



**PROCEEDINGS OF THE
12TH INTER-GOVERNMENTAL MEETING
AND
12TH SCIENTIFIC PLANNING GROUP MEETING**

**Honolulu, USA
21-23 March 2007**

PREFACE

The APN's 12th joint Inter-Governmental Meeting (IGM) and Scientific Planning Group (SPG) Meeting successfully convened in Honolulu, USA, from 21-23 March, 2007.

This was the first time for the APN to hold an annual meeting in the USA. This committed member country since the birth of the APN helped in the organisation.

In 11 years, the APN has supported 139 research and capacity building projects, enhancing the regional cooperation in dealing with the global change related issues relevant to the Asia-Pacific region. Through the success of these projects, appropriate interactions among scientists and policy-makers had been strengthened. This further resulted to international recognition that the APN would continue to promote in 2007/2008, with all its dedicated members.

Various encouraging outcomes stemmed from the active discussions that the participants took part in the 12th IGM/SPG. A more streamlined system for the Calls for Proposals and Review Process was endorsed. The meeting also indicated the right way forward and outlined the following works that must be achieved over the next year:

- Urge APN members and project leaders to continually promote the relevance of APN and its activities;
- Sustain existing collaboration with the global change community and pursue further partnerships with other agencies, institutions and organisations of same interest with the APN;
- Carry out the short-term actions outlined in the Operating Plan;
- Support the Steering Committee to mobilise additional funding source; and
- Implement the agreed budget plan with specific focus on scientific activities.

A liaison trial model that was initially proposed at the 11th IGM in Bangkok for Southeast Asia region was endorsed, with South Asia in the trial as well. The 12th IGM also agreed to organise a side event at the Conference of the Parties/Meeting of the Parties (COP/MOP 3) to United Nations Framework Convention on Climate Change (UNFCCC) to be held in Indonesia in December 2007.

Following-up the two APN scoping workshops on Global Earth Observation System of Systems (GEOSS) in 2005/2006, the IGM decided to develop a curriculum for a training programme, and collaborate with the Asia Water Cycle Initiative (AWCI) to reinforce links between users of observation data and observation/data creation experts in water management.

Now, allow me to express my sincere gratitude for the open and active involvement of the participants of the 12th IGM/SPG, which, I am certain, will contribute to the greater success of the APN. My heartfelt thanks to Mr. Louis Brown, national Focal Point for the USA for hosting the meetings and for his work as Chair; Dr. Luis Tupas, SPG Member for the USA; and members of the US delegation for the well-organised National Activity Session and for their hospitality.

Lastly, I would like to extend my special appreciation to the SC Members, including SPG Co-Chairs, for their dedication to the success of the APN in the past two years. Let me also congratulate and welcome the new Steering Committee. I look forward to working with you and also with all the members so that APN will continue to flourish in the coming years.



Hiroki Hashizume
Director, APN Secretariat



**Asia-Pacific Network for Global Change Research (APN)
12th Inter-Governmental Meeting and Scientific Planning Group Meeting
21-23 March 2007, Honolulu, USA**



National Focal Points:

Bangladesh – KHAN (36)
 Cambodia – SUNDARA (29)
 China – LI* (28)
 Indonesia – KARTAKUSUMA* (25)
 Japan – TSUKAMOTO (16)
 Lao PDR – KOMANY* (5)
 Mongolia – DASHZEVEG (15)
 New Zealand – MATTHEWS (19)
 Pakistan – IQBAL (6)
 Philippines – PEÑAFIEL (9)
 Rep. of Korea – YU* (41)
 Sri Lanka – JAYATILLAKA (21)

Thailand – AYUDHYA (11)
 USA – BROWN (44)
 Viet Nam – NGUYEN (40)

Scientific Planning Group Members:

Australia – WALLAND (7)
 Cambodia – KUM (10)
 India – MITRA (47)
 Indonesia – ADININGSIH (39)
 Japan – MIMURA (1)
 Lao PDR – BOUALAPHA (23)
 Malaysia – MOTEN (13)
 Mongolia – JAMSRAN (14)

