (e.g., urbanization, integrated water management, food production and security, adaptive coastal zone management, disaster risk reduction, human health, etc.) and interact with regional policy and practitioner communities, including the APN National Focal Points, to consider application of these advances for policy actions related to adaptation and development planning. Participation by policymakers and others is expected to provide a basis for identifying priority research areas within the Forum themes for supporting informed decision-making, capacity building and outreach activities. The forum program will also explore how relevant GEC science and knowledge about risks and vulnerability can best be communicated to the media and to policy audiences and be integrated with decision-making. The annual events should be mutually beneficial, in that stakeholder groups will gain access to information about relevant advances in GEC science, and scientists will acquire a better understanding of how science can support policymakers’ needs.

The topic(s) of the Forum will be selected based on regional priorities as they relate to APN strategic plans and regional policy needs as well as issues related to disaster risk reduction and the ICSU program on Integrated Research on Disaster Risk. START/APN sub-awardees may contribute to the Forum.

Papers, summaries of forum discussions, and syntheses of priority recommendations will be prepared in a manner that promotes fast-track publication for both scientific and policy audiences, such as through articles in peer-reviewed international journals, policy briefs, contributions to APN publications and summary brochures.

### Process

Typically, the presenters would be kept strictly to 20 minutes and presentations clustered in grouping of 3 or 4 per thematic session. Also during breaks, a small group of the forum organizers would meet and devise 3 or so cross-cutting questions aimed at issues of climate communication, developing research approaches that mix traditional and scientific knowledge, etc. Then, a 90-minute session would be devoted to discussion on the issues. Facilitators will ensure good interventions, and deter temptation for long-winded speeches.

### **Structure of the Presentations**

Presentation length: 20 minutes

The presentations would examine scientific findings or policy issues in the context of their implications for climate risk management and adaptation. While data and results are an important means for relaying information, please avoid presentations that are overly results-based and data intensive, as this event is meant to be a science-policy dialogue and not a scientific conference. The presentations should focus on opportunities for and impediments to action, which can be explored in the facilitated discussions that follow the presentations.

Therefore the presentations will:

- *Frame key issues related to the topic in terms of needs for climate risk management and adaptation (e.g. low soil fertility reduces productivity potential in highly variable rainfed environments, or lack of farmer access to information in relevant and actionable forms impedes effective management of risks, etc.);*
- *Describe actions or interventions to address issues raised in part 1, providing examples from research or from projects, and discuss measures needed to sustain and broaden successful outcomes, as well as challenges and threats to implementing and sustaining such actions; and*
- *Identify where knowledge and capacity gaps exist (e.g. where is more knowledge generation needed, where would capacity building be most effective), and suggest potential policy responses to support such efforts.*

Two examples of typical S-P dialogues conducted by START are shown as an appendix; and the intent is to develop a similar regionally relevant agenda for the START-APN S-P Dialogue.

### **Outcomes**

An overall S-P Dialogue report and a short, succinct paper for publication in peer reviewed journal are minimum outcomes. Possible development of subsequent informational material (communications, brochures, etc) for the upcoming significant regional and international meetings of interest will be considered.

### **Funding**

Total: US\$90,000 (of which US\$60,000 is from the US NSF/USGCRP)



## Appendix



### SCIENCE-POLICY DIALOGUE ON CLIMATE CHANGE

4-5 November 2010

Niamey, Niger, CRISAT Sahelian Centre  
Organized by START<sup>7</sup> and FARA<sup>8</sup>

DAY 1		
08.30 – 09.15	Arrival and registration of participants	
OPENING CEREMONY Chair: to be determined		
09.15 – 09.25	Welcome remarks Farid Waliyar, Director ICRISAT, West and Central Africa	
09.25 – 09.30	Remarks from Government of Niger The Honorable Minister of Water, Environment and Desertification	
09.30 – 09.35	Remarks from CCAFS Noel Beninati	
09.35 – 09.40	Remarks from FARA Ramadjita Tabo	
09.40 – 09.45	Remarks from the International START Secretariat	Jon Padgham
09.45- 10.30	Group photo and coffee/tea break	
TECHNICAL SESSIONS		
Session 1: Climate and food production, the current situation in Niger and the region Chair: To be determined		
10.30-10.50	Seasonal climate risks	Hubert Ouaga N’djafa Agrhymet
Response strategies and actions at local, national, and regional scales		
10.50-11.10	Local-scale perspectives	Aliou Diouf Univ. Cheikh Anta Diop, Senegal
11.10-11.30	Perspectives from Niger	Hama Abdou Yacouba FEWS-Net
11.30-11.50	Perspectives from the region	CORAF person
11.50-13.00	Facilitated discussion on key issues	

<sup>7</sup> [www.start.org](http://www.start.org)

<sup>8</sup> <http://www.fara-africa.org/>

13.00 – 14.00	Lunch	
Session 2: Climate change— future projections, and vulnerabilities and impacts		
Chair: To be determined		
14.00-14.20	Temperature and rainfall, extreme events, climate variability within climate change; Projections and key uncertainties	Andre Kamga Foamouhoue ACMAD
Key vulnerabilities and potential impacts of climate change on farming systems and food security		
14.20-14.40	Pastoralist systems—assets and livelihoods	Fode Camara Sanoussi Ministère des Ressources Animales
14.40-15.00	Agro-pastoralist systems—assets and livelihoods	Bakary Djaby Univ. Liege, Belgium
15.00-15.20	Tea/coffee break	
15.20-17.20	Facilitated discussion on key issues	
17.45-19.00	Reception	

DAY 2		
TECHNICAL SESSIONS		
Session 1: Climate risk management and implications for adaptation		
Chair: Ramadjita Tabo		
Options and opportunities for better managing climate risks and linkage with longer-term adaptation—analysis from the region		
08.30-09.00	Re-greening initiatives	Mathieu Ouedraogo, Re-greening Burkina and Chris Reij, Free Univ., Amsterdam
08.50-09.10	Soil water management and ridge tillage	Mamadou Doumbia, Institute for Rural Economy, Mali
09.10-09.30	Soil fertility management	Mahamadou Gandah and Dougbedji Fatondji ICRISAT, Niger
09.50-10.10	Climate risk management, livelihood resilience, and social protection programs	Petra Tschakert, Penn. State Univ., USA
10.10-10.30	Tea/coffee break	
10.30-12.30	Facilitated discussion on key issues	
12.30-13.30	Lunch	
Session 2: Enabling decision making for adaptation		
Chair: Hubert N'Djafa Ouga		
13.30-14.30	Climate services—technical and policy needs, and strategies for engaging end users	Katiellou Lawan METEO Nationale

		Andre Kamga Foamouhoue ACMAD
		Petra Tschakert Penn. State Univ., USA
14.30-14.50	Engaging policy makers	Amadou Souley Coordinator of CNEDD
14.50-15.10	Tea/coffee break	
15.10-17.10	Facilitated discussion on key issues	
17.10-17.30	Summary	
17.30	Adjourn	

# BURUNDI SCIENCE-POLICY DIALOGUE ON CLIMATE CHANGE

18-19 October 2010  
Venue: Hotel Amahoro  
Bujumbura

In support of the project 'Understanding the Findings of the IPCC Fourth Assessment Report, Climate Change 2007 - Integrating Climate Change Adaptation and Mitigation in Development Planning'

Supported by IGEBU, the University of Dar es Salaam, and START, in partnership with the WMO, IPCC, UNEP and the European Commission

DAY 1		
8:30 – 9:00 am	Arrival and registration of participants; pre-dialogue survey issued to participants	
OPENING CEREMONY		
Chair:		
9:00 – 9:10 am	Welcome Speech	
9:10 – 9:15 am	Remarks from the UNFCCC Focal Point <i>To be decided</i>	
9:15 – 9:20 am	Remarks from the EU representative <i>To be decided</i>	
9:20 – 9:25 am	Remarks from the International START Secretariat <i>To be decided</i>	
9:25 – 9:30 am	Remarks from UNEP representative <i>to be decided</i>	
9:30 – 9:35 am	Opening of the Workshop and addressed by Chief Guest	
9:35 – 10:00 am	Remarks by Chairman	
	Vote of thanks	
10:00- 10.30 am	Coffee/tea and group photo	
TECHNICAL SESSIONS		
Session 1: Overview of Climate Change Science and Policy		
10:30-10:45	Overview of climate science in Africa and outlook for AR5 (IPCC)	Chair:
10:45-11:00	Climate risk management, adaptation and development; perspectives from Burundi	
11:00-11:15	Initiatives on climate change adaptation and mitigation in Burundi	
11:15-12:45	Facilitated discussion on climate risk management, adaptation, mitigation and development	

12:45 – 2:00	Lunch	
Session 2: Ecosystems, biodiversity and natural resources management		
2:00-2:15	Global perspective with an East Africa focus, including REDD (IPCC)	Chair:
2:15-2:30	Ecosystems, biodiversity and NRM under a changing climate; national/regional <i>perspectives</i>	
2:30-2:45	Ecosystems, biodiversity and NRM under a changing climate; national/regional <i>initiatives</i> , including REDD	
2:45-3:15	Tea Break	
3:15-5:00	Facilitated discussion on ecosystem and livelihoods based adaptation: knowledge, capacity, and policy-support needs	

DAY 2		
TECHNICAL SESSIONS		
Session 3: Agriculture, water, and food security		
9.00- 9.15	Global perspective with an East Africa focus, including CCAFS initiative (IPCC)	Chair:
9.15-9.30	Climate change, agriculture, and food security; national/regional <i>perspectives</i>	
9.30-9.45	Climate change, agriculture, and food security; national/regional <i>initiatives</i>	
9:45-10:15	Tea break	
10:15-11:45	Facilitated discussion on agriculture and food security: knowledge, capacity, and policy-support needs	
11:45-1:00	Lunch	
Session 4: Human health		
1:00-1:15	Global perspective on climate change and human health; (IPCC)	Chair:
1:15-1:30	Climate change and human health; national/regional <i>perspectives</i>	
1:30-1:45	Climate change and human health; national/regional <i>initiatives</i>	
1:45-3:00	Facilitated discussion on human health: knowledge, capacity, and policy-support needs	

3:00-3:30	Tea break and post-dialogue survey	
Session 5: Disaster management, gender and livelihoods— rural and urban		
3:30-3:45	Disaster management— rural, perspectives and initiatives	Chair
3:45-4:00	Disaster management— urban, perspectives and initiatives	
4:00-5:15	Facilitated discussion on disaster management	
CLOSING SESSION		
5:15-6:00		
<ul style="list-style-type: none"><li>- Summary of the key points raised over the 2 days</li><li>- Identification of priority actions for enhancing CC communications to key decision makers</li><li>- Addressing science-polity linkages in Burundi</li></ul>		

# Proposal Development Training Workshops

**1. Introduction:** 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 and Pune back to back with other important meetings that brought together international participants.

## 2. Proposed Activities:

Conduct PDTWs during or back-to-back with the following meetings:

- APN 3<sup>rd</sup> SA-SRC meeting
- APN 4<sup>th</sup> SEA-SRC meeting (also consider holding PDTW during the Pacific Science Congress)
- Budget is also available for TEA PDTW should one be desired.
- LOICZ Young Science Forum in Yantai, China

**4. Target Audience:** Developing country early-career and established scientists and decision-makers from the Asia-Pacific region in the respective sub-regions regions of the Asia-Pacific.

**5. Relevance to the APN:** One of APN's 5 goals is *improving the scientific and technical capabilities of nations in the region*. It is vital that APN member countries have the capacity to conduct high quality research regarding global change that provides underpinning scientific support for policy-makers and policy-making processes. The APN believes that research must involve local scientists and that they must be given the capacity to continue their research, and analyze and utilize their research outcomes. The APN aims to develop this capacity mainly through its CAPaBLE programme.

## 6. Experts/Trainers:

- SPG members and national Focal Points from the respective sub-regions.
- Expert project-funded recipients' familiar with APN proposals processes.
- One member from the Secretariat Science section.
- Young scientists from the country and/or neighbouring countries where the PDTW(s) and SRC meeting(s) are to take place.

**7. Time requested:** Two days for each PDTW

**8. Expected Outcomes:** Raised awareness of the APN and increased capacity to submit proposals to the APN and compete effectively in its competitive annual calls for proposals (for research and capacity development) in key scientific areas for sustainable development in the Asia-Pacific region. Furthermore, empowerment of members to 1) Provide their knowledge on the APN proposal submission process; and 2) Learn about the APN Proposals Process so that they might go back to their respective countries and impart their knowledge.

**9. Budget:** US\$50,000

# Hyogo Activity in Mongolia

*Symposium and Training workshop in connection with the  
Hyogo-Mongolian Reforestation Project*

## **Background: Mongolia's efforts to address the global climate change**

Aggravation of climate change is likely to have a more serious impact than ever before in Northeast Asia and other regions, including Mongolia, that are affected by desertification. Recently, problems such as growing desertification, expansion of forest damages due to pests, damaged seedlings due to grazing by nomads, and forest fires caused by cigarette butts have been drawing much public attention. Efforts are needed to raise awareness of local citizens, etc. in the forest zones about forest protection and to manage forests via citizens' participation and collaboration in cooperation with afforestation-related organizations, etc. In addition to development of copper and gold mines, many mineral deposits have been newly identified in recent years. There are emerging challenges to conserve forests and ecosystem in the midst of rare earth development projects, etc.

**Proposed Activities:** Against this backdrop, it is desirable to (i) widely publicize to citizens, researchers, engineers, etc. the future impact of climate change in countries located in forest-steppe zones at 50 degrees north latitude (including Mongolia) and the impact, etc. of yellow sand from the Gobi Desert to neighboring regions and (ii) promote collaboration and network building through technical education programs and discussions at training workshops with participation by Japanese and Russian researchers, etc.

The impact caused by climate change on Mongolia's society, economy, forest restoration, etc. should be considered as an environmental issue involving the nation's citizens. It is necessary to host a local symposium with citizens' participation in an effort to widely publicize efforts to develop new technologies and raise awareness of local citizens, etc. about forest protection.

Meanwhile, expansion of market economy has given impetus to mine development, and extensive mining rights have been increasingly set, which has started to pose growing difficulties in nomads' activities and forest maintenance efforts. Increased production of cashmere has led to goat grazing on a larger scale and growing environmental damage. These problems and other issues should be presented at the symposium. Aggravation of aridification and global warming has resulted in increased desertification and a plague of pest. A symposium should be hosted involving Mongolian citizens as well as experts from Japan and Russia, etc. to help enhance effectiveness of forest restoration efforts, raise awareness about environmental protection, and promote information dissemination and enlightenment.

It is also necessary to raise engineers' and researchers' awareness and promote collaboration and network building by hosting a training workshop.

## **Symposium (via consecutive interpretation between Mongolian and Japanese)**

A local symposium involving citizens, etc. will be hosted (i) to widely publicize environmental issues and efforts to develop new technologies for forest restoration, and (ii) raise awareness of local citizens, etc. about forest protection.

- Dates: In late August or early September 2011
- Venue: Multipurpose Room, Japan Center in Ulanbaatar, Mongolia
- Organizers: Hyogo Environmental Advancement Association, APN Secretariat and APN Members for Mongolia, Mongolia Forest Forum (MoFF)
- Number of participants: 200 (expected)
- Topic 1: Current environmental status of the forest-steppe zones, etc. in Northeast Asia, and the vision of sustainable forest restoration and management via local citizens' participation
- Topic 2: Environmental challenges in Mongolia and the process to address these problems (in panel discussion)
- Topic 3: Current environmental status (including climate change) and problems to be addressed in Mongolia



- Topic 4: Role of forests in addressing environmental problems, and sustainable afforestation and forest management activities
- Topic 5: Intended participants: citizens, forest-related researchers, engineers, government officials, forestry officials, etc.
- Symposium Programme: (4 hours)
  - Opening address by an official of the Ministry of Nature, Environment, and Tourism, Mongolia
  - Keynote lecture (one hour) by an official of the Mongolian Academy of Science Institute of Geo-ecology
  - Panel discussion (where panelists will give their presentations in turns in their areas of expertise, and a coordinator will sum up at the end of the panel discussion) (2 hours and 30 minutes: 15 minutes per presentation, 30 minute summary)
- Panelists, etc.
  - Experts in the following fields from Mongolia and Japan
  - *Climate change*
  - *Biodiversity*
  - *Desertification prevention/ ecosystem restoration of former mineral resources development sites*
  - *Forest restoration*
  - *Participation by, and cooperation among, governmental organizations and NGOs, etc.*

#### **Training Workshop (Language: English)**

Aggravation of aridification and global warming has caused increased desertification and a plague of pest, which has resulted in extensive loss of forest. Against this backdrop, we will organize a training workshop for engineers, researchers and government officials specialized in forest-related matters, especially young ones, to contribute to forest restoration more efficiently. At the same time, we aim to increase crisis awareness among engineers and researchers, inspire them to start joint research, and promote collaboration and network building among relevant organizations.

- Dates: Two days in late August or early September 2011
- Venue: Reforestation Center, Ulaanbaatar, Mongolia
- Organizers: Hyogo Environmental Advancement Association, APN Secretariat and APN Members of Mongolia, Mongolia Forest Forum
- Number of participants: 30 persons (expected)
- Theme: Current status of forest restoration at 50 degrees north latitude and problems to be addressed
  - o Offering opportunities for young researchers to learn the afforestation technology to cope with global warming and increased aridification, to promote collaboration and joint research among relevant organizations
- Intended participants: Forest-related researchers, engineers, government officials and companies involved in forest business
- Program (for two days)
  - Opening address
    - o Speaker: Representative of the Institute of Geo-ecology of the Mongolian Academy of Sciences
    - o Subject: Outline and objective of the training workshop
  - Keynote lecture
    - o Lecturer: Researcher of the Department of Forestry of the National University of Mongolia
    - o Subject: Sharing with young researchers of the afforestation technology to cope with global warming and increased aridification, and exploring ways to promote collaboration and joint research among relevant organizations
  - Session meetings
  - Lecturers: Experts in afforestation from Mongolia, Japan and Russia
  - Subjects: Raising of seedlings, pest control, and new afforestation technology utilizing mycorrhizal fungi and other means
  - Program
    - o Lectures on the current status and problems in each of the above subjects

- Field work at the Forest Restoration Center and forest in the vicinity (site visit)
- Workshop discussion on the problems and solutions and summing up of the discussion
- Plenary meeting
  - Presentation of the discussion held at each session meeting
  - Exchange of opinions about the discussion among participants and with lecturers
  - Summing of the discussion by the keynote lecturer
- Closing address: Outline of APN and future project plans of the Forest Restoration Center

## Outputs

An A4-sized report of about 80 pages will be published in English and Japanese.