Nepal – SHRESTHA (33)
 New Zealand – MATTHEWS (19)
 Pakistan/SASCOM – MUHAMMED (8)
 Philippines – CABRERA (3)
 Rep. of Korea – CHO (4)
 Russian Federation – STERIN (2)
 Sri Lanka – DHARMARATNA (30)
 Thailand – BOONJAWAT (50)
 USA – TUPAS (32)

Invited Experts to SPG

START International – FUCHS (49)
 START Oceania – KOSHY (24)

Observers

IHDP – SCHROEDER (31)
 MOFA, China – QIAN (20)
 MOEJ, Japan – TSUKAHARA (48)
 MONRE, Thailand – KESAWAWONG (38)
 MONRE, Thailand – KIATSUTTHAKORN (26)
 MONRE, Thailand – SURAPHRUK (46)
 MONRE, Thailand – TUMMAKIRD (42)
 NOAA, USA – DIAMOND (17)
 NOAA, USA – EPPI (18)
 NOAA, USA – THURSTON (34)
 USCCP, USA – ALLEN (12)

Speaker/Guest

CMA, China – FAN (22)

APN Secretariat

FADHILLAH (45)
 HASHIZUME (43)
 IMANARI (35)
 PULHIN (37)
 TAPIA (27)

** attended on behalf of the nFP*

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SECTION I

12th APN Inter-Governmental Meeting and 12th APN Scientific Planning Group Meeting

**Honolulu, USA
21-23 March 2007**

Chairperson's Summary

Chairperson's Summary

APN's 12th Inter-Governmental Meeting (IGM) and Scientific Planning Group (SPG) Meeting 21-23 March 2007, Honolulu, USA

Representatives or alternates from Australia, Bangladesh, Cambodia, China, India, Indonesia, Japan, Lao P.D.R., Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Thailand, United States of America (USA) and Viet Nam attended the meeting. Global Change System for Analysis, Research and Training (START), an expert from National Satellite Meteorological Center, China, and observers from International Human Dimensions Programme – Institutional Dimensions of Global Environmental Change (IHDP-IDGEC), Ministry of Foreign Affairs (MOFA), China, Ministry of the Environment, Japan (MOEJ), Ministry of Natural Resources and Environment (MONRE), Thailand, National Oceanic and Atmospheric Administration (NOAA), and United States Climate Change Science Program (USCCSP), USA also participated. The list of participants is provided as **Attachment I**.

Day 1 – 21 March

IGM and SPG Session

Opening and Welcome

Mr. Hiroki Hashizume, the APN Secretariat Director, officially opened the 12th IGM/SPG Meeting. Mr. Louis Brown, the national Focal Point (nFP) for the USA and Chair, Working Group on International Research and Cooperation, USCCSP, as host, welcomed and thanked the participants for coming to Honolulu. He noted that the USA considers global/climate change research a high priority and that the USCCSP, in particular, continues to support a vigorous programme in this area.

Mr. Hashizume thanked the participants for attending the meetings. He expressed the special thanks of the APN to Mr. Brown; to Dr. Luis Tupas, SPG Member for the USA; to the USCCSP; to the NOAA; and to the East-West Center for hosting and for their assistance in organising the 12th IGM/SPG Meeting.

The new APN members were introduced and welcomed. The APN Secretariat Director provided a brief explanation of what the APN is all about, what it does and what the expectations for the meeting are. He informed the participants regarding the history of APN, its membership, its financial arrangements and projects it funded in the past 11 years. It was noted that this 12th APN Annual Meeting is the first IGM or SPG Meeting in the Pacific, particularly in the USA, but in 2000, the APN Steering Committee Meeting had been held at the East-West Center also.

Mr. Hashizume further elaborated on the APN's vision, goals, strategies, scientific agenda, programme, organs, activities, organisational arrangements and procedures. He stressed that the IGM/SPG meetings provide the best occasion to formulate plans of actions to enhance global change research in the Asia-Pacific region. IGM and SPG Meetings have been held together with several parallel sessions since 2004 to bring together the scientists and representatives of governmental agencies and programmes. Mr. Hashizume noted that this year's IGM will emphasise countries' updates, science-policy interactions, expected roles of members, and preparations for the next United Nations

Framework Convention on Climate Change (UNFCCC) Conference of the Parties/Meeting of the Parties (COP/MOP) Meeting from 3-14 December, 2007 in Bali, Indonesia.

Moving to a report on activities undertaken during the second year of the Second Strategic Plan, Mr. Hashizume mentioned important international activities in which the APN had been involved, such as the United Nations Commission on Sustainable Development (UNCSD 14), Twenty-fourth Sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA 24) of UNFCCC and Third Plenary Session of the Group on Earth Observations (GEO III). He noted that the APN initiated on a trial basis a new way to promote sub-regional liaison. The Opening Remarks is provided as **Attachment II**.

Election of Officers

Mr. Hashizume proposed that Mr. Lou Brown, the APN nFP for the USA and Mr. Sem Sundara, the APN nFP for Cambodia, be elected as Chair and Vice Chair, respectively. They both accepted. Mr. Brown invited the participants to introduce themselves and briefly state their respective roles in the APN.

ITEM 1: Adoption of the Agenda and Introduction to the Steering Committee (SC Election)

The Chair introduced the agenda which was adopted as proposed. The Chair referred to the list of SC candidates nominated in advance and called for additional nominations. Dr. Andrew Matthews, nFP for New Zealand, and Mr. Brown confirmed that they declined being included in the list. The Chair announced that SC nominations would be accepted until the end of the afternoon coffee break of the same day. He also briefly explained the election process and noted that the SC may also co-opt experts to serve as members of and participate in the activities of the SC.

ITEM 2: Review of 2006/2007 Activities

The Steering Committee Chair, Dr. Andrew Matthews, presented a review of APN's activities since the 11th IGM/SPG meetings in Bangkok, Thailand. These activities included the Annual Regional Call for Proposals (ARCP) Programme which supported 15 projects; the APN's capacity development programme (CAPaBLE) which supported 11 projects; a meeting to develop a Liaison Trial Model in APN Sub-region; and continued discussions with National Science Foundation (NSF) for direct funding.

APN's efforts on publicity and communications were also reported on. The APN participated at various national and international fora; published a Global Change and Integrated Coastal Management Book; the 11th IGM/SPG proceedings; the Report of the 7th International Conference on the Environmental Management of Enclosed Coastal Seas (in cooperation with the International EMECS Center); the 2005/2006 Annual Report; Project Bulletin Vol.2; four (4) new posters (APN General Poster, APN CAPaBLE Poster, ESSP OSC Poster, GEOSS Poster); and quarterly newsletters (soft copy only).

Dr. Matthews noted how important it is to continually promote the relevance of the APN's activities. He also saw the need to remain adaptive and try schemes or models of activity that member countries might find useful. While APN is still faced with the challenge of linking science to policy; he encouraged, and the Meeting agreed, that the APN should continue its collaboration with key international organisations and agencies with interests similar to those of the APN.

IGM Session (SPG members observe)

ITEM 3: Final Financial Report for 2005/2006 and Draft Financial Report for 2006/2007

The APN Secretariat presented the final Financial Report for 2005/06 and the draft Financial Report for 2006/07. It was also reported that the final Financial Report for 2005/06 had been incorporated in the overall Financial Statement of the Institute for Global Environmental Strategies (IGES) and the statement had been duly approved by the external auditors. The report summarised revenues (US\$ 2,235,000), expenditures (US\$ 1,782,000), the outstanding balance for project commitments (US\$ 225,000), and the funds to be carried over (US\$ 228,000) to the fiscal year 2006/07. It was noted that the carry-over increased from the draft financial report presented at the 11th IGM/SPG in Bangkok, Thailand, by US\$ 85,000 due to significant savings in the 2005/06 fiscal year. The final Financial Report for 2005/06 was approved by the IGM.