## Budget (in Japanese Yen; approximate US\$20,000)

Symposium and training workshop

● Airline tickets (for lecturers and secretariat members):	150,000 yen × 6 people	= 900,000 yen
● Accommodation fees (for lecturers and secretariat members):	10,000 yen × 6 people × 5 nights	= 300,000 yen
● Local travel expenses (for residents in the Khyalganat region):		= 30,000 yen
● Lecturer fees in Japan:	20,000 yen × 4 people × 3 days	= 240,000 yen
● Lecturer fees in the region:	10,000 yen × 4 people × 1 day	= 40,000 yen
● Insurance:	10,000 yen × 6 people	= 60,000 yen
● Venue rental fees (forum):		= 10,000 yen
● Public relations expenses (for flyers):	10 yen × 3,000 pieces	= 30,000 yen
● Interpreter fees:	10,000 yen × 2 people × 6 days	= 120,000 yen
● Translation fees:	5,000 yen × 20 sheets of documents	= 100,000 yen
● Compact car rental fees:	10,000 yen × 2 units × 5 days	= 100,000 yen
● Large car rental fees:	30,000 yen × 1 unit × 2 days	= 60,000 yen
● Miscellaneous expenses:		<u>= 10,000 yen</u>
		2,000,000 yen

## References

### 1. Background of the project

In response to a request for assistance from Mongolia for its regeneration of burned forests, Hyogo Prefecture started this project as an expression of its gratitude for the Mongolian support for the prefectural efforts to recover from the damage caused by Great Hanshin Earthquake. The project, which was initially conducted under the leadership of Hyogo Prefecture, is now promoted by the Hyogo Environmental Advancement Association for continual reforestation in Mongolia at the direction of the prefecture and supported by the prefecture, private foundations, and other organizations.

### 2. Past achievements of the project

Starting as a model project since 1999 for implementing the Clean Development Mechanism (CDM), this project has systematically developed areas to raise seedlings, planted trees on a massive scale, provided reforestation skills training, and promoted many more programs including the establishment of the Forest Restoration Center as a base for tree plantation. Large-scale afforestation and trainings at the Forest Restoration Center under the project have yielded impressive results in improved afforestation technology and forest restoration in Mongolia.

This project has also provided opportunities for people of both countries, including citizens, for cross-cultural and technical exchanges through tree planting experiences, exchange tours, meetings to exchange views on afforestation from a technical perspective, and other events.

# Hyogo Activity: EMECS

*Proposed New Hyogo Activity: Sponsorship of EMECS 9 Conference  
& Joint Side Event; Support of Satoumi (Budget US\$35,000)*

**Introduction:** The Asia-Pacific Network for Global Change Research (APN) and the International EMECS Center have jointly organised special fora and sessions at previous EMECS conferences to promote issues of common interest. Most recently, as an outcome of such efforts, the APN published its first book in 2006, “Global Change Impacts on Coastal Zone Management in the Asia-Pacific Region”, a comprehensive scientific manuscript dealing with global change impacts on coastal zone management in the region. At EMECS7, Caen France in 2006, the APN and EMECS presented their respective research and synthesis outputs as a follow-up to their joint efforts. EMECS8, held in Shanghai China, 2008, saw further collaboration, and APN held its first Proposal Development Training Workshop, empowering young EMECS8-registered scientists to write competitive proposals for the APN annual proposals processes.

**Proposal:** The purpose of EMECS9 is to improve our ability to manage enclosed or semi-enclosed coastal seas in all their ecological, economic, and cultural dimensions. The conference will work to cross barriers of discipline and culture by bringing together experts and stakeholders from different backgrounds to share information, insights, and lessons learned. EMECS9 Conference being held in Baltimore, Maryland USA, 28-31 August, 2011. APN activities will include conference support, sponsorship and a collaborative side event with EMECS and the International global change community.

## **Main Activity: Side-Event - Vulnerability and Risk Management of Enclosed Coastal Seas Home to Asian Megacities: *Bangkok, Dhaka, Kobe-Osaka and Tianjin***

Activities that APN has undertaken recently with a number of major institutions, including START, the East-West Center, Ibaraki University and LOICZ on coastal megacities and their vulnerabilities, the APN proposes to host a joint side event with EMECS on the occasion of the The side event will look at the added vulnerability enclosed coastal seas that are home to megacities, and how this risk and vulnerability is exacerbated by socio-economic pressures (increasing population, urbanization, pollution and environmental degradation) as well as climate change (flooding, storm surges, coastal erosion and sea-level rise).

**Outcomes:** The side event will identify and share the increasing risk and vulnerability of enclosed coastal seas as a result of them being home to megacities (identified as urbanized coastal areas with populations greater than 10 million) and, in so doing, identify best practices to reduce socio-economic and climate-related hazards threatening enclosed coastal seas. The side event will focus on four megacities of Bangkok (Thailand), Dhaka (Bangladesh), Kobe-Osaka (Japan) and Tianjin (China), all of which are situated on enclosed coastal seas of the Gulf of Thailand, Bay of Bengal, Seto Inland Sea and Bohai Bay, respectively. The outcomes will complement the research agendas of APN, EMECS, LOICZ and START on coastal vulnerabilities and risk management practices.

### **Budget:** US\$35,000

- Side Event: US\$15,000 (registration, travel, accommodation for invited experts)
- Gold Sponsorship US\$10,000 (with exhibit, 3 registrations and high visibility of the APN profile)
- Additional Support to EMECS Center for Satoumi: US\$10,000

**Invited experts:** Professor Nobuo Mimura (Ibaraki University); Dr. Hassan Virji (START International); Dr. Hartwig Kremer (LOICZ) and other experts from Bangladesh, China and Thailand.

## Hyogo Activity: The New Commons



*Proposed New Hyogo Activity (3)  
for consideration at the 16<sup>th</sup> IGM  
Sri Lanka, 4-8 April 2011*

*Joint Initiative of  
APN-DIVERSITAS-HYOGO-IHDP-UNU  
Satoyama: The New Commons in the Asia-Pacific Region*

*APN Funding: US\$50,000 (2011) and US\$50,000 (2012)*

**Introduction:** *Satoyama* is a Japanese term for a mosaic of different ecosystem types— secondary forests, farm lands, irrigation ponds, and grasslands — along with human settlements, which has been managed to produce bundles of ecosystem services for human well-being. *Satoyama* found largely in rural and peri-urban areas of Japan is a way of life; in other word a classical illustration of the symbiotic interaction between ecosystems and humans.

The Japan Satoyama Satoumi Assessment (JSSA) shows how Satoyama landscapes have been rapidly declining due to various factors including increased rural– urban migration, land-use conversion and the abandonment of traditional agricultural cultivation. If this trend continues, vital services provided by *satoyama* will be adversely affected causing changes in human well-being across a range of stakeholders.

There is no doubt that short term increases in human well-being has been accompanied by degradation of ecosystem services, which, over the long-term, may have negative consequences on human well-being. Two factors have been critical in these win-lose scenarios between human well-being and *satoyama* ecosystems. First, with the uprooting of the Japanese population in post-war years as rural populations declined and urban ones swelled, there is collective loss of connection to one's landscape. Wherein traditionally those who worked the land and the waters assumed collective responsibility for maintaining and protecting them, in a rapidly urbanized, industrialized Japan this sense of obligation to one's surroundings has been quickly lost. Thus, it becomes possible to pursue economic development that produces short-term benefits to human well-being, while simultaneously degrading the ecosystems necessary to sustain well-being over the long haul.

This loss of collective management of *satoyama* and *satoumi* landscape may be termed a loss of the “commons”. Critical to the success of a more integrated and holistic approach to ecosystem management is the creation of a new “commons,” understood both as a system of co-management of ecosystem services and biodiversity within private and public land, and as a single system to produce a bundle of ecosystem services for direct and indirect use by society. The new “commons” could provide the basis for sustainable development in both developing and developed countries. The term “commons” refers to a system of co-management of natural resources, or the natural resources themselves. It may be possible to form commons in various levels, from regional to global.

**The Challenge:** The notion of the new commons introduces a level of complexity for the governance of these systems. The mosaic nature of Satoyama implies a combination of different ecosystem types with a myriad of different tenure systems overseeing the access and use of these ecosystems. These can range from private, communal and public land tenure systems for the ownership of the land. The rights to the ecosystem services offered by the mosaic of ecosystem types offers a bigger challenge. The bundle of ecosystem services offered by the mosaic landscape of Satoyama is used by a variety of different uses ranging from local communities living within the vicinity of Satoyama landscapes to users living at a distant from these landscapes. Moreover, many of the ecosystem services are public goods in nature

which implies that users cannot be excluded from the use of ecosystem services such as flood regulation, pollination and water purification to name a few.

**Methodology:** Three workshops are envisaged to bring together a core group of experts from Japan and the international scientific community. These workshops will be jointly organized by APN, DIVERSITAS and IHDP. The workshops will draw on case studies in Japan and other countries in the Asia Pacific region that have Satoyama-type landscapes.

### **Workshop Planning**

**1. Scoping Workshop – Mid-November 2011:** Convening in Japan the first scoping workshop will set the stage for the work ahead and produce a framework that details the methodology, the main actors involved, and the key deliverables: a science paper and policy paper. In the workshop, the co-chairs of the JSSA will introduce the concept of the new commons, including:

- Bundled ecosystem services;
- Mosaic landscapes;
- Land-tenure regime systems (public *vs* private *vs* science); as well as issues of migration, aging population, etc.
- **Case studies:**
  - In Japan: Fukui/Hyogo/Kyoto
  - Sri Lanka
  - Indonesia
  - System delivering multi-services. Issue to be addressed: sites in which work on ES has already been conducted (i.e. we already understand the ecological process and then develop the socio-ecological understanding) or sites where we need to better understand the ES delivery. DIVERSITAS (Hal Mooney)
  - Institutional practices in place that contribute to mosaics and their governance issues
- Co-Chairs of the Scoping workshop: Hal Mooney (DIVERSITAS Chair), Anantha Duraipah (IHDP ED) and Kazuko Takeuchi (UNU/ISP Vice Rector)
- Logistics: Organized by the APN Secretariat

### **2. Second Workshop – early February 2012:**

- Convening in Sri Lanka - details to be elaborated at the scoping workshop
- Logistics: Organized by the IHDP Secretariat
- Planning: Depends on the outcomes of the first scoping workshop and the case studies.

### **3. Third Workshop:**

- Convening in Indonesia. Details will be discussed at the scoping workshop. Workshop will be held prior to UNCBD12, in India, November 2012.

### **Key Deliverables:**

- A policy paper providing guidelines for the establishment and/or maintenance of Satoyama landscapes;
- 2 scientific journal papers: one on methodology/concept (to be drafted after the first workshop); one on the results/analysis (to be drafted at the end of the 3<sup>rd</sup> workshop)

### **Timeline:** Two years.

- Workshop 1: November 2011
- Workshop 2: February 2012
- Symposium at the Planet Under Pressure Conference in London March/April 2012
- Workshop 3: Third Quarter 2012 – with sufficient time to report to UNCBD2012 to be held in India. Noting too that this is also post Rio+20 and there needs to be relevant outputs to disseminate at UNCBD12.

**Budget:** Funding will be for “science-oriented” workshops/case studies/deliverables

- One workshop will require approximately US\$50,000 (for 10 to 15 people)
- IHDP will provide, in-kind, policy-briefs and other materials for wider dissemination
- IHDP has sought leverage funding from UNU of US\$50,000 (to be confirmed in writing)
- DIVERSITAS to be discussed further.

**Key Players:**

- APN (Secretariat and key members)
- DIVERSITAS (Secretariat, key members and SC Chair)
- IHDP (Secretariat, Key members, Earth System Governance project)
- JSSA [Takahashi, Otsubo–Otsunomiya)
- Satoyama International Initiative
- JSSA: Indonesia, Philippines and Cambodia?
- Leading, early-career scientists in the AP region
- Key Policy and Science Processes:
  - Planet Under Pressure Science Conference
  - Rio+20
  - UNCBD COP12
  - Satoyama International Initiative

## FINAL Financial Report for 2009/10 (01 April 2009~31 March 2010)

	FINAL Financial Report FY 2009	Interim Financial Report FY 2009	Approved Budget FY 2009
<b><i>Resources Available</i></b>			
Operative Assets from FY 2008	45,000	45,000	78,000
Japan Ministry of the Environment	1,342,000	1,342,000	1,342,000
Hyogo Prefecture	322,000	322,000	322,000
USA NSF/USGCRP	480,000	480,000	480,000
New Zealand Ministry for the Environment	0	0	14,000
Republic of Korea Mministry of Environment	10,000	10,000	10,000
<b>Total Resources Available<sup>1)</sup></b>	<b>2,199,000</b>	<b>2,199,000</b>	<b>2,246,000</b>
<b><i>Use of Resources</i></b>			
<b>Science, Policy, Institutional Activities</b>			
ARCP	720,000	720,000	720,000
CAPaBLE CRP	180,000	180,000	180,000
CAPaBLE CBA	305,000	305,000	330,000
CAPaBLE SCBCIA	150,000	150,000	150,000
Climate Synthesis	9,000	9,000	50,000
UNCSD and PWTW	17,500	18,000	20,000
SBSTA	4,000	4,000	10,000
Hyogo Activities	49,000	48,000	50,000
Sub-Regional Cooperation	20,500	20,000	25,000
IGM/SPG and SC Meetings <sup>2)</sup>	103,000	105,000	100,000
Posts (Science, Policy, Institutional)	312,000	312,000	290,000
Programme Fellowship	35,000	35,000	55,000
Travel <sup>3)</sup>	31,000	29,000	35,000
Publication & Website	32,000	31,000	32,000
Reserve	0	0	14,000
<b>Sub Total Science, Polisy, Institutional Activities<sup>4)</sup></b>	<b>1,968,000</b>	<b>1,966,000</b>	<b>2,061,000</b>

<b>Administrative/Operative Costs</b>			
Posts (Administration)	57,000	58,000	65,000
General operational costs, including supplies materials and equipment	71,000	71,000	80,000
<b>Sub Total Administrative/Operative Costs<sup>5)</sup></b>	<b>128,000</b>	<b>129,000</b>	<b>145,000</b>
<b>Reimbursement for Services</b>			
IGES Overhead (3% of MOEJ contribution) <sup>6)</sup>	40,000	40,000	40,000
<b>Sub Total Reimbursement for Services</b>	<b>40,000</b>	<b>40,000</b>	<b>40,000</b>
<b>Total Use of Resources<sup>7)</sup></b>	<b>2,136,000</b>	<b>2,135,000</b>	<b>2,246,000</b>
Unspent Resources (Resources Available Total - Total Use of Resources) <sup>8)</sup>	63,000	64,000	
Savings through Exchange Rate Fluctuations <sup>9)</sup>	47,000	47,000	
Returned Funds from NSF/USGCRP 2006-2009 Grant <sup>10)</sup>	77,000	77,000	
<b>Total Operative Assets to be carried over to FY 2010<sup>11)</sup></b>	<b>187,000</b>	<b>188,000</b>	

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

FY 2009

US\$ 1 = Japanese Yen 100

NZ\$ 1 = US\$ 0.55

#### **Additional Contributions:**

Co-Funding/Fund Matching from APN Funded Projects/Activities: **US\$ 600,000**

In-Kind Contributions from APN Funded Projects/Activities: **US\$ 350,000**

In-Kind Contributions of Member Country Governments, including Hyogo Prefecture: **US\$ 530,000**

International START Secretariat: **US\$ 20,000**

NSF: **US\$ 2,600**

**Total: more than US\$ 1,500,000**

*Related to 15th IGM/SPG Meeting:*

China: **US\$ 400 (for Dr. Dong's airfare)**

India: **US\$ 450 (for Dr. Goswami's airfare)**

Ministry of Environment, Republic of Korea

APEC Climate Center (APCC), Busan, Republic of Korea



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

	Interim Financial Report FY 2010	Approved Budget FY 2010
<b><u>Resources Available</u></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 NSF/USGCRP	560,000	560,000
New Zealand Ministry for the Environment <sup>1)</sup>	18,000	18,000
Republic of Korea Mministry of Environment	30,000	30,000
<b>Total Resources Available<sup>1)</sup></b>	<b>3,276,000</b>	<b>3,277,000</b>

<b><u>Use of Resources</u></b>		
<b>Science, Policy, Institutional Activities</b>		
ARCP <sup>2)</sup>	875,000	875,000
CAPaBLE <sup>3)</sup> CRP	120,000	120,000
CAPaBLE CBA	490,000	490,000
Ecosystems, Biodiversity, Land Use <sup>4)</sup>		
- 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 <sup>5)</sup>		
- Call for Proposals	215,000	215,000
- Scoping WS/International Symposium	0	50,000
Climate Synthesis <sup>6)</sup>	30,000	80,000

Proposal Development Training Workshop <sup>7)</sup>	20,000	20,000
UNFCCC SBSTA <sup>8)</sup>	18,000	10,000
Other International Fora and Activities <sup>9)</sup>	33,000	44,000
Hyogo Activities <sup>10)</sup>	32,000	50,000
Sub-Regional Cooperation <sup>11)</sup>	40,000	40,000
IGM/SPG and SC Meetings <sup>12)</sup>	118,000	110,000
Posts (Science, Policy, Institutional) <sup>13)</sup>	335,000	330,000
Programme Fellowship <sup>14)</sup>	55,000	54,000
Travel <sup>15)</sup>	44,000	50,000
Publication & Website <sup>16)</sup>	41,000	40,000
Reserve <sup>17)</sup>	0	38,000
<b>Sub Total Science, Polisy, Institutional Activities<sup>18)</sup></b>	<b>2,859,500</b>	<b>3,066,000</b>
<b>Administrative/Operative Costs</b>		
Posts (Administration) <sup>19)</sup>	49,500	67,000
General operational costs, including supplies and equipment <sup>20)</sup>	70,000	80,000
<b>Sub Total Administrative Costs<sup>21)</sup></b>	<b>119,500</b>	<b>147,000</b>
<b>Reimbursement for Services</b>		
IGES Overhead (3% of MOEJ contribution) <sup>22)</sup>	64,000	64,000
<b>Sub Total Reimbursement for Services</b>	<b>64,000</b>	<b>64,000</b>
<b>Total Use of Resources<sup>23)</sup></b>	<b>3,043,000</b>	<b>3,277,000</b>
Resources Available Total - Total Use of Resources	233,000	
<b>Total Operative Assets to be rolled over to FY 2011<sup>24)</sup></b>	<b>233,000</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

**Additional Contributions:**

Co-funding/fund aatching and in-kind contribution by APN funded projects/activities: **almost US\$ 2,780,000**

In-kind contributions from Member Country Governments, including Hyogo Prefecture: **US\$ 550,000**

International START Secretariat: **US\$ 20,000**

**Total: more than US\$ 3,350,000**

**Ministry of Environment, Government of Sri Lanka:**

- 1) Direct contributions by organising the meeting bags, study tour, reception dinner, etc.
- 2) Tremendous logistical support provided by colleagues from ARM & IR Division, MOE Sri Lanka

## Proposed Budget Plan Fiscal Year 2011 (01 April 2011-31 March 2012)

		Proposed Budget FY 2011	Approved Budget FY 2010	Changes 2011 vs 2010		Interim Financial Report FY 2010
				US\$	%	
<b><i>Resources Available</i></b>						
Operative Assets from Previous Fiscal Year <sup>1)</sup>		233,000	188,000	45,000	23.94	187,000
Japan	Ministry of the Environment <sup>2)</sup>	2,394,000	2,142,000	252,000	11.76	2,142,000
	Hyogo Prefecture <sup>3)</sup>	334,000	339,000	-5,000	-1.47	339,000
USA	NSF/USGCRP <sup>4)</sup>	600,000	560,000	40,000	7.14	560,000
New Zealand	Ministry for the Environment <sup>5)</sup>	18,000	18,000	0	0.00	18,000
Republic of Korea	Ministry of Environment <sup>6)</sup>	40,000	30,000	10,000	33.33	30,000
<b>Total Resources Available<sup>7)</sup></b>		<b>3,619,000</b>	<b>3,277,000</b>	<b>342,000</b>	<b>10.44</b>	<b>3,276,000</b>

<b><i>Use of Resources</i></b>					
<b>Science, Policy, Institutional Activities</b>					
ARCP <sup>8)</sup>	1,240,000	875,000	365,000	41.71	875,000
CAPaBLE CRP <sup>9)</sup>	198,000	120,000	78,000	65.00	120,000
CAPaBLE CBA <sup>10)</sup>	718,000	490,000	228,000	46.53	490,000
Ecosystems, Biodiversity and Land-Use:					
- Call for Proposals	0	360,000	-360,000	-100.00	360,000
- Scoping Workshop	0	60,000	-60,000	-100.00	33,500
- Kobe-Oxford Symposium <sup>11)</sup>	50,000	30,000	20,000	66.67	0
Resources Utilisation and Pathways for Sustainable Development:					
- Call for Proposals	0	215,000	-215,000	-100.00	215,000
- Scoping Workshop/International Symposium <sup>12)</sup>	50,000	50,000	0	0.00	0
Climate Synthesis <sup>13)</sup>	70,000	80,000	-10,000	-12.50	30,000
Proposal Development Training WS <sup>14)</sup>	50,000	20,000	30,000	150.00	20,000
UNFCCC SBSTA <sup>15)</sup>	30,000	10,000	20,000	200.00	18,000

Other International Fora and Activities	0	44,000	-44,000	-100.00	33,000
Biodiversity Framework <sup>16)</sup>	40,000	--	40,000	--	--
Science-Policy Dialogue <sup>17)</sup>	90,000	--	90,000	--	--
Planet Under Pressure <sup>18)</sup>	100,000	--	100,000	--	
Hyogo Activities <sup>19)</sup>	105,000	50,000	55,000	110.00	32,000
Rio +20 (Earth Summit 2012) <sup>20)</sup>	40,000	--	50,000	--	--
Sub-Regional Cooperation <sup>21)</sup>	80,000	40,000	40,000	200.00	40,000
IGM/SPG and SC Meetings <sup>22)</sup>	110,000	110,000	0	0.00	118,000
Posts (Science, Policy, Institutional) <sup>23)</sup>	256,000	330,000	-74,000	-22.42	335,000
Programme Fellowship <sup>24)</sup>	61,000	54,000	7,000	12.96	55,000
Travel <sup>25)</sup>	60,000	50,000	10,000	20.00	44,000
Publication & Website <sup>26)</sup>	40,000	40,000	0	0.00	41,000
Reserve <sup>27)</sup>	34,000	38,000	-4,000	-10.53	0
<b>Sub Total Science, Policy, Institutional Activities<sup>28)</sup></b>	<b>3,422,000</b>	<b>3,066,000</b>	<b>356,000</b>	<b>11.61</b>	<b>2,859,500</b>
<b>Administrative/Operative Costs</b>					
Posts (Administration) <sup>29)</sup>	55,000	67,000	-12,000	-17.91	49,500
General Operational Costs, including Supplies Materials and Equipment <sup>30)</sup>	70,000	80,000	-10,000	0.00	70,000
<b>Sub Total Administrative/Operative Costs<sup>31)</sup></b>	<b>125,000</b>	<b>147,000</b>	<b>-22,000</b>	<b>-14.97</b>	<b>119,500</b>
<b>Reimbursement for Services</b>					
IGES Overhead (3% of MOEJ contribution) <sup>32)</sup>	72,000	64,000	8,000	12.50	64,000
<b>Sub Total Reimbursement for Services</b>	<b>72,000</b>	<b>64,000</b>	<b>8,000</b>	<b>12.50</b>	<b>64,000</b>
<b>Total Use of Resources<sup>33)</sup></b>	<b>3,619,000</b>	<b>3,277,000</b>	<b>342,000</b>	<b>10.44</b>	<b>3,043,000</b>

All figures are shown in US\$.

Exchange Rates Applied:

**FY 2010:** US\$ 1 = Yen 95  
 NZ\$ 1 = US\$ 0.72

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

# Background on SRC Activities

## *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.*

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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**

#### 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.

#### 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 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 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.

#### 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.

#### 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).

#### 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.

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.

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.

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

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 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

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.

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. 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.

## Parallel Session: Sub-Regional Cooperation

This paper provides procedure for the Parallel Session.

### Procedure for Parallel Session

The South Asia (SA) and Southeast Asia (SEA) Sub-Regional Committee (SRCom) members will group into their respective sub-regions to discuss the issues of mutual importance and brainstorm on the way forward. A draft agenda, together with all necessary documents, will be provided by the Secretariat to both sub-regional groups for their consideration.

Each sub-regional group should prepare a summary of the discussion (WORD FILE) for submission to the Secretariat on the following day. Under Item 15 for SA-SRCom and Item 16 for SEA-SRCom on Day 3, a representative from each of the SA and SEA sub-regional committees will give a brief presentation/report (12-15 minutes) on the conclusion/outcomes of the discussion on Day 1 before opening the floor for further discussion. *The sub-regional committee representatives should hand their presentation and report to Secretariat members Lighier Coralde/Erdene Nyamjav by 13:00 pm on Day 2, 7 April 2011.*

During the 14<sup>th</sup> IGM/SPG Meeting in Kuala Lumpur, Malaysia, members from Temperate East Asia (TEA) countries decided that they are not yet ready to establish a SRCom at that time. Similarly, members from the Oceania and Pacific countries agreed on not formally organising a SRCom. Considering any developments in both sub-regions, they are given the opportunity to convene as well to discuss and decide whether they would like to establish SRCs for their respective sub-regions this time.

The following summaries and reports are appended to this paper for information of the members.

#### For SA-SRCom

- Chairperson's Summary of the 2<sup>nd</sup> SA-SRC Meeting
- Highlights of the Proposal Development Training Workshop (PDTW) and 2<sup>nd</sup> SA-SRC Meeting back-to-back with the Training Workshop on Downscaling of South Asia Climate Projections

#### For SEA-SRCom

- Chairperson's Summary of the 3<sup>rd</sup> SEA-SRC Meeting
- Highlights of the APN 3<sup>rd</sup> SEA-SRC Meeting and PDTW

#### For Oceania and the Pacific and TEA

- Reports from 14<sup>th</sup> IGM/SPG Meeting

Those who are not involved in SRC discussions are requested to engage in the informal networking session.

### Member countries for sub-regional groups

Oceania and the Pacific: Australia, Fiji, New Zealand, USA

Temperate East Asia: China, Japan, Mongolia, Republic of Korea, Russian Federation

South Asia: Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka

Southeast Asia: Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Viet Nam



# APN Climate Synthesis

## Background:

The current Climate Synthesis is the third APN synthesis activity. The two previous syntheses are on “Land-Use Cover Change: An Initial Synthesis (2003)” and “Global Change and Coastal Zone Management: A Synthesis Report (2004)” The latter synthesis resulted in a number of citations in the IPCC Fourth Assessment Report (AR4) as well as the publication of APN’s first book on “Integrated Coastal Zone Management” published by Springer in 2006.

The two-year Synthesis kicked-off at the APN Climate Synthesis Scoping Meeting held at the APN Secretariat in Kobe on 10-11 November 2009. The Meeting was attended by a number of reputable scientists in the region namely Dr. Lance Heath from the Climate Change Institute, The Australian National University; Prof. Kanayathu Koshy from Centre for Global Sustainability Studies Universiti Sains Malaysia; Dr. Michael Manton from School of Mathematical Sciences, Monash University; and Dr. James Salinger from School of Environment, University of Auckland.

## Goals:

The purpose of this activity is to undertake a synthesis and review of all APN supported projects in which climate is featured as a major theme. This will allow for the identification of knowledge gaps and help prioritize research goals and programmes relating to climate in the Asia-Pacific region as well as provide knowledge on climate issues for policy- decision-making.

## Deliverables:

The expected deliverables of this activity are:

- A synthesis report published in June 2011 (**IGM-SPG/16/11-Appendix1**).
- Published Journal Paper from the Synthesis Report by December 2011.
- A special edition journal publication academic book published in March-September 2012 (**IGM-SPG/16/11-Appendix2**).
- Citations in IPCC-AR5

*Publications are timed so that we can maximize opportunities for citations in Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5). The results of the synthesis are also expected to be cited in the IPCC-AR5. This APN activity is part of its stronger effort to contribute, from the science perspective, to the development of policy options for appropriate responses to global change that will also contribute to sustainable development.*

## Summary of Activities to Date & Timeline:

A Summary of activities to Date and Timeline for future activities is outlined in **IGM-SPG/16/11-Appendix3**

## APN Focused Activities: SCBCIA, EBLU and RUSD

This paper provides background information on APN funded Focused Activities, namely: the Scientific Capacity Building for Climate Impact and Vulnerability Assessments (SCBCIA), the Ecosystems, Biodiversity and Land Use (EBLU) and the Resources Utilisation and Pathways for Sustainable Development (RUSD).

### SCBCIA

In order to assist in improving the scientific capacity to be able to conduct crucial impact and vulnerability assessments and to support informed decisions on how best to reduce the risks associated with climate change in developing countries of the region, the APN launched a special call for proposals for a focused activity: Scientific Capacity Building for Climate Change Impact and Vulnerability Assessments (SCBCIA) in the fiscal year running from April 2009 to March 2010. With additional contribution from the Ministry of the Environment, Japan, the SCBCIA funding was approved by the 14th APN IGM/SPG Meeting in Kuala Lumpur, Malaysia.

Following the launch of a special call for proposals for focused activities, APN Secretariat received 82 Letters of Intent. In consultation with the APN SPG-SC and CDC and endorsement by APN Steering Committee, APN selected seven (7) projects for funding according to the funds available. Currently the SCBCIA projects are already providing results of their activities. Four projects have successfully completed and three projects are implementing their activities under no-cost extension. A scientific article and project updates produced from SCBCIA activities are featured in the new **APN Science Bulletin** published in March 2011.

### EBLU and RUSD

In celebrating the completion of the APN's Second Strategic Phase and moving dynamically into its Third Strategic Phase, the new special focused activities are launched under two of the four new scientific themes highlighted in the Third Strategic Plan (3SP) as follows:

1. Theme 2: Ecosystems, Biodiversity and Land Use (EBLU)  
*Key focus areas: Forestry and REDD-Plus*
2. Theme 4: Resources Utilization and Pathways for Sustainable Development (RUSD).  
*Key focus areas: Global change implications of efficient resources utilisation and action to establish international sound material cycle society*

The new focussed activities of EBLU and RUSD were approved at the 15th APN IGM/SPG Meeting in Busan, Republic of Korea in March 2010 with financial contributions from The Ministry of the Environment Japan (MOEJ).

Following a launch of two special calls for proposals in April 2010, forty-four (44) Expressions of Interest (EOI) for EBLU and thirty-one (31) for RUSD were submitted to the APN Secretariat. In consultation with the APN SPG-SC and CDC and endorsement by APN Steering Committee, APN selected seven (7) projects for funding according to the funds available.

Five (5) projects were selected for EBLU and two (2) for RUSD. New focussed activity projects began their activities late 2010 and early 2011. A list of the selected projects is attached herewith.

## SCBCIA Project Summary Sheet

Project Reference Number	Project Title	Project Leader, Institution and Country	Email	Summary of Project	Project Duration and Budget Details			Status
					Duration	APN awarded grant	In-Kind Contributions	
CIA2009-01-Snidvongs	Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities.	Anond Snidvongs, SEA START Regional Center, Chulalongkorn University, Thailand	<a href="mailto:anond@start.or.th">anond@start.or.th</a>	<b>REGIONAL (Pan Asia):</b> The proposed activity will strengthen capacity in Asian coastal cities on the part of researchers and representatives from urban planning and development agencies, as well as operational climate and disaster planning agencies to cope with future climate impacts and vulnerabilities to change. This addresses directly the concerns of the SCBCIA that capacity be increased for informed decision-making regarding climate change impacts and vulnerabilities. The workshop would involve teams from selected Asian coastal cities, each team to be made up of a minimum of one university researcher and one or more officials or practitioners from urban planning, development, and hydro-meteorology and disaster management agencies.	1 year	\$45,000.00	Matching in-kind value US\$43,000 vis travel and salary	completed
CIA2009-02-Pulhin	Capacity Development on Integration of Science and Local Knowledge for Climate Change Impacts and Vulnerability Assessments	Dr. JUAN M. PULHIN, Professor and UP Scientist II Department of Forestry and Forest Governance, College of Forestry and Natural Resource, University of the Philippines Los Baños, Philippines	<a href="mailto:jmpulhin@uplb.edu.ph">jmpulhin@uplb.edu.ph</a> <a href="mailto:jpulhin@yahoo.com">jpulhin@yahoo.com</a>	<b>NATIONAL</b> (with expertise from Asutralia) The project proposal aims to build the capacity of local government officials and researchers, and the provincial government of Albay, in the Philippines, as a whole, in assessing the impacts of and their vulnerability to climate change with the use of computer model system and complimented by the local knowledge of the people in the province. It will serve as a pilot site for the assessment of climate impacts and vulnerability using the SimCLIM, which is a computer model system for examining the effects of climate variability and change over time and space and is designed as well to support decision-making and climate proofing.	1 year	\$38,000.00	0	no-cost extension until 14 June 2011

CIA2009-03-Lun	Climate Change in the Eastern Himalayas: Advancing Community-Based Scientific Capacity to Support Climate Change Adaptation	Dr. Yin Lun, Centre for Tibetan Regional Sustainable Development, Yunan Academy of Social Sciences, CHINA	<a href="mailto:lun.yin@gmail.com">lun.yin@gmail.com</a>	<b>NATIONAL</b> (Localised/Tibet) Proposed project aims to assist Aspiring Scientists, Local Governments and Indigenous Peoples in three townships in the Diqing Tibetan Autonomous Prefecture in Yunnan, China to better understand their vulnerability to climate change and prepare to adapt to potential impacts, through scientific capacity building in vulnerability assessment. Furthermore, the qualitative and quantitative information gained through this process will assist the international community to have a greater information base and understanding of the vulnerabilities and adaptation options available and understood by Indigenous People in East Himalayas. Through the involvement of multistakeholders, this capacity building will involve the participation of not only Indigenous Peoples, Government, and aspiring scientists, but research institutions, NGOs and international organizations, and will seek to reconcile new scientific methods with Indigenous Knowledge and practices.	1 Year	\$28,500.00	approx. US\$30,000	no-cost extension until 20 July 2011
CIA2009-04-Gaol	Increasing Capacity of Local Scientists for Climate Change Impact & Vulnerability Assessments on Indonesia Archipelagos: Training In-Situ/Satellite Sea Level Measurement	Dr. Jonson Lumban Gaol, Department of Marine Science and Technology, Bogor Agricultural University, Indonesia	<a href="mailto:jonsonrt@yahoo.com">jonsonrt@yahoo.com</a>	<b>NATIONAL</b> (with US expertise): Ministry of Fisheries and Marine Affairs of Indonesia predicted that more than 2000 islands will be lost due to the sea level rise (SLR) impact. Sea level rise is one of the impacts of global warming and will cause inundation of many small islands in Indonesia. Indonesia has thousands of small islands and these islands will be affected from sea level rise evidence. Therefore, monitoring of SLR in Indonesian waters is very important for assessing the impact and vulnerability of climate change. Meanwhile, scientists in Marine Science and Technology field in Indonesia are very limited and lack of knowledge and experience specifically in measurement of sea level from in situ and satellite.	1 year	\$28,500.00	US\$10,000 cash; US\$10,500 in-kind	completed
CIA2009-05-Jitpraphai	Developing Research Capacity on Assessing Community Livelihood Vulnerability to Climate Change Impacts in Central Vietnam and Mekong River Delta	Dr. Somrudee Jitpraphai Southeast Asia START Regional Center (SEA START RC), Thailand	<a href="mailto:somrudee@yahoo.com">somrudee@yahoo.com</a>	<b>NATIONAL</b> (with Thailand providing expertise). This project proposed to develop research capacity in Vietnam, which will be based on experience of SEA START RC on climate change study in the Southeast Asia region. Activity would include training on local climate change risk assessment through the analysis of regional climate scenarios and to apply relevant data extracted from climate scenarios on climate change impacts analysis. Moreover, process and procedure to assess community risk and vulnerability to climate change will be customized to fit local context. This capacity building will be conducted through training and workshop exercise.	1 year	\$28,500.00	0	completed

CIA2009-06-Duc	Capacity Development for Adaptation to Climate Change in the Rural Coastal Zone of Vietnam	Dr.DO MINH DUC, Faculty of Geology, Hanoi University of science, Vietnam	<a href="mailto:ducdm@vnu.edu.vn">ducdm@vnu.edu.vn</a>	<b>NATIONAL</b> (with Japan as expert). The study relates directly to the Governmental Action Plan Framework for Adaptation and Mitigation of Climate Change in the Agriculture and Rural Development Sector Period 2008-2020 and the “National Target Program (NTP) to Response to the Climate Change” of Vietnam which was signed by the Prime Minister in December 2008. The NTP shows the priority to research and assess the impacts of climate change, especially sea level rise to the coastal zone. The courses and workshop of the project can help to get the goal of the NTP till 2010 which is to have more than 10% of population and 65% of staffs knowing basics and impacts of climate change. The adaptive measures referring from pilot study can also be useful for landuse planning and socio-economic development in the region.	1 year	\$28,500.00	0	completed
CIA2009-07-Lotia	Capacity Development of the Scientific Community for Assessing the Health Impacts of Climate Change	Hina Lotia, Ms General Manager, Programme Development Department, Leadership for Environment and Development (LEAD), Pakistan	<a href="mailto:hlotia@lead.org.pk">hlotia@lead.org.pk</a>	<b>NATIONAL</b> (with input from Malaysia). APN has always recognized that countries especially those in the developing world lack the scientific capacity required to undertake vulnerability assessments so as to make informed decisions on how best to reduce the risks associated with climate change. In line with the given philosophy, the present project will be undertaking capacity-building activities to improve the ability of those from Pakistan’s health related scientific community to interpret the information available about climate change and to understand climate related risks and vulnerabilities to human health. This will in turn enable these experts to conduct much-needed vulnerability and impact assessments in the said area, which will form the basis for planning on appropriate adaptation strategies.	1 year	\$33,000.00	In-kind matching to approx. US\$75,00	no-cost extension until 18 June 2011