The draft Financial Report for 2006/07 was then introduced with revenue and draft expenditure amounting to US\$ 2,039,000, including a planned carry-over of US\$ 169,000 to 2007/08. It was explained that the increase of US\$ 157,000 in the revenue was due to the generous contributions of the Republic of Korea, the increase in the contributions of the US NSF/USCCSP and New Zealand, and the increase in carry-over from the previous year. It was also reported that less money had been spent on the Annual Regional Call for Proposals (ARCP), due to shifting one project to the CAPaBLE Programme (CBA2006-01NSY-Manner) and the pledge to support two capacity development activities (IHDW and SOLAS). The US nFP expressed his concern in the decrease in ARCP funding, relative to that on CAPaBLE since the primary focus of the APN should be on research.

The in-kind contributions of member countries were also highlighted and acknowledged, particularly in devoting their time to the work of the APN. Special thanks were addressed to the USA and to the Hyogo Prefectural Government, Japan, for the additional support they had provided in the fiscal year 2006/07. It was noted in particular that the regular APN budget had been augmented substantially by the significant support provided by the Hyogo Prefectural Government in hosting the APN Secretariat and providing the salaries of two secretariat staffs and by the USA in defraying some costs of the 12th IGM. Prof. Roland Fuchs of the International START Secretariat indicated that START had provided in-kind contribution with the administration of the projects and activities which received funding from the USA contribution to the APN.

The APN Secretariat agreed to include a list of significant in-kind contributions to the APN budget in the presentation of the financial report next year.

The draft Financial Report for 2006/07 was adopted and it was thus agreed to delete the word "Draft" from the title of the 2006/07 Financial Report.

ACTION: Secretariat

IGM and SPG Session

ITEM 4: Institutional Issues

Membership Development

The APN Secretariat Director provided the meeting with an update on membership development. Four new nFPs and one new SPG Member were recognised and welcomed. The following member countries have new nFPs: Bangladesh, Cambodia, Pakistan and Republic of Korea. It was noted that Fiji may have no nFP at the moment after its former nFP stepped down. The new SPG Member for the Philippines was also introduced. New members of the APN Secretariat (the Coordinator, Administrative Assistant, Programme

Fellow for Scientific Affairs, and Programme Fellow for Communications and Development) were also introduced.

It was also reported that the APN Secretariat has been in communication with the Ministry of Environment and Water Resources of Singapore regarding the possibility of Singapore becoming a member of the APN. The Secretariat was encouraged to continue this effort in the future and it was noted that, in the meantime, Singapore is an APN approved country (whose scientists are eligible to receive funding under APN awards). The APN Secretariat Director reported that he had responded to an inquiry from the National Environment Commission in Bhutan in January 2007 about the procedures on how to become an APN member country, but that a response from this official is still being awaited.

Framework Document

The Chair introduced the Framework Document and provided background on the issues raised on the document at the 11th IGM/SPG Meeting, particularly the appropriateness of having Terms of Reference for participants in APN activities attached to the Framework Document. The APN Secretariat Director introduced a proposed amendment to the Framework Document that would add a provision to Section 8 of the current Framework. This provision would refer, in turn, to an appendix that would guide those participating in APN organs. The Chair suggested that the Framework Document be considered a living document of the APN and be revisited regularly and updated as necessary. The amendment was adopted by the IGM and the guidance was approved as Appendix 4 in the Framework Document.

The APN Secretariat Director proposed to also add to the Framework Document a provision on the Capacity Development Committee (CDC) of the CAPaBLE Programme right after the current provision on SPG Sub-Committee in the similar wording. The nFP for Japan reported that, although the CAPaBLE Programme had originally been conceived as a five-year programme, the Government of Japan is very pleased with the programme's accomplishments and confirmed that the support for this programme will be continued and strengthened. It was agreed that acknowledgment should be sent to the donor countries, namely, Japan, New Zealand, Australia, the Republic of Korea, and the USA for the generous financial support that they had provided to this programme.