## 2010 Focussed Activity: Ecosystems, Biodiversity and Land Use (EBLU), Focus: Forestry and REDD+

Project Reference Number	Project Title	Project Leader, Institution and Country	Email	Regional Collaboration Countries Involved	Summary of Project	Project Duration and Budget					
						Duration	Year 1	Year 2	Year 3	Total	In-kind and/or financial contribution
<b>EBLU2010-01NSY(R)-Suneetha</b>	Evaluation of Trade-offs between conservation and development- Case of land use change in Malaysia and Indonesia	Dr. M.S. Suneetha, United Nations University, Institute for Advanced Studies, Yokohama, <b>JAPAN</b>	<a href="mailto:Subramanian@ias.unu.edu">Subramanian@ias.unu.edu</a>	Malaysia, Indonesia, Japan	Carbon-dioxide emissions due to deforestation and forest degradation are linked to increasing drought, destructive floods, and sea level rise. Activities to reduce such emissions therefore provide a compelling justification for their inclusion in international environmental policy. This research focuses on land change from forestry to large-scale plantations in Malaysia and Indonesia, mega-biodiversity hotspots of Southeast Asia. Impacts of plantation types on biodiversity and carbon flux are assessed as well as the role of large-scale agricultural plantations on rural livelihood and the global economy. Trade-offs in conservation and economic development priorities within the context of REDD is evaluated.	1 year	37000	0		<b>37000</b>	42,000
<b>EBLU2010-02NMY(R)Takeuchi</b>	Critical analysis of effectiveness of REDD+ for forest communities and shifting cultivation based on lessons learnt from conservation efforts in Laos and Thailand	Kazuhiko Takeuchi, Director United Nations University Institute for Sustainability and Peace, <b>JAPAN</b>	<a href="mailto:Takeuchi@unu.edu">Takeuchi@unu.edu</a>	Japan, Thailand, Lao PDR	The research will assess the potential social and economic impacts of REDD+ on local and indigenous forest communities. It will analyze the unintended effects of policy-driven land use change under the name of forest conservation, focusing on areas where land rights are uncertain or state-owned. Lessons will be drawn from forest conservation policies studied by the UNU project on Sustainable Land Management in mountainous region of mainland Southeast Asia (SLM-MMSEA) – an area where REDD+ has not yet been tried.	3 years	44000	38000	38000	<b>120000</b>	\$60,000

<b>EBLU2010-03NMY(R)Scheyvens</b>	Participatory Approaches to Forest Carbon Accounting to Mitigate Climate Change, Conserve Biodiversity, and Promote Sustainable Development	Dr. Henry Scheyvens Natural Resources Management Project, Institute for Global Environmental Strategies (IGES) <b>JAPAN</b>	<a href="mailto:scheyvens@iges.or.jp">scheyvens@iges.or.jp</a>	Japan, Indonesia, Cambodia, Laos	The proposed activity is to develop, test and disseminate the outcomes of participatory approaches to involve forest-dependent communities in forest carbon stock estimation and monitoring, and other aspects of forest management, to achieve real, long-term emissions reductions, biodiversity conservation and sustainable development outcomes, including livelihood creation. At the action research sites, the Proponent and Collaborators will work with the local communities to establish permanent sample plots reflecting IPCC Good Practice Guidance (GPG), and to gather data on basic forest parameters from these plots to enable accurate estimation and monitoring of forest carbon.	3 years	42000	39000	39000	120000	\$97,500
<b>EBLU2010-04NMY(C)-Skole</b>	Developing an MRV system for REDD+: Scaling up from project level to a national level REDD + MRV systems for Laos and Vietnam	Dr. David L. Skole, Michigan State University <b>U.S.A</b>	<a href="mailto:skole@msu.edu">skole@msu.edu</a>	U.S.A, Lao PDR, Viet Nam	The project will emphasize 1) training and capacity building in basic concepts of REDD, REDD+ and MRV systems, 2) development and testing of scalable MRV methods based on current IPCC guidelines using remote sensing satellite data and geospatial technologies, and 3) technology transfer of national level MRV systems for REDD+.	2 years	32000	33000		65000	\$31,000
<b>EBLU2010-05NMY(C)-Haruyama</b>	Capacity Building of ALOS satellite data to support Mapping and Monitoring Deforestation and Degradation in Indonesia	Mr. Yukio Haruyama Remote Sensing Technology Center of Japan (RESTEC), <b>JAPAN</b>	<a href="mailto:haruyama_yukio@restec.or.jp">haruyama_yukio@restec.or.jp</a>	Japan, Indonesia	Training in forest monitoring using remote sensing satellite data using Advanced Land Observing Satellite (ALOS). Capacity being developed in Indonesia.	2 years	23000	35000		58000	\$96,250

## 2010 Focussed Activity: Resource Utilisation and Pathways for Sustainable Development(RUSD), Focus: Efficient Resource Utilisation, and Sound Material Cycle Society

Project Reference Number	Title of Project	Project Leader, Institution and Country	Email	Regional Collaborati on Countries Involved	Summary of Project	Project Duration and Budget					
						Duration	Year 1	Year 2	Year 3	Total	In-kind and/or financial contribution
<b>RUSD2010-01NMY(R)-Surjan</b>	Advancing Locally Based Green Practices to realize establishment of Sound Material Cycle Society in Asian Cities	Dr. Akilesh Surjan United Nations University, <b>JAPAN</b>	<a href="mailto:surjan@unu.edu">surjan@unu.edu</a>	India, Vietnam, Indonesia and Japan	multi-country research will review urban expansion and economic growth vis-a-vis time-series analysis of life-styles to ascertain changing material flows in domestic and industrial sectors as well as prevailing reuse and recycle practices which may be considered as precursor to the ideas of establishing Sound Material Cycle Society. Further, field realities from the selected cities of India, Indonesia, Vietnam as well as Japan will be captured to arrest minuscule and oft-ignored dimensions of cyclicity of the materials at the household, community and city level. Multidisciplinary research team will also investigate associated looming urban environmental stresses and their interlinkages with urban material flows to focus attention on notions of integrated and synergistic application of scientific research in the society	3 years	45000	37000	38000	<b>120000</b>	\$49,440
<b>RUSD2010-02NMY(C)-Sun</b>	Assessment and Promotion of Japanese Strategies and Techniques for Biomass Use in Countryside of China -Concentrating on Agricultural Straw Residue	Dr. Hongwen Sun, College of Environmental Science and Engineering, Nankai University, <b>CHINA</b>	<a href="mailto:sunhongwen@nankai.edu.cn">sunhongwen@nankai.edu.cn</a> <a href="mailto:matsuda@irs.u-tokyo.ac.jp">matsuda@irs.u-tokyo.ac.jp</a>	Japan, China	The aim of this study is to promote the advanced experience in recycling and reusing the agricultural straw residue from Japan experience such as building 'Biomass Town' through transferring of scientific know-how and technology from developed country (Japan) to developing country (Chinese), and helping Chinese scientist to conduct initiative study on reusing agricultural straw. We will first understand current status of agricultural straw residue production, reusing and disposal pattern in a demonstrating area (the suburb of Tianjin) in China and make a comparison to the pattern of recycling and reusing the agricultural straw in Japan to find the gap in China. Then, we will assess the applicability of the agricultural straw recycling strategy and techniques of Japan in China countryside.	2 years	28000	27000		<b>55000</b>	\$50,000

EBLU 178,000 145,000 77,000 400,000  
RUSD 73,000 64,000 38,000 175,000



# SPG and CDC Activities

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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 programme. 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 presentations to the IGM.***

### 1. PROJECT MANAGEMENT

#### a. Projects

The APN is currently supporting a total of **35 new and continuing projects** of which *18 are under the Annual Regional Calls for Research Proposals (ARCP)* and *17 are under the CAPaBLE Programme* (2 comprehensive research projects and 15 capacity building projects). Summaries of these projects under the ARCP and CAPaBLE programmes are attached as *IGM-SPG/16/13-App.1* and *IGM-SPG/16/13-App.2*, respectively. The lists indicate also the amount of funding awarded to each project.

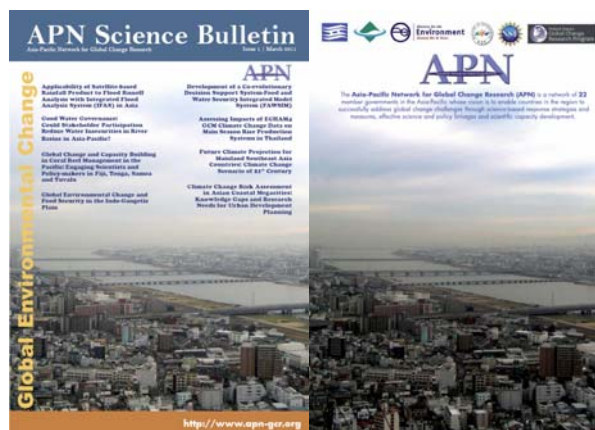
#### b. Management

- The APN projects Terms of Agreement (ToA) is further streamlined. Significant revisions/additions were made particularly on the Official Term of the Contract, Project/Activity Extension and Suspension and Termination of the Project Activity. Article XVII: Liability for Death, Injury or Damage was also added.
- Submission of reporting requirements are regularly followed-up and is consistent. However, the APN Secretariat is struggling with some issues on financial reports particularly those projects that did not submit the report on time despite repeated reminders, did not provide necessary and correct evidence of expenditures, lacking evidence, etc.
- 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.
- Concerning multi-year projects transferring from 1 year to another, the Secretariat has had to establish a new mechanism whereby there is no gap from one contractual period to another, while still allowing 12 months for each year of the project. To do this the APN has introduced automatic addendums at the end of Contractual years allowing for an additional 2-month extension (at no cost). This has its problems particularly in attempting to quickly close out project contracts before new contracts can begin.
- 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 2010-11 Activities*

### c. 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 has launched a new publication series: **APN Science Bulletin**.

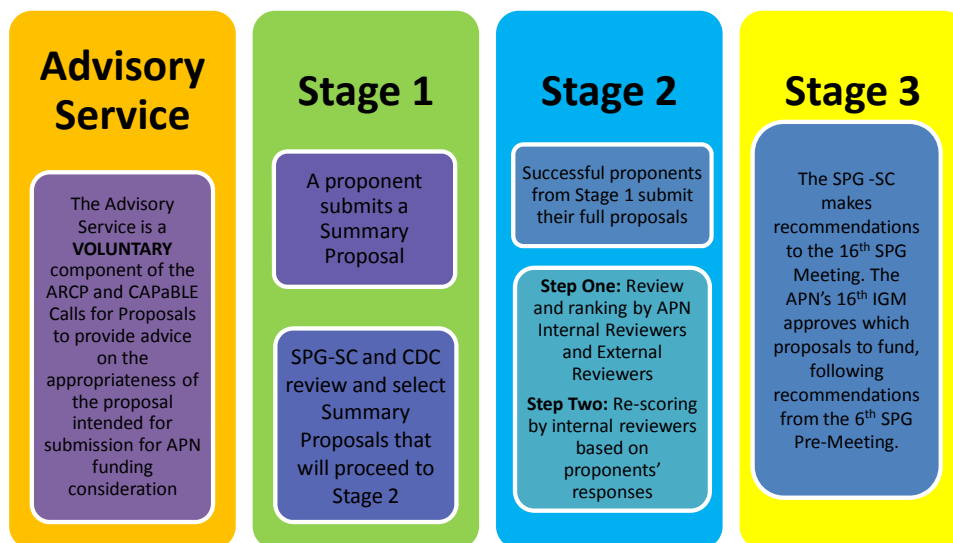
The APN Science Bulletin will publish annually and highlights all of the projects funded and completed by the APN in the year of publication (the present year running from April 2010 – March 2011). The Science Bulletin has four main sections: 1) Featured Articles; 2) Regional Research Projects funded 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.



In this **first issue of the APN Science Bulletin**, March 2011; all activities that were funded and undertaken since April 2010 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 from looking at high-resolution regional climate models for food security in Southeast Asia to developing scientific capacity of for Coral Reef Management in the South Pacific. Sections 2 and 3 look at the work conducted under the APN's two main pillars of activities; the ARCP and CAPaBLE programmes, respectively. Section 4 highlights projects funded through a special focussed activity undertaken from 2009-2010 on Climate Impact and Vulnerability Assessments.

## 2. ANNUAL CALLS FOR PROPOSALS PROCESS

- a. Following the 15<sup>th</sup> APN IGM/SPG Meeting in March 2010, the APN Secretariat implemented the 2010 Annual Calls for Proposals for ARCP and CAPaBLE Programmes. The Annual Calls for Proposals was officially launched on 14<sup>th</sup> May 2010. Please refer to Figure 1 for information, especially for new members of APN, on the general procedure 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 30 July 2010). 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 18<sup>th</sup> September 2010, and only those proponents that pass 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 **Tuesday 12 October 2010**.

**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: October 2010 – December 2010***). 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 16<sup>th</sup> IGM/SPG Meeting approves which proposals to fund, following recommendations from the SPG (***April 2011***). The Secretariat informs proponents of the final decision in April 2011.

**b. Report on the Implementation of the Calls for Proposals*****Advisory Service (Voluntary)***

The APN Secretariat received 62 Letters of Intent on 11<sup>th</sup> June 2010. 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> June 2010, to give proponents who are advised to submit a Stage 1 Summary Proposal a full month to prepare it.

***Proposals Submission and Review Process (Compulsory)***

Under ARCP Programme, 29 summary proposals were received by the APN Secretariat, following review by the SPG-SC, 19 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 19 of the 16<sup>th</sup> IGM/SPG Meeting agenda. Please also refer to IGM-SPG/16/19-App.2a under Item 19 in your folders for a summary spreadsheet of the 19 full proposals.

Furthermore, the APN Secretariat received 31 summary proposals under the CAPaBLE Programme, 30 of which have been considered by the Secretariat to have met the basic eligibility criteria for submission. Following review by the CDC, 18 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 19 of the 16<sup>th</sup> IGM/SPG Meeting agenda. Please also refer to IGM-SPG/16/19-App.2b under Item 19 in your folders for a summary spreadsheet of the 19 full proposals.

This year, **the review process has been further mainstreamed** following the 16<sup>th</sup> Steering Committee (SC) Meeting recommendation that those proposals at Stage Two-Step Two with clearly high scores not be re-reviewed (although proponents were still asked to respond to reviewer comments). Thus, only “borderline” proposals were rescored at Step 2. The responses from all proponents, however, are made available for the SPG-SC meeting prior to the SPG Pre-Meeting.

All 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 “borderline” or “cut-off line” for funding from the APN. As of December 2010, the APN has 135 external reviewers in its External Mail Review System.

Please refer to appendix IGM-SPG/16/13-App.3 for supplemental information related to 2010 Proposals and Projects.

### **General Observations**

- There was no major problem encountered in the launching of Calls for Proposals. Assistance was also obtained from partner organisations in distributing the announcement to a wider audience.
- The addition of a Special Call for Proposals for Focussed Activities in APN’s scientific activities required the same level of preparation to Annual Calls hence, deadlines for the latter had to be set earlier and the Secretariat had to work on a fairly tight schedule to implement this and ensure that there is no large overlap/conflict with the schedule of Two Calls. Similarly, the SPG-SC and CDC worked harder to ensure that the necessary outputs will be delivered as scheduled.
- Common mistakes of proponents:
  - Submission to the wrong email addresses (e.g., email accounts of Secretariat staff or the APN info account)
  - Proposals exceeding the page limit

It might be a good idea to highlight these common mistakes by proponents in the next announcement of the Calls for proposals and encourage them to read the guidelines thoroughly including the Frequently Asked Questions (FAQs). This will significantly reduce the exchange of communication between the Secretariat and the proponents, which would also help ease the workload for both concerned.

- Common mistakes/grievances in the review process:
  - Not understanding that external institutions (from non APN member countries) can be involved in APN activities (with due consideration of funding options)
  - Not understanding that equipment may be purchased
  - Not understanding that part-time salaries can be covered
  - Not providing comments to back up scores
  - Not using the whole range of scoring
  - System for proposal reviewing is becoming too complicated (do we need the second stage and rescoring system for example).
  - There are too many review processes and insufficient number of reviewers – workload is too heavy. Secretariat is attempting to broaden its pre-screening process in order to make the burden easier.

The APN Secretariat will be communicating with the CDC and SPG regards the criteria for funding in the proposals process, criteria for successful capacity development and successful sustainability, etc. in the year ahead with the view of introducing a new set of criteria that is easily understandable by both proponents and reviewers. This will also include Data Policy and Conflict of Interest Policy revisions.

### 3. OTHER ACTIVITIES

*Conducted at the SPG Pre-Meeting on 5<sup>th</sup> April and reported to the 16<sup>th</sup> IGM on Day 2*

#### a. Science Agenda and the Operating Plan

Report on Operating Plan for 3<sup>rd</sup> Strategic Phase (3SP) and short, medium to long-term action and discussion on ARCP programme and project timelines. (The draft operating plan was discussed under Item 4 of the 16<sup>th</sup> IGM/SPG Meeting Agenda.)

#### b. APN Climate Synthesis

Report on the main highlights of work to date on the two-year synthesis on *APN and Climate Change: Perspectives from Asia and the Pacific*. More information on this item will be reported under Item 11 of the 16<sup>th</sup> IGM/SPG Meeting Agenda.

#### c. APN Institutional Policies

- Review of APN's Institutional Policy on Data Sharing & Management

This process has allowed for the culmination of a robust draft policy formulated with the full cooperation and input from the APN's SPG members and national Focal Points. The draft policy will be presented to the IGM/SPG Meeting under Item 14 for endorsement.

- Review of APN's Conflict of Interest Policy

A similar process with APN's Institutional Policy on Data Sharing & Management was taken to revise the current policy. A revised draft policy is to be presented to the IGM under Item 14 for endorsement.

#### d. SPG Membership and Election of Co-Chairs

*The new SPG-SC members will be announced during the 16<sup>th</sup> IGM under Item 13*

##### Current SPG-SC Members

##### SPG Co-Chairs

1. Erna Sri Adiningsih (SPG for Indonesia)
2. Luis Tupas (SPG for U.S.A.) – stepped down

##### Opt-in members

1. MD. Giashuddin Miah (SPG for Bangladesh)
2. Madan Lall Shrestha (SPG for Nepal)
3. Alexander Sterin (SPG for Russian Federation)

##### Election of the SPG-SC for 2011/12

##### One Co-Chair is to be elected for 2 years

*Dr. Erna Sri Adiningsih has served for two years and will step down*

*Dr. Luis Tupas will continue for another one-year term*

##### Two opt-in members are to be elected if one of the current SPG-SC Members will be elected as SPG Co-Chair

*Dr. Giashuddin Miah (opted in 2009) has served for two years and will step down*

### 4. SPG and CDC ACTIVITIES in 2011/12 and BEYOND

- Launch an Annual Call for Proposals for ARCP activities
- Launch an Annual Call for Proposals for Capacity Building activities
- Define successful scientific capacity building criteria
- Discuss, develop and implement the framework devised from the Biodiversity Gap Analysis
- Implement the 3-year Phase III of the comprehensive research element of the CAPaBLE programme

# APN Institutional Policy on Data Sharing & Data Management

*(New policy for approval by the IGM)*

The present paper is the final draft policy (***present Step 7***) for consideration by the 16<sup>th</sup> Inter-Governmental Meeting

## **Revised Timeline (Version 2) for Discussion and Data Policy Revision:**

### **Step 1: 30<sup>th</sup> July to 15<sup>th</sup> August 2010:**

Obtain responses/written statements from SPG members regards the policies, with results compiled for discussion at the 16<sup>th</sup> SC Meeting to be held 30<sup>th</sup> and 31<sup>st</sup> August.