The amendment on the Framework Document to include a reference to the CDC was approved. The Chair suggested and it was agreed that the amended document be circulated to the members for additional comments and that, if no additional comment is received, the amendments will take effect two months after the IGM/SPG Meeting.

The Framework Document with amendments approved at the 12th IGM/SPG Meeting is provided as **Attachment III**.

APN Recognition

Both nFPs and SPG Members recognised the importance of promoting APN and agreed to promote increased recognition of the APN in their countries and in appropriate activities in these countries.

Financial Management

The APN Secretariat explained how the finances are being managed. Current financial sponsors and all the members providing in-kind support were recognised for their contributions. The APN also acknowledged START who administers the funds coming from NSF on behalf of the USCCSP.

APN Brochure

The APN brochure which had been approved by the SC was presented to the members. The Chair asked the members to inform the APN Secretariat how they want their countries to be referred to in the brochure. The IGM endorsed the printing and distribution of the brochure.

ACTION: Secretariat and all APN members

ITEM 5: ARCP Process and Project Management

The SPG Co-Chair, Dr. Nobuo Mimura, gave an overview of the ARCP proposals process and project management in the past year, as well as the results of the SPG Pre-Meeting held on the 20th March. He explained the goals of the call for proposals and the ARCP process. It was reported that the APN had received 20 pre-proposals from its combined ARCP and CAPaBLE Pre-proposals Stage of which 11 were intended for ARCP. Following the completion of the pre-proposals stage, 24 proposals were received for the ARCP that met the basic criteria for eligibility and these were considered for funding. It was noted that nine of the proponents were new to the APN process and that most of proposals focused on more than one theme. The review process utilised both internal reviewers (i.e., SPG Members) and external reviewers from the international global change research community. The latter provided only qualitative review of the proposals. The review process was further refined at the SPG Pre-Meeting on the 20th March 2007.

Regarding project management, it was noted that the projects implemented in 2006/07 followed a revised Terms of Agreement and that the project review questionnaire had also been revised to reflect an evaluation of the APN's funding management. It was noted that peer-reviewed publications that had resulted from projects completed in 2005/06 have been listed in the APN 2005/06 Annual Report. Volume 2 of the Project Bulletin was also published in March 2007 to inform APN members, stakeholders and other interested parties of the projects being funded by the APN.

It was acknowledged that the number of proposals submitted in the past few years had declined. The SPG Co-Chair suggested some reasons for this, such as existence of large international projects and government investment in in-country studies. Other possible reasons include lack of information on APN funding, lack of experience in proposal preparation and the amount of time needed to prepare proposals. The Chair noted that a basic reason for the drop of proposals may be the low success rates of proposals in the past which could have discouraged scientists to submit proposals.

The SPG Member for New Zealand, however, emphasised that the quality of the proposals presently being considered is very high and that this is more important than the number received. He also noted that large well- and widely-coordinated projects could also result in fewer proposals being submitted. Furthermore, the SPG Member for USA, Dr. Luis Tupas observed that the level of collaboration proposed in the proposals received this year was substantially higher than last year.

It was agreed that the APN, as discussed in the SPG Meeting, should streamline its process for submission of proposals for the ARCP. It was also decided to undertake to improve the visibility of the APN by assuring effective representation of the APN in important meetings (such as the COP/MOP to be held in Bali) and by preparing and widely distributing a booklet on APN capabilities, project achievements and syntheses.

ACTION: Secretariat, SPG Members

ITEM 6: CAPaBLE Update: Report from the CDC

The SC Chair, Dr. Andrew Matthews presented an update on the CAPaBLE Programme. The success of CAPaBLE was highlighted in terms of its contribution to national, regional and international processes, such as the IPCC. In the four years since it was launched, CAPaBLE has implemented 37 projects and produced a number of professional publications.

It was reported that this year, CAPaBLE had received nine pre-proposals and 19 full proposals, of which thirteen were considered for funding. The wide range of capacity

building activities intended to be implemented by the projects was summarised to give a feel of the sort of activities that CAPaBLE has been funding. Dr. Matthews also emphasised the unique capabilities of CAPaBLE, particularly in allowing single-country capacity building projects rather than the regional requirement as in the ARCP, because capacity is effectively built within an individual country and using that country's own language.

ITEM 7: Southeast Asia Sub-Regional Committee Update

On behalf of the nFP for Indonesia, Ms. Liana Bratasida, Mr. Dana Kartakusuma presented the results of the meeting on sub-regional cooperation that had been conducted in Jakarta last August 2006. A budget of the activity was discussed as summarised under Item 17 below.

ITEM 8: Proposed New Activities

Side Event at UNFCCC

Climate change has been one of the major foci of the APN. In December 2007, the COP/MOP3 of UNFCCC will be held in Bali, Indonesia. Since it is one of the most important international climate change-related events of the year and it is going to be held in the Asia-Pacific, it is an ideal occasion to promote the APN. It was agreed to have a side event during COP/MOP3 and to invite the Minister of Research and Technology of Indonesia as one of the speakers to attract a wider audience. Mr. Kartakusuma volunteered to contact the Minister to check his availability in attending the event. It was also decided that the APN should set up a stand to showcase APN's products such as Project Reports, Project Bulletins, and DVDs. It was further agreed that US\$10,000 should be included in the budget for these purposes.

GEOSS

It was recalled that the APN had organised two "Scoping Workshops on Global Earth Observations and Capacity Building Needs of the Region: Focus – Climate" in 2005/2006 and that a GEOSS Symposium on Integrated Observation for Sustainable Development in Asia-Pacific Region had been organised by the GEO Secretariat in collaboration with the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) in January 2007. It was noted that MEXT is considering to organize further GEOSS-related activities. The APN Secretariat was asked to keep in touch with MEXT. Pakistan, Sri Lanka, and Thailand showed their interest in and their willingness to be involved in these activities.

The APN Secretariat Director introduced a letter that the APN had received from Mr. Shuichi Sakamoto, Director, Office of Earth and Environmental Science and Technology, Ocean and Earth Division, Research and Development Bureau, MEXT. In this letter, Mr. Sakamoto indicated that "MEXT hopes to strengthen the partnership with observation data users in the Asia Pacific region which is well represented by APN". In particular, Mr. Sakamoto indicated that MEXT would welcome development of cooperation between the APN and Prof. Toshio Koike of the University of Tokyo in developing plans for and implementing activities in support of the Asian Water Cycle Initiative (AWCI) that Prof. Koike is advancing.

The APN Secretariat Director then also introduced a detailed paper prepared by Prof. Koike with description of the Initiative, its planning and the kinds of programmatic activities that are being considered under and in association with the Initiative. The Meeting appreciated the extensive effort that Prof. Koike had made and discussed a number of key points he raised based on a summary of the paper that was presented by the SC Chair.

It was agreed that the Initiative identifies a number of objectives that are also of priority interest to the APN. Foremost among these are the "standardisation, collection, and exchange of scientific data; and improvement of scientific and technical capabilities and research infrastructures of nations in the region". It was stressed that the APN had

already contributed to the development of GEOSS primarily through the two Scoping Workshops referred to above.

It was also noted that the APN has substantial interests and capabilities in areas of research regarding the water cycle that could benefit from its use of “observation data” as referred to by Mr. Sakamoto and that it might be useful for the APN to offer to work with Prof. Koike to further elaborate the scientific/research objectives of the AWCI.

It was concluded that the APN should explore as a matter of priority the potential for collaboration with the AWCI by corresponding with Prof. Koike regarding the best ways to advance such collaboration and by responding very positively to Mr. Sakamoto indicating APN’s interest to collaborate with MEXT, especially in this area.