### **Step 2: 30-31 August 2010:**

Consult the Steering Committee regards the policies and develop draft policies based on the current policies and responses from the SPG members

### **Step 3: November 2010:**

Discuss the policies during the SA and SEA Sub-regional Committee Meetings taking place in Pune, India and Manila, Philippines, respectively. Discussions on sub-regional perspectives for Oceania and Temperate East Asia will be facilitated by email.

### **Step 4: 12<sup>th</sup> November to 31<sup>st</sup> January (formerly 17<sup>th</sup> December):**

SPG Co-Chairs discuss and finalize the draft policies and distribute to the SC and SPG-SC for additional comments.

### **Step 5: Mid-February 2011**

Prepare revised draft policies based on Step 4 for circulation among the APN membership for comments, additional suggestions and revisions

### **Step 6: Mid-March 2011**

Finalize the draft policies

### **Step 7: April 2011**

Present the policies to the 17<sup>th</sup> SC for final feedback before seeking endorsement at the 16<sup>th</sup> IGM.

*The draft paper policy is outlined on pages 2 to 4 of the Present document.*

# APN Institutional Policy on Data Sharing & Data Management

## Introduction

During the Scientific Planning Group (SPG) Pre-Meeting held in Busan, Republic of Korea, in March 2010, the APN's policies on data were discussed with the aim of ensuring that a robust policy, or policies, would be devised for 16<sup>th</sup> IGM approval in April 2011. The SPG members were asked to read carefully the text outlined in APN's documentation relating to data generation and its management<sup>9</sup>, and provide responses for discussion at the 16<sup>th</sup> Steering Committee (SC) Meeting, which was held in Kobe, Japan 30-31 August 2010. Following this, comments from the SC were taken to the South Asia and Southeast Asia Sub-Regional Committee Meetings, held in Pune, India and Manila, Philippines, respectively, in November 2010. This process has allowed for the culmination of a robust draft policy, formulated with the full cooperation and input from the APN's SPG members and national Focal Points.

The APN Secretariat will implement the policies contained in the present document for dissemination and sharing of **APN-Funded Data** (for definition, refer to Section 1: 1-A) through the proposal review process, through award negotiations and conditions; and through appropriate support and incentives for data cleanup, documentation dissemination, documentation storage, etc.

## Section 1: General Policies on APN Data

As the APN becomes increasingly involved in the funding of projects that develop and deploy new observing systems that collect increasing amounts of data providing needed input to research, the APN aims to ensure that all data that is generated using APN funds is shared with the scientific and policy-making communities in a timely manner. The APN believes that significant results of the research it sponsors should be submitted promptly for publication to assure that the widest possible scientific community is able to benefit from this research. As a corollary to this policy, the APN considers that it is essential for scientists everywhere to be able to consider these results in the light of the data that has served as the basis for these results.

To this end, the present policy aims to encourage open access to and/or sharing of data and to strengthen data distribution (hubs, portals, etc.) and overcome, as far as possible, existing limitations on the availability of and access to data.

The present policy shall be implemented for all from April 15<sup>th</sup> 2011 and will be reviewed on a regular basis by the APN Scientific Planning Group (SPG).

### 1-A. Definition of APN-Funded DATA

**APN-Funded DATA** is defined as:

Data, datasets, data products that have been “collected/acquired and manipulated/processed,” and/or “generated” through a project, whether partially or fully funded by the APN. Data that is “collected” or “acquired” from another source is not considered, in itself, to be **APN-Funded DATA**.

### 1-B. Validation/Standardisation of APN-Funded DATA

The APN is very careful about the quality of data labelled **APN-Funded DATA** and how such data is portrayed and, while the APN recognises that there have been excellent efforts to generate data, data that is not validated may result in invalid conclusions. All Project Leaders have a responsibility to validate

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<sup>9</sup> **APN Terms of Agreement attached to Project Leader Contracts- Accessibility to Data:** When an APN-funded project/activity generates new data or datasets and/or collects existing data or datasets, the Project Leader must make the said data/datasets available to the APN within twelve (12) to twenty-four (24) months of project/activity completion in order that the APN can freely disseminate the said data/datasets.

**Criteria in the Annual Regional Call for Research Proposals (ARCP): Criterion #10. Meeting standardised data collection and user needs, and open access to data and research sites:** In the interests of the greatest benefit in the shortest time for the greatest number of countries in the region, the best proposals will promote *better data collection, analysis and dissemination, open access to existing and new datasets, and access to research material and sites.*

and/or standardise **APN-Funded DATA** (as defined in SECTION 1-A), according to international standards. Written evidence of validation and/or standardisation must be lodged with the APN Secretariat, in accordance with the conditions outlined in the Contractual Agreement.

#### 1-C. Accessibility to and Management of APN-Funded DATA

**APN-Funded DATA** must be fully available to any party that seeks it for scientific research purposes. This should be understood as a process of “open access” in terms of **APN-Funded DATA** acquirement. While it is understood that there may be marginal costs incurred in the process of acquirement, the process itself should not be cumbersome.

The APN will maintain a database accessible via the APN website that provides basic information, in other words metadata, on how to access **APN-Funded DATA** from an APN project or activity. To facilitate this, all Project Leaders, as a condition of their grant, will complete a **standardised metadata form** that will allow the APN Secretariat to facilitate the access to and sharing of **APN-Funded DATA**. This form can be obtained from the APN Secretariat<sup>10</sup>.

Note the APN Secretariat will not be a data-centre or data-storage hub but, rather, will provide information via the APN website on how **APN-Funded DATA** can be acquired. This will be known as the **APN Metadata Portal**. If a Project Leader has any concerns about this, he/she should contact the appropriate Programme Officer at the APN Secretariat.

## Section 2: Proposal & Project Requirements

#### 2-A. APN Proposals and Proponent Requirements

In the interests of the greatest benefit in the shortest time for the greatest number of countries in the region, the best proposals will promote better data collection, generation, analysis and dissemination; and open access to **APN-Funded DATA** (as defined in SECTION 1-A) and access to research materials and sites.

The APN Proposal Submission Guidelines requires that a proposal sets forth a plan for preservation, documentation and sharing of data, samples, physical collections, curriculum materials and other related research, capacity building, training and education materials. Each such plan should identify the responsibilities in this respect of the Project Leader and of each Project Scientist who is expected to be involved in the collection of Project data. Plans for handling what will become **APN-Funded DATA** (as defined in SECTION 1-A), as well as other materials mentioned in the present paragraph, will be considered during the review process.

#### 2-B. APN-funded Projects and Project Leader Requirements

Before project initiation and funds remittance, Project Leaders, as a condition of their grant, will:

- i. Be responsible for meeting all legal requirements of the country or countries in which data is to be collected/acquired and/or generated.
- ii. Ensure that all clearances and necessary certification for the work to be undertaken is agreed **upon** in advance of implementing the activity to ensure there is no conflict with national data policies.
- iii. Ensure that, once **APN-Funded DATA** becomes available, there are no additional barriers to be overcome in order for the **APN-Funded DATA** to be openly available as outlined in SECTION 1-C.

Upon project completion, and before final portions of APN grants are remitted, Project Leaders, as a condition of their grant, will:

- iv. Validate and/or standardize **APN-Funded DATA** as defined in SECTION 1-A, according to international standards and provide written evidence of such validation and/or standardization to the APN Secretariat, in accordance with the conditions outlined in the Contractual Agreement.

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<sup>10</sup> And will, in due course, be available for completion online as part of the interactive features of the APN website



- v. Complete a **standardized metadata form** that will allow the APN Secretariat to facilitate the access to and sharing of **APN-Funded DATA** by sharing the information on the APN's Metadata Portal<sup>11</sup>.
- vi. Ensure that all **APN-Funded DATA** collected in conjunction with the Project is archived in a manner that will allow open access to the **APN-Funded DATA**, whether collected by the Project Leader, or by Project Scientists, even in a situation where the Project Leader or Project Scientist(s) no longer works at the Institution where the **APN-Funded DATA** was originally generated.

2-C. APN Institutional Policy on Data & Data Management: Non-Compliance

Failure of a Project Leader or Project Scientist(s) to comply with the requirements contained in the present document will result in the following penalties/actions by the APN:

- i. The APN Secretariat will notify the Project Leader and/or Project Scientist(s) of their non-compliance and will provide an opportunity for those so notified to explain the non-compliance and to present to the Secretariat a plan within two weeks for compliance to be achieved.
- ii. The Secretariat will evaluate the explanation and the plan; determine if these seem reasonable; and, if so, allow the Project Leader/Project Scientist (s) involved a reasonable amount of time to complete their compliance with the Policy.
- iii. If the Project Leader/Project Scientist(s) involved does not then comply with this revised plan in the time allocated by the Secretariat, the Secretariat will notify the Project Leader/Project Scientist(s) involved; the Grantee (the Lead Institution) and the Collaborating Institution(s) that they will be ineligible to receive APN funding for a period of three years or until they comply fully with the Policy.
- iv. If the Project Leader/Project Scientist(s) involved later complies with the Policy, the Secretariat may declare that the Institution(s) involved are once again eligible to apply for APN funding. However, the Secretariat should ensure that reviewers of future proposals from the Project Leader/Project Scientist(s) and Institution(s) involved are aware of their recent history regarding non-compliance with the APN Data Policy for a period of three years from the date of compliance.
- v. The Secretariat should copy the appropriate national Focal Points and SPG Members of any and all actions taken by Project Leaders/Project Scientists, their Institutions, and the Secretariat with regard to the above non-compliance issues and their follow-up.
- vi. If a second case of non-compliance (under SECTION 2-C.1) occurs in the same member (or approved) country, the Secretariat will bring this matter to the SPG with its recommendations as to whether the member (or approved) country should lose its eligibility for future APN funding for a period longer than three years.
- vii. If the SPG concludes that a country should be declared ineligible for future APN funding for a specific period or indefinitely and in accordance with 2-C.vi above, the SPG should present its recommendation(s) to the IGM for their final approval.

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<sup>11</sup> The APN Metadata Portal will be established as part of the Interactive APNIS Database on the APN website by September 2011.

# APN Conflict of Interest Policy for Proposal Review

*(New Conflict of Interest Policy for consideration by IGM)*

## History of Development and Revision:

- 2000: Original was endorsed by the 5<sup>th</sup> IGM
  - 2002: During the 7<sup>th</sup> IGM a revised Conflict of Interest policy was approved.
  - 2005: During the 10<sup>th</sup> IGM the Conflict Of Interest Policy was addressed, resulting in no changes.
  - 2010: During the 15<sup>th</sup> IGM the Conflict of Interest Policy was addressed, resulting in a strategy and timeline for revision with the aim of endorsing a new version at the 16<sup>th</sup> IGM, in 2011.
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## Introduction

It is incumbent on the APN to assure that the process that it applies to the review, evaluation and award of funds to institutions and their scientists is conducted on a completely fair and impartial basis without bias of any kind. To achieve this objective the APN takes all possible precautions to avoid the introduction of bias into this process.

The present Conflict of Interest Policy applies to the members and experts of the Scientific Planning Group (SPG), any additional reviewers whom the SPG members might involve in its review of proposals, SPG-approved reviewers from the APN external reviewer database, and members of the Inter-Governmental Meeting (IGM).

## Conflict of Interest Policy

Before reviewing proposals, the present document must be read carefully. Should any of Paragraphs 1 to 6 apply, reviewers **MUST** declare a Conflict of Interest. Furthermore, if “COI” is present in the reviewers’ area of the **Reviewer Matrix**, a conflict of interest has been noted and reviewers are asked not to review the proposal.

Paragraph 1: *Reviewers should not review, seek to review, or be seen to influence the review of their own proposals;*

Paragraph 2: *Reviewers should declare a conflict of interest if any of the following has applied:*

- They are a collaborator in the project or have collaborated directly with the proponent on a project within the past four years;*
- They have collaborated with the proponent on a book, article, report or paper within the past two years;*
- They are employed or are being considered for employment by the same organization or institution as the proponent, have a similar connection (e.g., board member or advisor of that organization or institution), or have derived or expect to derive any financial benefit from that organization or institution.*

Paragraph 3: *Reviewers who are members of an APN Sub-Regional Committee that has submitted a proposal to the APN must declare a conflict of interest under the provisions of Paragraphs 1 and 2 above.*

Paragraph 4: *As the APN utilizes a group process for the final evaluation and recommendation of proposals to the IGM for funding, primarily through the SPG, SPG members must absent themselves from the SPG’s review and/or evaluation of any proposal for which they are in conflict under the provisions of Paragraphs 1, 2, and 3 above.*

Paragraph 5: *The fact that a proposal involves, or has originated from, the country of a reviewer is not considered, in and of itself, to be a conflict of interest, unless the reviewer is in conflict with a specific proposal or unless the reviewer falls under the provisions of Paragraphs 1, 2, 3 and 4 above.*

Paragraph 6: *Reviewers should declare a conflict of interest if any of the following applies:*

- Has a family relationship with the proponent (i.e., spouse, child, sibling, or parent)*
- The proponent is, or was in the past four years, a business or professional partner;*
- The proponent is, or was in the past four years, a teacher or student of the reviewer*

When a reviewer declares a conflict of interest, the Secretariat will decide whether the declared conflict might preclude or might be perceived to preclude the reviewer from providing an unbiased review.

If the reviewer disagrees with the Secretariat's decision the reviewer may appeal the Secretariat's decision to the Scientific Planning Group Sub-Committee (SPG-SC), which shall review the decision; reach a conclusion; and so inform the reviewer and the Secretariat.

Reviewers in doubt as to whether they should review a proposal may consult the APN Secretariat for advice.

# Report from South Asia Sub-Regional Committee Meeting

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## PARTICIPANTS

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### BANGLADESH

A.N. Shamsuddin Azad CHOWDHURY (National Focal Point)  
Giashuddin MIAH (SPG Member)

### BHUTAN

G. Karma CHHOPEL (National Focal Point)

### NEPAL

Shanta Devi PANT (National Focal Point Alternate)  
Madan Lall SHRESTHA (SPG Member)

### SRI LANKA

Gunavi Baladeva SAMARASINGHE (SPG Member)  
Anura JAYATILAKE  
Mahinda WERAHERA

### PAKISTAN

Amir MUHAMMED (SPG Member)

### APN Secretariat

Erdene Saikhan NYAMJAV

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## REPORT FROM THE SA-SRC

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1. **Chair of the South Asia Sub-Regional Committee (SA-SRCom)**  
Mr. Gunavi Baladeva SAMARASINGHE (SPG Member) was elected as a Chairperson for the period 2011-2012/13
2. **Review the 2<sup>nd</sup> South Asia Sub-Regional Cooperation Meeting back-to-back with Proposal Development Training Workshop and Downscaling of South Asia Climate Projections and Consider the Discussion at the 16<sup>th</sup> SC Meeting and some Issues Raised**

*“How can the cooperation and collaboration be enhanced among the South Asia regional committee?” In order for this kind of activity to be a long-term success in developing the capacity of our South Asian scientists and our region to research policy-relevant issues of global environmental change, how can we collaborate to strengthen our base in the South Asian region and how can APN can be involved in this?” (Refer to discussion in Chairperson’s Summary).*

Dr. Amir suggested to focus on subjects that regional nations are strongly interested. Attempting to identify project topics and project leaders from the region can help in developing potential APN-funded project proposals. When the members mentioned that such efforts had taken place at previous meetings, Dr. Amir suggested that this effort can still be a valid point.

Mr. Samarasinghe highlighted to tackle issues with intense/extreme natural events with climate change. Dr. Miah suggested to look at collective climatic data for trends and to develop forecasts in areas of vulnerability of the region. Dr. Madan confirmed that such analyses is possible with given data available. Mr. Shamsuddin warned that erratic situation might cause problems. However, Dr. Madan added that impact studies can be looked for South Asia, Dr. Amir shared his past experience in this regard and suggested that this research can be done. He also mentioned to emphasise on mega city issues. Dr. Miah recommended to also include biodiversity matters as it is of high importance for the region.

Members have agreed to propose analyzing statistical data and meteorological data in line with extreme events and possible severe consequences. This subject might be emphasized on adaptation approaches.

The SA group members have agreed to focus on the following tentative issues:

- **Water related issues**  
Topic: Melting Glaciers in Himalaya Areas and Water Resources Management.
- **Agriculture**  
Topic: “Food and Crop Production Strategies Adaptation to Climate Change in the Region”;  
“Agriculture Land-Use Issues Under Changing Climate Scenario”;
- **Health**  
Topic: Possible Survey of Climate Induced Diseases in Relation to Climatic Change  
(Public health professionals can help in this endeavour).
- **Urbanization and Human Development Issues**  
Topic: Human Issues of Urbanization, Megacities, Migration.  
Urbanization and Emerging Socio-Economic Issues Caused by Global Environmental Changes  
in the Region  
(In line with IGB issues).

### 3. Plan for the 3<sup>rd</sup> SA-SRC meeting

- Country and host institution: Members collectively supported for Bhutan as a next location.  
Alternate country: Nepal (in case Bhutan’s inability)
  - Chair of the Meeting: G. Karma CHHOPEL (National Focal Point) of Bhutan
  - Date/Venue: Early November 2011, Ministry of Environment, Kingdom of Bhutan
- Objective(s): To develop a regional research proposal through APN. PDT workshop. To discuss existing capacities on global change research in the member countries.
- Expected outcome(s): Identify researchers, institutions in the region and to come with a collective decision.
- SA-SRCom Meeting to be conducted again back-to-back with the Proposal Development Training Workshop and another activity. PDTWorkshop is recommended by all groups.
- Plans/Activities in the future: Country projections (perspectives) by regional cooperation among member countries was proposed.

### 4. SA-SRCom Report

Prepare summary of the discussion (WORD FILE) and a PowerPoint presentation to be presented by the group’s representative in 12-15 minutes on Day 3 under Item 15 for submission to Secretariat members Lizhier Coralde/Erdene Nyamjav by 13:00 pm on Day 2, 7 April 2011.

# Report from Southeast Asia Sub-Regional Committee Meeting

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## PARTICIPANTS

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### CAMBODIA

Sundara SEM (National Focal Point)  
Paris CHUOP (SPG Member Alternate)

### INDONESIA

Liana BRATASIDA (National Focal Point)  
Erna Sri ADININGSIH (SPG Member)

### MALAYSIA

Che Gayah ISMAIL (National Focal Point Alternate)  
Subramaniam MOTEN (SPG Member)

### PHILIPPINES

Marcial Jr. AMARO (SPG Member)

### THAILAND

Pavich KESAWAWONG (National Focal Point Alternate)  
Jariya BOONJAWAT (SPG Member)

### VIET NAM

Kim Chi NGO (SPG Member)

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## REPORT FROM THE SEA-SRC

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### 5. Chair of the Southeast Asia Sub-Regional Committee (SEA-SRCom)

The SPG Member for Philippines, Mr. Marcial Amaro, Jr. having hosted the 2<sup>nd</sup> SEA-SRC Meeting in Manila, Philippines chaired the Meeting.