ACTION: Secretariat and SPG Co-Chairs

ITEM 9: Resources Development: Report from the RDC

Dr. Matthews presented an update from the Resources Development Committee (RDC). It was noted that seeking funding resources for the APN is a job for all the members. He asked the members to inform the APN Secretariat if there are funding opportunities, whatever the mechanism is. The nFP for Japan shared that many major companies in various member countries are interested in providing funds for research and these developments are very welcome to the APN. The Chair asked the APN Secretariat to continue this endeavour of mobilising funds from different sources and encouraged the members to support the Secretariat.

ACTION: Secretariat and all APN members

ITEM 10: Member Country Report Update (Summary)

On behalf of the nFP for Indonesia, Dr. Erna Sri Adiningsih, SPG Member for Indonesia, presented the summary of country reports that she had introduced at the 11th IGM/SPG in Bangkok, Thailand. She recalled that major purposes of the country reports is to identify the scientific priorities in each member country and in the region at large in relation to global change; identify best practices and opportunities to promote interactions between science and policy; and find ways to strengthen member governments’ sense of ownership.

For the Science Agenda, a range of topics have been identified by the APN members as priority areas in their respective countries, and climate is the highest concern in the Asia-Pacific region. The SPG Member for Indonesia presented a summary of these research topics.

The Chair suggested that the APN Secretariat might usefully contact individual nFPs to explore opportunities for co-funding from the countries where awarded projects will be or are being conducted. Other concerns that were identified were streamlining of the proposal preparation and proposal award processes.

The nFP for the USA suggested that the Sub-Regional Group be invited to consider the key points that were raised and to observe if their collaboration with the SPG Members and project leaders will be productive. The SPG Member for Indonesia agreed to work on these lines and will consult the nFP for Indonesia. The Sub-Regional Group was invited to draft a proposal for submission to the APN (as a possible model for such Sub-Regional Groups) and to work closely with the Secretariat on this.

It was agreed that the APN should encourage leaders of funded projects to make sure that their nFPs, SPG Members, governments, and policy makers are informed as to the results of their research.

ACTION: Secretariat, Sub-Regional Group, all APN members

ITEM 11: Member Country Updates (Individual FY 2006/2007 Report)

The Chair opened the session on the country member updates and referred to the template provided by the APN Secretariat. Each member country gave a five-minute summary of their respective reports.

Many countries still consider climate as their top priority concern. Other specific topics that were emphasised are adaptation, vulnerability and climate extremes. The public is being more aware of the impacts of the climate change. It was noted that an international climate change summit will be held in 2008 and that many more conferences, workshops and symposia are being conducted to heighten the awareness and further promote global change research.

ITEMS 12 & 13: Science Policy Update and Member Country Discussion

The APN Secretariat presented a paper on Science-Policy Update which compiled issues raised at the 11th IGM/SPG.

The nFP for New Zealand commented on the issue of events and appealed to nFPs to notify the APN Secretariat if they learn of any meeting relevant to global change whether national, regional, or international in scope so that these events can be considered in the planning process. He suggested that the APN could usefully encourage nFPs to represent the APN at those meetings and thus also ease some work and financial pressures on the APN Secretariat. The nFP for the USA supported this recommendation and suggested that the APN might also look to SPG Members to represent the APN in the more scientific of these events. It was agreed that the APN Secretariat invite both nFPs and SPG Members to provide information regarding important regional, sub-regional and national events, wherever appropriate and the Secretariat look to both nFPs and SPG Members to represent the APN in these events, whenever appropriate.

Regarding interaction with the media, START Oceania Regional Committee Director, Dr. Kanayathu Koshy, shared the experience in Fiji and the Pacific Islands wherein a media training programme, which was part of climate and extreme events training, was found effective in disseminating global change research information in the region.

Mr. Samuel Peñafiel, nFP for the Philippines, suggested that the APN could perhaps invest on a video production about the network and its activities that could be presented at meetings and other events. Such a production could be later translated into local languages. The APN could also approach the Academy of Sciences for the Developing World (TWAS) by giving them materials for dissemination, etc.