### 6. Review of the 3<sup>rd</sup> Southeast Asia Sub-Regional Cooperation Meeting back-to-back with Proposal Development Training Workshop and Consider the discussion at the 16<sup>th</sup> SC Meeting and some Issues Raised:

- More attention should be put on the result of SWOT (strengths, weaknesses, opportunities, threats) analysis that was conducted at the second Meeting particularly the weaknesses. 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.
- As information and knowledge management is the most important, there should have a centralised system of storing data. Virtual database should be set up where meteorological and socio-economic data can be integrated. A central information system that is accessible to policy-makers must be developed. Each country should have a national centre on climate change that not only houses data but performs coordination functions as well. The centres should be encouraged to submit proposal for APN funding.
- Coordination among the SEA-SRCom can be strengthened through the exchange of information/updates on a structured format, at least once or twice a year, among the nFPs and SPG Members.
- There is a need to strengthen collaboration at all levels: national, sub-regional, regional, global. For an APN programme/project to be successful he considered it relevant to engage the policy-makers and thus, discussion should be taken on at the policy level.

- Organising a national event where scientists can present to policy-makers the project outcomes, not only those related to APN but to global change as well. This will provide a forum or venue for science-policy dialogue.
- Contribution of member countries and finding additional resources for SRC future activities. Approach the SPG Member of the country where global change events are taking place and plan how to showcase APN activities strategically. This is also crucial for effective resources development.
- Ask the sub-regional committees to work with the Secretariat in writing a proposal. The implementation of the project or activity will be co-funded by the sub-region and the APN. It might be worth investigating also to ask non-governmental organisations (NGOs) to write a proposal for the APN.

The Chair proposed reviewing the outcomes of the 3<sup>rd</sup> SEA-SRC Meeting and checked the status of the action points identified during the Meeting. Considering the limited time, he suggested going through the main action points in the chairperson's summary as follow:

- To cascade the information from policy level to community level, the SPG Member for Thailand, Dr. Jariya Boonjawat will prepare a concept note focussing on the related discussion under this bullet and would circulate to all by email. Deadline for completing the concept note is on January 15, 2011. The national Focal Point for Indonesia, Ms. Liana BRatasida suggested to have a definite timeline **(New deadline: 30 April 2011)**.
- The SEA-SRCOM Members exchanged views and agreed that a concept note on Downscaling Training Workshop for the SEA region be drafted by Thailand SPG Member with assistance from the nFP for Lao PDR. Deadline for completing the concept note is on January 15, 2011. **(New deadline: 30 April 2011)**
- The Members also need to see the two (2) concept papers and follow-up the activities proposed by Prof. Fuchs to come with a collective decision whether a new activity will be conducted back-to-back with the PDTW and SEA-SRC Meeting similar to what the SA group did. The SPG for Indonesia, Dr. Erna Sri Adiningsih will re-circulate by concept note by **30 April 2011**.

The Members agreed that the other outstanding issues identified at the 3<sup>rd</sup> SEA-SRC Meeting will be discussed at the 4<sup>th</sup> SEA-SRC Meeting.

## 7. Way forward

The Members considered several options in planning the date of the 4<sup>th</sup> SEA-SRC Meeting. While it is difficult to consider the suggestion of the APN Secretariat to hold the next meeting back-to-back with the Science-Policy Dialogue on Challenges of Global Change: Focussing in Southeast Asia due to conflict of schedule of the Members, they agreed to hold the 4<sup>th</sup> SEA-SRC Meeting back-to-back with Proposal Development Training Workshop and Downscaling Training Workshop.

The nFP alternate for Malaysia, Ms. Che Gayah Ismail stressed that preparations need to start earlier as the experts who will be invited need to be notified in advance.

For purpose of continuity, while the Members were not able to elect a Chairperson for the period 2011-2012/13, the SPG Member for Philippines will serve as interim Chair until a new Chair has been decided before the 4<sup>th</sup> SEA-SRC Meeting.

The Chair sought for nomination of the venue of the next Meeting.

SPG Member for Viet Nam, Dr. Kim Chi Ngo proposed to hold the 4<sup>th</sup> SEA-SRC Meeting in Viet Nam.

- Chair of the Meeting: TBA
- Date/Venue: Viet Nam, 25 July – 1 August 2011

## Discussion on SRC Development

### Procedure

Under this item, representatives from each of the sub-regional committees will give a brief presentation/report (12-15 minutes) on the SRC activities, particularly the conclusion/outcomes of their respective Ad Hoc Meetings held on Day 1. The remaining time will be spent on further discussion. *The sub-regional committee representatives should hand their presentation and report to Secretariat members Lixhier Coralde/Erdene Nyamjav by 13:00 pm on Day 2, 7 April 2011.)*

### Member countries for sub-regional groups

- Oceania and Pacific: Australia, Fiji, New Zealand, USA
- Temperate East Asia: China, Japan, Mongolia, Republic of Korea, Russian Federation
- South Asia: Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka
- Southeast Asia: Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Viet Nam



# Mitra Awardee Presentation

*Networking Session*

*Global Change Community Exhibit & Young Sri Lankan 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 the previous day (*after Session Six: Science Session with Global Change Partners*), 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.

# ARCP and CAPaBLE

## Recommendations for Funding

*The task of the IGM is to review the recommendations made by the SPG Pre-Meeting (who met on the afternoon of the 5<sup>th</sup> April) and Capacity Development Committee (who met on the morning of the 4<sup>th</sup> April) for continuing multi-year projects who wish to continue funding for one more year and for new ARCP and CAPaBLE projects from step 2 of the second stage review process of the 2010 Annual Calls for Proposals.*

### I. ARCP Budget and Review Information

#### **1. Available Budget for 2011/12**

The proposed budget plan for the fiscal year 2011/12 indicates that **US\$1,240,000** is available for ARCP projects. Of this amount, **US\$305,270** is earmarked for continuing multi-year projects and, should these projects be approved, there will be a minimum of **US\$934,730** for new ARCP projects.

#### **2. Review and Recommendation of Multi-Year Projects**

Of the 2010/11 ARCP projects, ten (10) are multi-year projects that wish to continue project activities for a further year in 2011/12. Seven (7) of the 10 are seeking additional funding for **one more year** in 2011/12.

Summary details are outlined in the spreadsheet (*IGM-SPG/16/19-App.1*) and summarised below. Progress reports are available in electronic format from Kristine Garcia or Linda Stevenson of the Secretariat.

<i><b>Reference</b></i>	<i><b>Funding Requested</b></i>	<i><b>Progress Report</b></i>
ARCP2010-04CMY-Wang	40,050	Available
ARCP2010-10NMY-Koike	45,000*	Available
ARCP2010-11NMY-Asanuma	47,100	Available
ARCP2010-12NMY-Uprety	39,980	Available
ARCP2010-13NMY-Bae	42,000*	Available
ARCP2010-14NMY-Li	37,250*	Available
ARCP2010-15NMY-Han	38,440	Available
ARCP2010-16NMY-Huda	59,700	Available
ARCP2010-17NMY-Towprayoon	40,000	Available
ARCP2010-18NMY-Lutaenko	40,000	Available

*\*Funds secured from 2010 budget for the entire 2 years, however, APN retains the year 2 budget. A progress report was submitted, but there is no request for additional budget allocation.*

#### **3. Review and Recommendation of New ARCP projects**

Summary details of the 19 full proposals received and being considered for funding recommendation by the SPG are presented in the attached spreadsheet (*IGM-SPG/16/19-App.2*) for your information. Proposals from this summary sheet selected by the SPG for recommendation to the IGM for funding will be presented on day 3 under the present Item 19.

Please note that, during the presentation made by the SPG Co-Chairs under Item 19, the spreadsheets will be re-distributed in ranking order highlighting recommendations and SPG comments.

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## II. CAPaBLE Budget and Review Information

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### **1. Available Budget for 2011/12**

The proposed budget plan for the fiscal year 2011/12 indicates that **US\$718,000** is available for capacity building activities in FY 2011/2012. Of this amount, **US\$55,000** is earmarked for continuing multi-year projects and, should these projects be recommended for approval, there will be a minimum of **US\$663,000** for new CAPaBLE capacity development projects. There is also an additional amount of **US\$120,000** available for CAPaBLE comprehensive research projects (in the 3<sup>rd</sup> Phase), subject to the same conditions for approval. *Furthermore, an amount of US\$78,000 is allocated for Phase IV CRPs should a Call for CRPs will be launched this year. More information will be provided during the Meeting.* This brings the total amount for CAPaBLE activities for 2011/12 to **US\$ 916,000**.

### **2. Multi-Year CAPaBLE Capacity Development Projects**

2-1. *Capacity Building Projects:* Of the 2010/11 CAPaBLE CBA projects, 2 are multi-year projects that wish to continue project activities for a further year in 2011/12. These are 2 capacity building projects moving into their second and final year of activities.

<b>Reference:</b>	<b>Funding Requested:</b>	<b>Progress Report</b>
CBA2010-13NMY-Kawai	US\$15,000	Attached
CBA2010-14NMY-Kaihotsu	US\$40,000	Attached

Total Funding being requested for continuing multi-year projects for 2011/12 is **US\$55,000** (from an available budget of **US\$ 916,000**)

2-2. *CAPaBLE Comprehensive Research Projects:* Both 2010/11 CAPaBLE CRP multi-year projects wish to continue project activities for a further year in 2011/12. These 2 comprehensive research projects are moving into their third and final year of activities.

<b>Reference:</b>	<b>Funding Requested:</b>	<b>Progress Report</b>
CRP2010-01CMY-Weber	US\$45,000	Attached
CRP2010-02CMY-Pereira	US\$70,000	Attached

Total Funding being requested for continuing CRP multi-year projects for 2011/12 is **US\$115,000** (from an available budget of **US\$ 916,000**).

Summary details for both capacity building and comprehensive research projects are outlined in the spreadsheet *IGM-SPG/16/19-App.3*. Progress reports are available in electronic format from Kristine Garcia or Linda Stevenson of the Secretariat.

### **3. Review and Recommendation of New CAPaBLE projects**

Summary details of the 19 full proposals received under the annual call for CB proposals being considered for funding recommendation by the SPG are presented in the spreadsheet *IGM-SPG/16/19-App.4* for your information. Proposals selected by the SPG for recommendation to the IGM for funding will be presented on day 3 under the present Item 19.

Please note that, during the presentation made by the SPG Co-Chairs under Item 19, the spreadsheets will be re-distributed in ranking order highlighting recommendations and SPG comments.
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# Promoting Science and Strengthening Engagement with the International Communities

*Venue: Taj Samudra Hotel Colombo, Sri Lanka*

*Date: Friday 08, April (13:00-15:30)*

*Facilitator: APN SPG Co-Chairs*

## Background

This session is to facilitate of promoting science and strengthening engagement with the international communities. There are presentations from four (4) APN national Focal Points (nFPs) representing sub-regions. The sub-regional representation will include the Oceania and Pacific, South Asia, Southeast Asia, and Temperate East Asia. This session will be followed by brainstorming/discussion with the global change communities. The discussion will focus on the direction of the APN and scientific priorities particularly on strengthening partnerships and aligning our programmes with that of the global change science and policy communities.

## Presentations

- APN Regional Representatives
- Dr. Andrew Matthews, the Oceania and Pacific
- Mr. Anura Jayatilake, South Asia
- Mr. Sundara Sem, Southeast Asia
- Mr. Sun Chengyong, Temperate East Asia

## An Oceania and Pacific Perspective

Dr. Andrew Matthews

The issues for Oceania and the Pacific in terms of global change are really no different than those for other regions of the World – pressure on resources, physical and human, food and water security, security and supply of energy, land-use change and the pressures of urbanisation and consequent issues of waste disposal.

For Oceania and Pacific Island States in particular, is not that they are not affected by issues of global change but rather that they often lack the skilled individuals, or the time that these individuals have, to engage in these issues locally let alone at the international level. The planning is often performed where the critical mass is found, usually in Europe or the US and hence at a distance from these States that further exacerbates the problem and even being involved in teleconferencing is problematic because of the time shift.

Consequently the role that APN can play, particularly in capability development and training, is extremely useful and relevant. Supporting pilot projects that can be duplicated is an efficient use of APN resources but also a very useful modality for Pacific States that lack the capital resources, both human as well as physical, to trial a range of solutions.

Another interesting development is the separation in a philosophical sense from those that live in urban environments and those that live in rural areas. There are often ill-informed and unrealistic opinions and demands on agricultural and animal husbandry practices, on energy generation systems and on water storage options, being made by urban dwellers who at the same time are demanding a higher standard of living and for an ever increasing population.

## **Temperate East-Asia**

Mr. Sun Chengyong

China's efforts on promoting science and international cooperation for addressing the climatic change. China has for long time made great attention on addressing the issue of climatic change by making efforts on enhancing scientific research, development of technologies, international cooperation, etc., for achieving the goal of sustainable development. Many scientific research projects have been financed by different national programs, e.g. National 863 program, national 973 program and national supporting S&T program, for understanding the mechanism of climatic change, for the mitigation and the adaption of climatic change, for achieving a sustainable and green development. We have also taken great importance for international cooperation on climate change. Temperate East Asia is one of the good examples of international cooperation. Many projects have been carried out in TEA, especially with APN, successfully.

# Hosting of Inter-Governmental Meetings (IGMs)

The process of seeking potential IGM hosts usually starts by sending 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 for your information.

## Locations of IGM (and associated meetings) since 1996

1. 1996 – ***Chiangmai, Thailand (SEA)***
  - 1<sup>st</sup> IGM, 25-26 March
2. 1997 – ***Tokyo, Japan (TEA)***
  - 2<sup>nd</sup> SPG Meeting, 24-26 March
  - 2<sup>nd</sup> IGM, 27-28 March
3. 1998 – ***Beijing, China (TEA)***
  - 3<sup>rd</sup> IGM, 11-13 March
4. 1999 – ***Kobe, Japan (TEA)***
  - 4<sup>th</sup> IGM, 18-20 March
5. 2000 – ***Islamabad, Pakistan (SA)***
  - 5<sup>th</sup> SPG Meeting, 26-27 March
  - 5<sup>th</sup> IGM, 29-30 March
6. 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
7. 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
8. 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
9. 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
10. 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)
11. 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)
12. 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
- 13. 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
  - 13<sup>th</sup> Joint IGM/SPG Meeting, 18-20 March
  - 9<sup>th</sup> SC Meeting, 20 March
- 14. 2009 – ***Kuala Lumpur, Malaysia (SEA)***
  - 4<sup>th</sup> SPG-SC Meeting, 16 March
  - 8<sup>th</sup> CDC Meeting, 16 March
  - 4<sup>th</sup> SPG Pre-Meeting, 17 March
  - 11<sup>th</sup> SC Meeting, 17 March
  - 14<sup>th</sup> Joint IGM/SPG Meeting, 18-20 March
  - 12<sup>th</sup> SC Meeting, 20 March
- 15. 2010 – ***Busan, Republic of Korea (TEA)***
  - 5<sup>th</sup> SPG-SC Meeting, 15 March
  - 9<sup>th</sup> CDC Meeting, 15 March
  - 5<sup>th</sup> SPG Pre-Meeting, 16 March
  - 14<sup>th</sup> SC Meeting, 16 March
  - 15<sup>th</sup> Joint IGM/SPG Meeting, 17-19 March
  - 15<sup>th</sup> SC Meeting, 19 March
- 16. 2011 – ***Colombo, Sri Lanka (SA)***
  - 6<sup>th</sup> SPG-SC Meeting, 4 April
  - 10<sup>th</sup> CDC Meeting, 4 April
  - 6<sup>th</sup> SPG Pre-Meeting, 5 April
  - 17<sup>th</sup> SC Meeting, 5 April
  - 16<sup>th</sup> Joint IGM/SPG Meeting, 6-8 April
  - 18<sup>th</sup> SC Meeting, 8 April

#### **Locations of other APN Meetings**

1. 1<sup>st</sup> SPC Meeting – ***Tokyo, Japan*** (25-26 January 1996)
2. 1<sup>st</sup> SPG Meeting – ***Kuala Lumpur, Malaysia*** (29-30 August 1996)
3. 3<sup>rd</sup> SPG Meeting – ***Canberra, Australia*** (19-21 January 1998)
4. 4<sup>th</sup> SPG Meeting – ***Jakarta, Indonesia*** (2-4 February 1999)
5. 1<sup>st</sup> SC Meeting – ***Honolulu, USA*** (3-4 December 2000)
6. 4<sup>th</sup> SC Meeting – ***Manila, Philippines*** (16-17 December 2001)
7. 6<sup>th</sup> SC Meeting – ***Kuala Lumpur, Malaysia*** (9-10 December 2002)
8. 8<sup>th</sup> SC Meeting – ***Wellington, New Zealand*** (11-12 December 2003)
9. 2<sup>nd</sup> SC Meeting – ***Tokyo, Japan*** (19-20 November 2005)
10. 3<sup>rd</sup> CSC Meeting – ***Tokyo, Japan*** (18-19 November 2005)
11. 4<sup>th</sup> SC Meeting and Workshop on the New Liaison Model – ***Jakarta, Indonesia*** (24-26 August 2006)
12. 1<sup>st</sup> SEA Sub-Regional Committee Meeting – ***Jakarta, Indonesia*** (20-21 August 2007)
13. 7<sup>th</sup> SC and 6<sup>th</sup> CDC Meeting – ***Kobe, Japan*** (4-5 October 2007)
14. 10<sup>th</sup> SC Meeting – ***Manila, Philippines*** (6-7 October 2008)
15. 1<sup>st</sup> SA Sub-Regional Cooperation Meeting – ***Colombo, Sri Lanka*** (27-28 July 2009)
16. 2<sup>nd</sup> SEA Sub-Regional Committee Meeting – ***Bangkok, Thailand*** (19-20 August 2009)
17. 13<sup>th</sup> SC Meeting, Augmented SC Meeting (ASCM) and Writing Workshop – ***Kobe, Japan*** (24-27 August 2009)
18. 16<sup>th</sup> SC Meeting – ***Kobe, Japan*** (30-31 August 2010)
19. 2<sup>nd</sup> SA Sub-Regional Committee Meeting – ***Pune, India*** (2 November 2010)
20. 3<sup>rd</sup> SEA Sub-Regional Committee Meeting – ***Manila, Philippines*** (9-10 November 2010)

**Host of the 17<sup>th</sup> IGM**

The APN Secretariat Director will announce the host on Day 3 of the Meeting.

**Sub-regions**

*SA – South Asia*

*SEA – Southeast Asia*

*TEA – Temperate East Asia*

**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**

Winning Poster and Presentations



# PLANT MEDIATOR TO TACKLE CLIMATE CHANGE

Wathugala G.D. Lakmini<sup>1</sup>, Heather Knight<sup>2</sup> and Marc R. Knight<sup>2</sup>



<sup>1</sup>Department of Crop Science, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka,  
<sup>2</sup>School of Biological and Biomedical Sciences, Durham University, South Road, Durham, United Kingdom. DM1 5LE



## INTRODUCTION

The current rate of climate change predicts that plants will become subject to increasing extremes of environmental stress. Rapid population increases in developing countries also demand higher yield from crop production, often from sub-optimal agricultural areas. Genetic engineering can help meet these needs through the development of crops with greater stress tolerance. Mediator is transcriptional co-activators which convey DNA bound transcriptional regulators and enhancers to the general RNA polymerase II transcription machinery and mediator genes are recently identified in plants (Fig. 1). So far it has showed their great involvement in regulation of plant stress tolerance by controlling transcription of stress genes (Fig. 2). *SFR6* (SENSITIVE TO FREEZING) is one of plant mediator protein which has identified first with its involvement to tolerance against freezing in *Arabidopsis*. The freezing sensitivity of *sfr6* mutant is lack of expression of downstream genes in CBF cold response pathway (Fig. 3). Apart from that there was preliminary evidence that *sfr6* mutant is sensitive for other biotic and abiotic stresses. Therefore, the objective of this research was to screen the involvement of *SFR6* to regulate other environmental stresses.

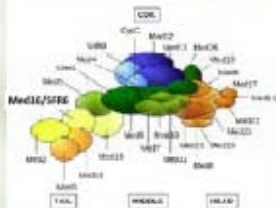


Figure 1: Topological organization of yeast mediator (Gagliardi et al., 2004)



Figure 2: Function of mediator in transcriptional activation and repression (Yorkland and Gremillion, 2005)



Figure 3: Involvement of *SFR6* upon low temperature induced gene expression

## MATERIALS AND METHODS

To examine the role of Med 16/*SFR6*, *AtSFR6* was over-expressed in wild type *Arabidopsis* and *sfr6-1* mutant. Then freezing sensitivity and *KDZ* expression were measured in transgenic plants. To examine the sensitivity of *sfr6* mutant to different environmental stresses, *sfr6* mutants were subjected to range of environmental stresses along with wild type *Arabidopsis*. Homologue was cloned from rice and its orthology was tested transferring *OaSFR6* to *sfr6-1* mutant.

## RESULTS

### Complementation of *sfr6-1* mutant by wild type *AtSFR6*



Figure 4: (A) Transformation of wild type *AtSFR6* into the *sfr6-1* mutant restores its freezing tolerance. Line 3, 4, 5 and 6 are in *sfr6-1* background. (B) Real-time PCR of *KDZ* transcripts in 7 day old seedlings of *sfr6-1* overexpressing 35S-*AtSFR6*, subjected to 4°C for 6 h. Error bars show s.e.

Introducing the wild type *SFR6* gene into the *sfr6-1* mutant should rescue the mutant phenotype. This assay shows that *AtSFR6* in the *sfr6-1* mutant complements mutant phenotypes. The transgene rescues seedling colour from yellow green to dark green, the plants regain freezing tolerance (Fig. 4A), and express *KDZ* gene to wild type levels (Fig. 4B).

### *AtSFR6* orthologues from other crop plants



Figure 5: (A) Transformation of *OaSFR6* into the *sfr6-1* mutant restores its freezing tolerance. Line 3, 4 and 5 are in *sfr6-1* background. (B) Real-time PCR of *KDZ* transcripts in 7 day old seedlings of *sfr6-1* overexpressing 35S-*OaSFR6*, subjected to 4°C for 6 h. Error bars show s.e.

*AtSFR6* homologue from rice was identified (*OaSFR6*), and its functional complementation was tested by transferring *OaSFR6* to *sfr6-1* mutant. Transgenic plants complemented all *sfr6-1* mutant phenotypes including freezing sensitivity (Fig. 5A) and *KDZ* expression (Fig. 5B).

## REFERENCES

1. Yorkland B, Gremillion CM (2005) The yeast Mediator complex and its regulation. *Trends in Biochemical Sciences* 30: 340-344
2. Byrne, J. M., B. Knight, et al. (2003). The *sfr6* mutant of *Arabidopsis* is defective in transcriptional activation via CBF/DREB1 and DREB2 and shows sensitivity to osmotic stress. *Plant Journal* 34(4): 495-498
3. Reddyana S, B. Knight, et al. (2007) Purification of a plant mediator from *Arabidopsis thaliana* identifies PPT1 as the Med25 subunit. *Molecular Cell* 26: 717-729
4. Gagliardi B, NL van Drielan et al. (2004) A high resolution protein interaction map of the yeast Mediator complex. *Science* 303: 5379-5391
5. Knight, H., E. L. Yeale, et al. (2004). The *sfr6* mutation in *Arabidopsis* suppresses low-temperature induction of genes dependent on the CRT/DRE sequences motif. *Plant Cell* 16(9): 2541-2541.
6. Knight, H., B.G. Mayfield, et al. (2009). Identification of *SFR6*, a key component in cold acclimation acting post translationally on CBF function. *Plant Journal* 58: 97-109.

\*Presenting Author: Wathugala G.D. Lakmini, wathugala.gd@ru.ac.lk, wathugala.gd@durham.ac.uk

### Sensitivity of *sfr6* mutants to UV radiation and biotic stresses

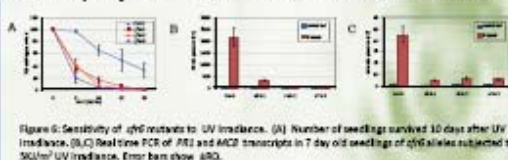


Figure 6: Sensitivity of *sfr6* mutants to UV irradiance. (A) Number of seedlings survived 10 days after UV irradiance. (B) Real-time PCR of *PBI* and *MCB* transcripts in 7 day old seedlings of *sfr6* alleles subjected to 300/m² UV irradiance. Error bars show s.e.

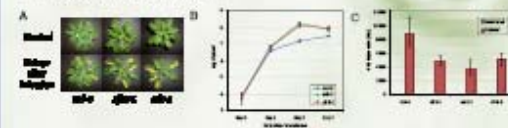


Figure 7: Sensitivity of *sfr6* mutants to virulent *R. syzygiae* infection. (A) Comparison of the spread of lesions caused by *R. syzygiae*, 5 days after infiltration. (B) The growth of strain by scoring colony forming units (cfu). (C) Real-time PCR of *PBI* transcripts in 5 weeks old plants of *sfr6* alleles inoculated with *R. syzygiae* virulent strain. Error bars show s.e.

Sensitivity of *sfr6* mutants to range of environmental stresses were tested and found, in addition to known roles of *SFR6*, *SFR6* also has roles in protecting against UV irradiance and pathogen infection in *Arabidopsis*, by showing reduced level of UV (Fig. 6) and pathogen (Fig. 7) induced gene expression.

## CONCLUSION

Results demonstrate the requirement of *SFR6*/*Med16* for the activation of many but not all stress response gene expression, and indicated conserved *AtSFR6* function in rice. However, the mechanism of regulation of stress induced gene expression via *SFR6*/*Med16* remains to be further investigated. The future research on specific roles of individual subunits and of the whole complex of plant mediator will widen our knowledge of the transcriptional regulation of gene expression in plant and will create new routes to improve crop tolerance to environmental stresses.

## PLANT MEDIATOR TO TACKLE CLIMATE CHANGE

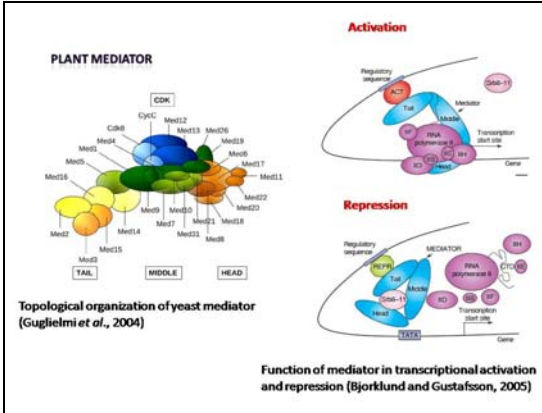
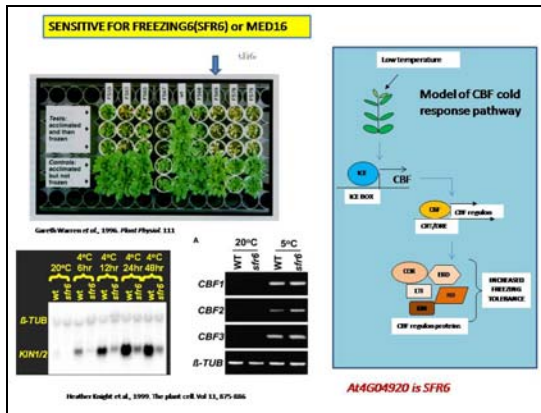
Wathugala G.D. Lakmini<sup>1</sup>, Heather Knight<sup>2</sup> and Marc R. Knight<sup>2</sup>

<sup>1</sup>Department of Crop Science, Faculty of Agriculture, University of Ruhuna  
<sup>2</sup>School of Biological and Biomedical Sciences, Durham University

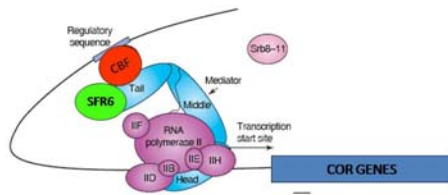
## Introduction

WHY WE NEED TO ENHANCE STRESS TOLERANCE OF PLANTS?

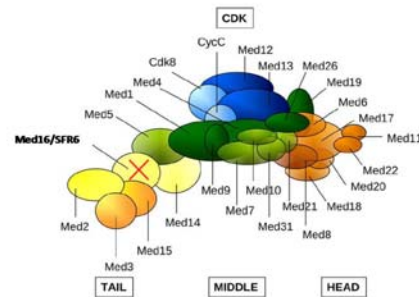
1. The current rate of climate change predicts that plants will become subject to increasing extremes of environmental stress
  2. Rapid population increases in developing countries also demand higher yield from crop production, often from sub-optimal agricultural areas
- Genetic engineering can help meet these needs through the development of crops with greater stress tolerance



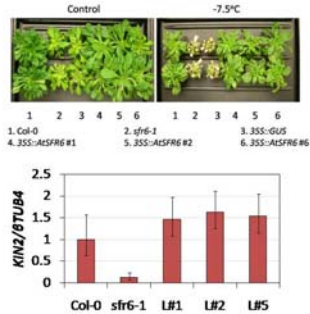
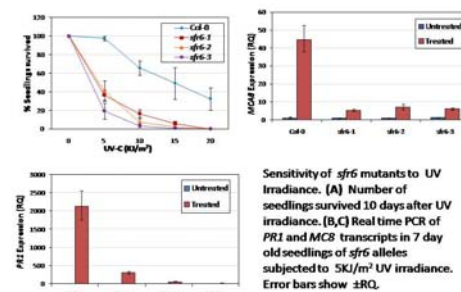
## Role of SFR6?



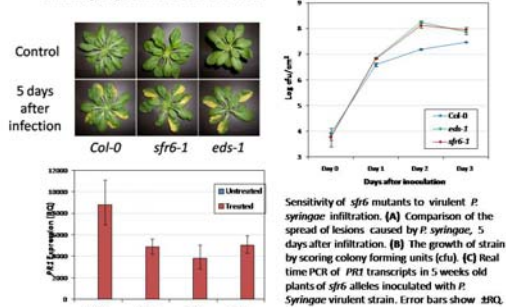
## Loss of Med16 subunit



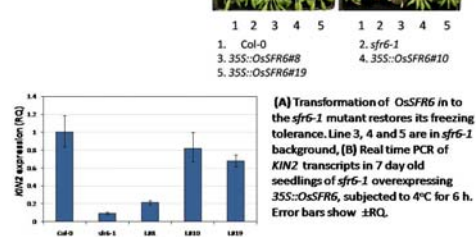
## RESULTS

Complementation of *sfr6-1* mutant by wild type *AtSFR6*Sensitivity of *sfr6* mutants to UV radiation

Sensitivity of *sfr6* mutants to UV irradiance. (A) Number of seedlings survived 10 days after UV irradiance. (B,C) Real time PCR of *PR1* and *MCH* transcripts in 7 day old seedlings of *sfr6* alleles subjected to 5KJ/m<sup>2</sup> UV irradiance. Error bars show  $\pm$ SD.

Sensitivity of *sfr6* mutants biotic stresses

Sensitivity of *sfr6* mutants to virulent *P. syringae* infiltration. (A) Comparison of the spread of lesions caused by *P. syringae*, 5 days after infiltration. (B) The growth of strain by scoring colony forming units (cfu). (C) Real time PCR of *PR1* transcripts in 5 weeks old plants of *sfr6* alleles inoculated with *P. syringae* virulent strain. Error bars show  $\pm$ SD.

*AtSFR6* orthologues from other crop plants

(A) Transformation of *OsSFR6* in to the *sfr6-1* mutant restores its freezing tolerance. Line 3, 4 and 5 are in *sfr6-1* background. (B) Real time PCR of *KIN2* transcripts in 7 day old seedlings of *sfr6-1* overexpressing 35S::*OsSFR6*, subjected to 4°C for 6 h. Error bars show  $\pm$ SD.

## Conclusion

Results demonstrate the requirement of SFR6/MED16 for the activation of many but not all stress response gene expression, and indicated conserved *AtSFR6* function in rice. However, the mechanism of regulation of stress induced gene expression via SFR6/MED16 remains to be further investigated. The future research on specific roles of individual subunits and of the whole complex of plant mediator will widen our knowledge of the transcriptional regulation of gene expression in plant and will create new routes to improve crop tolerance to environmental stresses.

## References

1. Björklund S, Gustafsson CM (2005) The yeast Mediator complex and its regulation. *Trends in Biochemical Sciences* 30: 240-244
2. Boyce, J. M., H. Knight, et al. (2003). The *sfr6* mutant of *Arabidopsis* is defective in transcriptional activation via CBF/DREB1 and DREB2 and shows sensitivity to osmotic stress. *Plant Journal* 34(4):395-406
3. Backstrom S, N. Elving et al. (2007) Purification of a plant mediator from *Arabidopsis thaliana* identifies PFT1 as the Med25 subunit. *Molecular Cell* 26: 717-729
4. Guglielmi B, NI van Berkum et al. (2004) A high resolution protein interaction map of the yeast Mediator complex. *Nucleic Acids Research* 32: 5379-5391
5. Knight, H., E. I. Voale, et al. (2004). "The *sfr6* mutation in *Arabidopsis* suppresses low-temperature induction of genes dependent on the CBF/DRE sequence motif". *Plant Cell* 16(9): 2541-2541.
6. Knight, H., S.G. Mugford, et al. (2009). Identification of SFR6, a key component in cold acclimation acting post translationally on CBF function. *Plant Journal* 58: 97-108.

## Acknowledgement

1. Prof. Marc R. Knight
2. Dr. Heather Knight
3. Dr. Margaret Pullen
4. Dr. Piers Hemsley
5. Dr. Bekir Ulker
6. Dr. Rob Ingle
7. Dr. Vanja Pekovic
8. Dahai Gao
9. Alex Sargeant
10. Liam O'hara
11. Paul Loftus
12. Hillary Wilkinson



# Emerging Science Issues in Sri Lanka

*G B Samarasinghe*

## Emerging Science Issues in Sri Lanka

G B Samarasinghe  
SPG Member/ Sri Lanka  
Director General of Meteorology

## Science Research in Sri Lanka

- National Science Foundation
- National Authorities for different sectors
  - Department of Meteorology
  - Department of Agriculture
  - Department of Health etc.

## Main Issues

- Climate Change
- Extreme Events and Disasters
  - Natural
  - Man-made
- Research for Sustainable Development

## Climate Change as an Emerging Issue

- Centre for Climate Change Studies at Department of Meteorology
  - in 2000 as a coordinating body
- IPCC focal point - DOM under Disaster Management Ministry
  - Collaborate Science Research among Government, non-Government and Private institutes on Climate Change
  - Applied Research on sectors Agriculture, Plantation, Marine, Health etc
- UNFCCC focal point (and Climate Change Secretariat) - Ministry of Environment

## Climate Change Issues

- Increase in temperature and sectoral impact (Agriculture/Costal erosion...)
- Irregular rainfall pattern and effect on various sectors - Water Resources, Agriculture, Energy, Health (Vector diseases)
- Health issues with irregular rainfall pattern and increasing temperature (mosquito breeding...)
- Soil erosion due to intense rainfalls as land degradation and Agriculture issues
- Bio-diversity, climate change and human involvement
- Quantifying changing climate in socio-economic terms
- Demand for water among competing sectors -energy, Agriculture, Industry etc.,
- Shifting of seasonal Monsoon dates
- Development of future scenarios and projections for impacts due to climate change in Sri Lanka (downscaling for sectoral impacts, forestry, bio-diversity, water resources, energy etc)
- Awareness and education on climate change, disasters and preparedness

## Climate Change Issues....

- Need of weather forecasts tailor-made for different seasons at different time scales
- Unauthorized constructions and vulnerability to landslides with high impact rainfalls
- Vulnerability of community to both drought and flood (an annual feature) as a socio-economic issue, in general
- Flash floods in urban areas
- Riverine flood, dam safety and the safety of community downstream
- Lightning as an increasing threat to lives and property damage

### Other Science Issues

- ❑ Sea water intrusion and salinity as a fresh water availability and Agriculture issue
- ❑ Monsoons and coastal erosion in respective areas as land and social issues
- ❑ Water quality and health issues in certain regions of island
- ❑ Increase in Ozone and health issues
- ❑ Human – Elephant conflict in changing environmental conditions

### Non-exhaustive List of Emerging Science Issues

- ❑ Reducing environmental degradation
- ❑ Poverty of people as the most conspicuous root cause for environmental degradation
- ❑ Settling down/carrying out agricultural practices in marginal lands resulting in erosion, landslides, loss of biodiversity and pollution of freshwater ecosystems
- ❑ Research aiming at maintaining ecosystem services at a healthy level *probably* through our own techniques to fit our requirements
  - To increase production
  - To minimize waste of food material
  - Maintaining cleanliness of natural waters
  - Recycling of water
  - Alternative material for commonly used substances such as timber and fiber
  - To minimize the usage of fossil fuel
  - To develop alternative energy sources
  - To conserve our genetic resources

### Gaps in Science Research in Sri Lanka

- ❑ Limited (inadequate) participation - Universities and Institutes
- ❑ Lack of enthusiasm and involvements
- ❑ Lack of Human Resources
- ❑ Lack of financial resources
- ❑ Lack of coordination among institutions
- ❑ Inadequate linkage between policy and Science Research
- ❑ Less proficiency in proposal writing
- ❑ Government and private sector patronage for market oriented high tech research in the fields of nanotechnology, biotechnology, telecommunication, electronics and information technology
- ❑ Inadequate media awareness and interaction with scientific community

### Points to Ponder

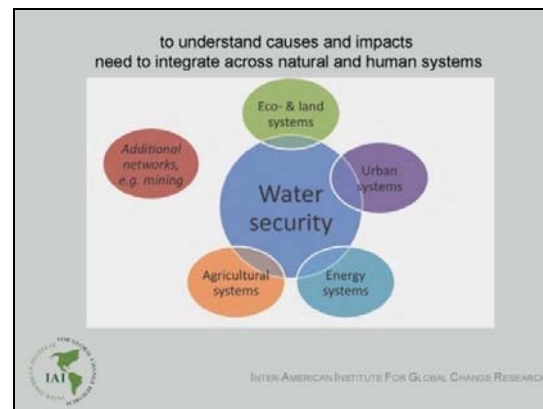
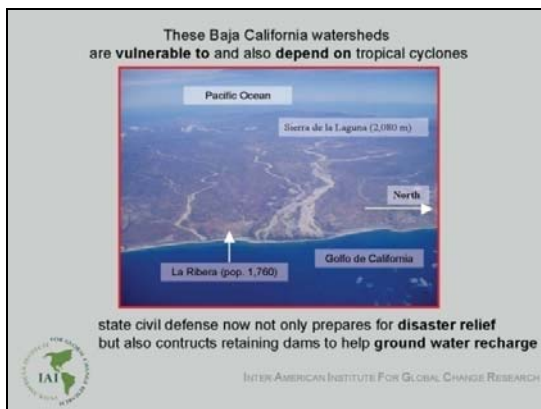
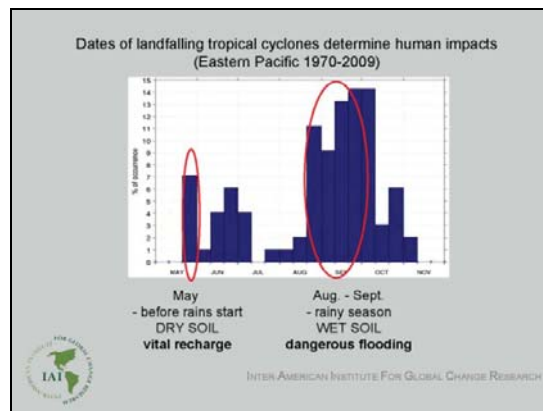
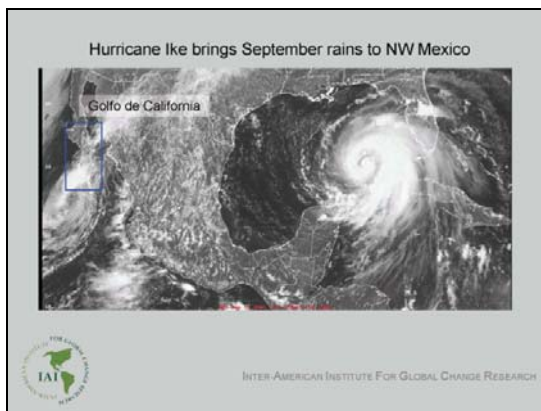
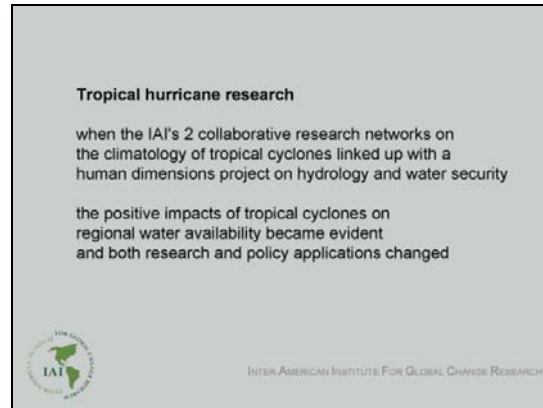
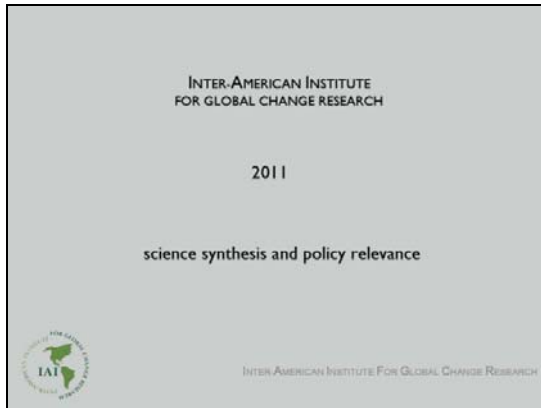
- ❑ Tendency to get involved is increasing
- ❑ Exposure of Scientist to APN and encouragement
- ❑ APN news in DoM website since 2009
- ❑ Much research on diseases by the academics in medical faculties.
- ❑ To encourage young scientist carrier development through research involvements
- ❑ Workshops on project proposals writing

# Thank You




# Inter-American Institute for Global Change Research 2011: Science Synthesis and Policy Relevance

*Louis Brown*

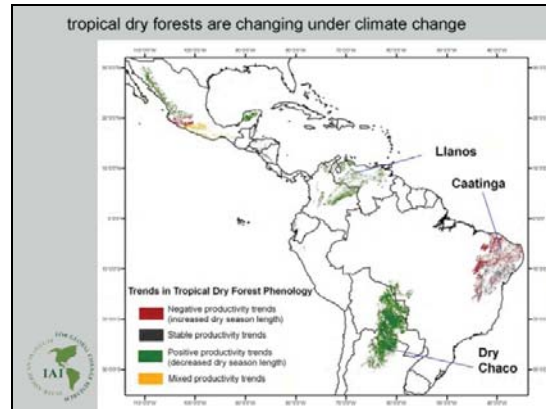




the IAI collaborative research network on **tropical dry forests** linked up with a human dimensions project on the **value of ecosystem services**



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH



The project classified and characterized dry forests in Central Brazil, helping to protect over 10,000 km<sup>2</sup> under existing forest protection laws

this ecosystem protection has societal impacts and sparked a public debate:

deforestation allows development and wealth generation by agriculture and ranching

- is that development equitable?
- who is impacted by protection?



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH


in the dry forest region of Minas Gerais

45% of farms are smaller than 10 hectares and cover only 2.8% of the land

only 1.5% of farms are 1,000 hectares or larger and cover 51% of the land

77,700 rural properties are run by family farmers, with about 214,000 or 77% of the total rural jobs

ecosystem protection protects these land users but also limits their use rights



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the dry forests are vital for the São Francisco - Brazil's second largest watershed




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river margins need protection but have traditional land uses



scientists from the project have been called onto a human rights commission evaluating the impact of protection on land user rights and livelihoods



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the scientific knowledge generated must feed into  
rational and equitable land-use decision making



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

as the IAI embraces the synthesis and outreach  
resulting from its science

science governance and project management  
become more complex and more "political"



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

# Earth System Sciences Partnership (ESSP)

*Ada Ignaciuk*



### Scientific activities

**How to do integrative science?**

- What is integrative science?
- How to do integrative science?
  - Geographic integration
  - Scientific integration
  - Sectoral integration
- What are the barriers to integrative science?
- What should be done to advance integrative science?

ISSC/ESSP/ICSU IGBP CHANGE IHDP WCRP

### Scientific activities

**Bio-energy workshop (co-organized by ESSP and DIVERSITAS)**

'To produce a balanced and integrated view on the future of food and (bio)energy security, and its relationship with ecosystem services'

Subject to funding.

Invitation to APN to participate and co-sponsor young scientists participation from APN network!

Logos: DIVERSITAS, IGBP, IHDP, WCRP

### COSUST& ESSP publications

Issues (2010) include:

- Terrestrial Systems
- Carbon and Nitrogen Cycle

Included in Thompson Web of Sciences!

Brochure & Web

ESSP is a joint initiative of DIVERSITAS IGBP CHANGE IHDP WCRP

### ESSP Science Highlights -GWSP

- Workshops and Conf
  - Workshop (Feb) and Catchment Initiative with expected large participation of Asian scientists.
  - Workshop on Global
  - World Water Day (panel-together with UNEP)
- Science paper on worldwide joint assessment of human water security and aquatic biodiversity together with DIVERSITAS.

In October, a one day long workshop on nonlinear changes in the hydrological regime in Xi'an, with expected large participation of Asian scientists.

nature  
RIVERS IN CRISIS

Logos: DIVERSITAS, IGBP, IHDP, WCRP

### ESSP Science Highlights -GECHH

- The GECHH 2011 (Verbania, Italy, 19-21 September 2011):
  - \* Invitation to APN to participate
  - \* And to cover participation (travel/subsistence) of three senior scientists and two young scientists from APN Member Countries (APN's support to identify the above-mentioned scientists is welcomed)
- Appropriate visibility will be given to APN as sponsor of the Symposium
- Planned symposium 'Global Environmental Change and Human Health: Healthy Forests for Life'



### ESSP Science Highlights -GECAFS

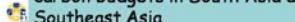
- Synthesising their 10 year activities
 
- Joint GECAFS/IAI workshop
- Scenario development for East Africa for CCAFS
- Royal Geographical Society's Founder's Medal for Diana Liverman



### ESSP Science Highlights -GCP

- Second phase of GCP
- 2009 Carbon Budget is published
- Synthesis brochure - 10 y GCP
- Special issues in:
  - COSUST
  - Energy Policy
- Spin off activities
  - International Carbon
  - Global Carbon Atlas

Proposal Greenhouse gas budgets of South and Southeast Asia (lead: Prabin Patra and Pep) to support the development of carbon budgets in South Asia and Southeast Asia




### Assessments and Stakeholder Fora

Ongoing:

- GEO 5
- UNFCCC-SBSTA


ESSP is a joint initiative of



### Collaboration with UNEP

- Global Environmental Outlook 5: to be published in 2012 and prepared in 2011.
- Preliminary agreement with UNEP, the ESSP will handle the scientific review of GEO 5 and identify Review Editors and Reviewers for the Scientific Review for the individual chapters.

Request to the GEC Programmas - Identification of potential candidates



### SBSTA 32

- UNFCCC Side Event 'Emerging Scientific Findings and Research Outcomes'
 
- Presentations of GEC Programmas, ESSP, START, IAI, APN, EU, IPCC
- Presentations of representatives of diverse negotiating groups
- Discussion

ESSP is a joint initiative of





**SBSTA 33 – COP 16**

- UNFCCC Side Event 'Updated Information on Emerging Scientific Findings and Research Outcomes'
- ICSU/ESSP Side Event 'Emerging Scientific Findings and Research Outcomes'

ESSP is a joint initiative of

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IHDP

WCRP

**SBSTA 33**

- Agricultural and Rural Development Day 2010  
Event co-organized by ESSP/WFP/IFAD  
On behalf of ESSP-  
Diana Liverman
- An Informal 'Research Workshop Planning Meeting, organized by UNFCCC'
  - Event organized by UNFCCC
  - Intended as a platform between Research and Policy Makers

ESSP is a joint initiative of

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**SBSTA 35**

In Planning Phase:

- 2-day workshop prior to SBSTA 35
- 3h Side Event in a similar format to previous side events on Emerging Scientific Findings

ESSP is a joint initiative of

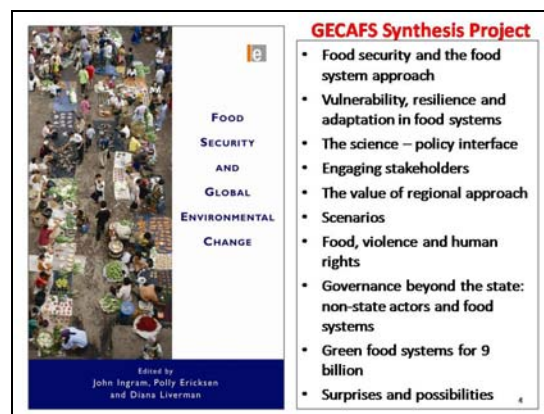
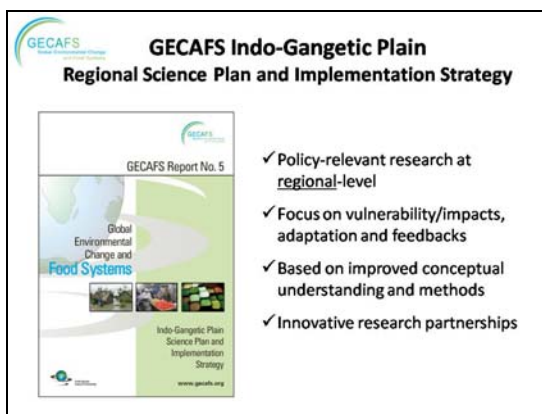
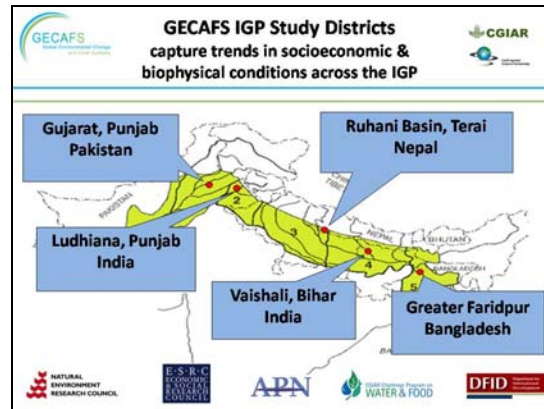
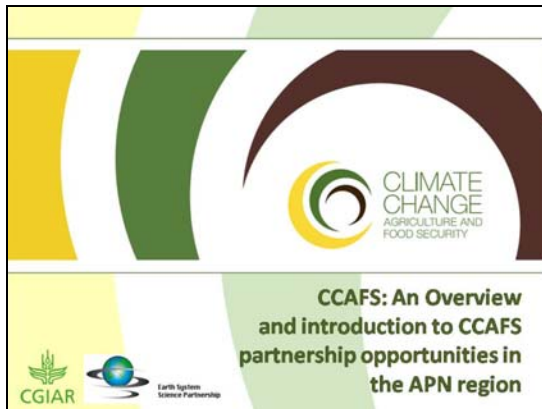
GLOBAL IGBP CHANGE

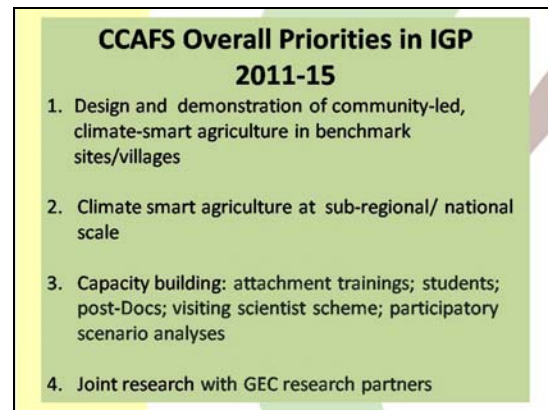
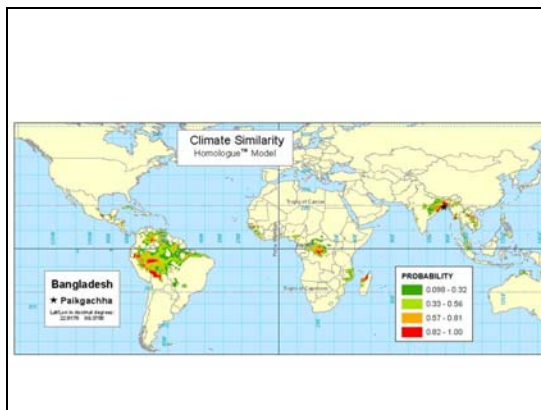
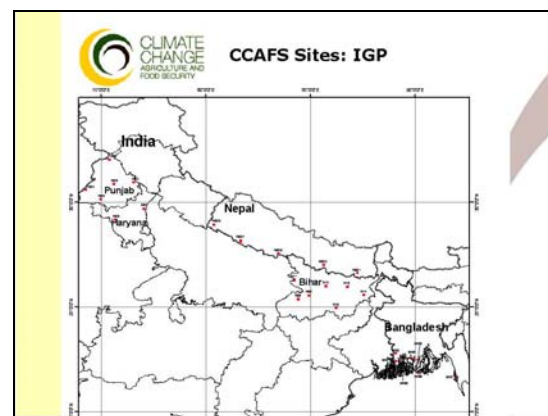
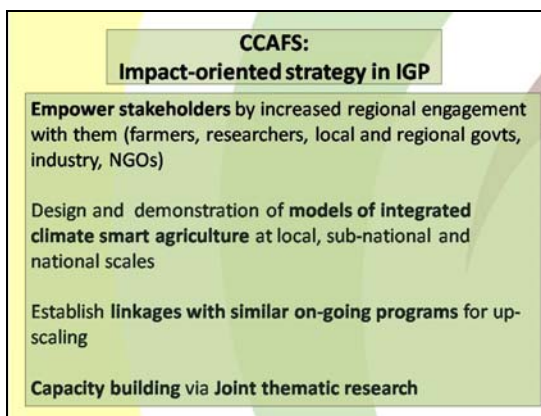
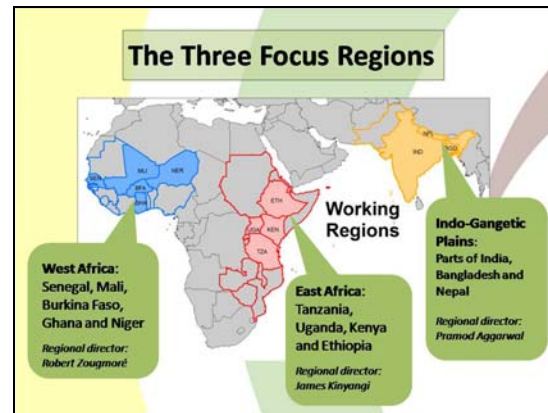
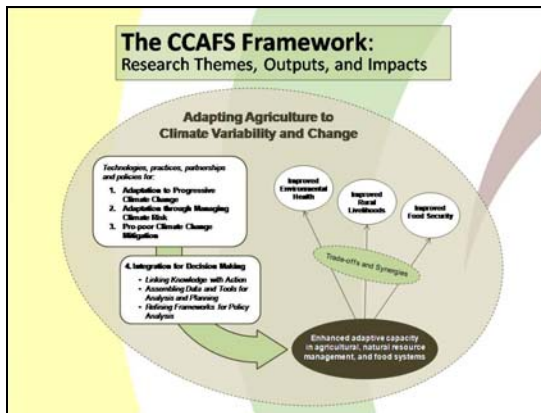
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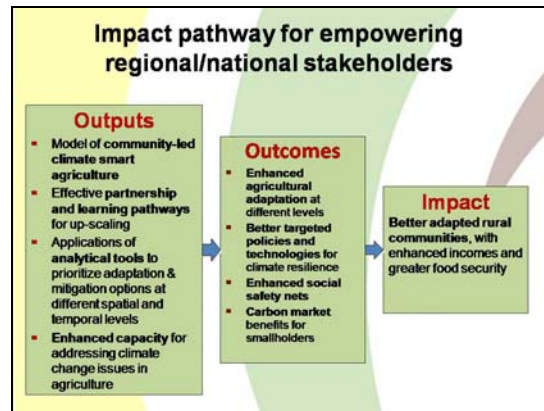
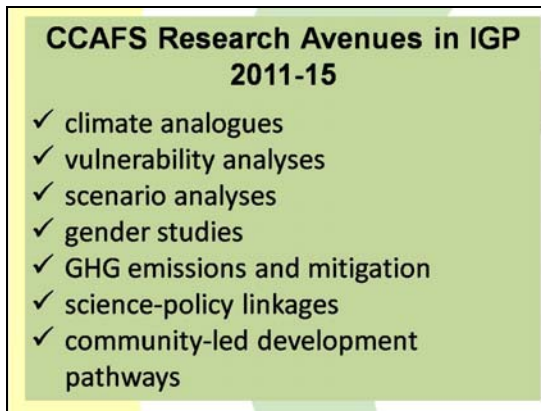
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# Climate Change, Agriculture and Food Security (CCAFS)

John Ingram











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