The US Global Climate Observing System (GCOS) Program Manager, Mr. Howard Diamond, reported that, during one of the GCOS meetings, a media expert from New Zealand, Dr. Jan Sinclair from the University of Auckland, had organised a seminar on how scientists could deal effectively with the media. Dr. Matthews and Mr. Diamond agreed to explore with Dr. Jan Sinclair possible opportunities to follow-up on this. Related to this, Dr. Koshy added that in Fiji they had invited the media to their workshop and they used a Pacific Journalism Programme at the University of the South Pacific, for one of their in-country training programmes in Kiribati,.

It was agreed that the SC and the APN Secretariat work with Dr. Koshy to extract the relevant media component of the Fiji project for dissemination to member countries.

The APN Secretariat Director noted that a video production had not been thought about before but that he considers the idea attractive. It was suggested that inputs from APN members (nFPs, SPG Members) and project leaders would be needed for such a production. Concern was expressed regarding the needs and benefits of translating such

a production into local languages. Dr. Matthews suggested that in making such a video presentation, a strong effort be made in order to come up with a product that will fit all.

Dr. Heike Schroeder, representing IHDP, also suggested to focus on one example of media dealings and to learn from it. Mr. David Allen, Program Associate of the USCCSP, suggested that it might be possible to have one video presentation produced in the major languages of APN members, but to also have different language tracks. Dr. Adiningsih noted that for scientific affairs, English would be fine, but for the policy community and public use, it is important to have the presentation in local language.

The SPG Member of Japan suggested that if the target is mass media, people want a short and concise message. He proposed that, as an initial step, the APN prepare attractive materials in written form, then pilot-test the translation into other languages. If effective, the APN can proceed to the preparation of visual materials.

One option that could be considered is the translation of the APN brochure into the languages of APN member countries. The SC and Secretariat were asked to explore possible options for the preparation and distribution of materials that could be useful in communicating the APN message to mass media and local people.

The APN Secretariat Director noted that preparing such audio-visual materials is not easy, is time-consuming and very costly. For the preparatory stage, he advised the members to give visual images to the APN Secretariat. He recalled that, previously, the APN had produced materials in different languages. The Chair suggested that it is often best to provide media with short punchy information on new and exciting scientific results. In doing this, inputs from members, especially from scientists, are relevant.

It was agreed that the SC, the SPG, and the APN Secretariat should work together to explore possible options along the above lines, noting that the Secretariat will serve as coordinator and not information generator. Other global change partners will be asked to share their expertise in preparing the video production. The recent two publications (the Annual Report and Project Bulletin) will be considered as sources of information.

ACTION: Secretariat and all APN members

Day 2 – 22 March

ITEM 14: Global Change Programme Updates

Prof. Roland Fuchs presented an update on START and highlighted its capacity building activities and START's interaction with the IHDP, World Climate Research Programme (WCRP), International Geosphere-Biosphere Programme (IGBP), and International Programme of Biodiversity Science (DIVERSITAS). Prof. Fuchs indicated that part of START's portfolio emphasises the science-policy interface in its capacity building activities.

Dr. Schroeder presented an IHDP update and highlighted the partnership that the APN has with IHDP, particularly through the APN-IHDP International Human Dimensions Workshop held in Chiang Mai, Thailand, in October 2006.

Mr. Lou Brown presented an IAI update and was asked several questions. He agreed to check on the budget of the IAI and inform the APN Secretariat. He made it clear also that there is flexibility within the IAI to launch new calls for proposals from time to time depending on the stage of implementation of the projects.

During the discussions, concern was raised that the APN, like IAI, is funding less projects on human dimensions. However, it was also pointed out that most APN projects are integrated in approach hence human dimension issues are addressed through such cross-

cutting projects. The Chair suggested and it was agreed that nFPs and SPG Members be encouraged to keep the issue in mind and promote more research in this area.

ACTION: Secretariat, all APN members

ITEM 15: Open Discussion on Regional Activity and Funding for Young Scientists
Regional Activity

The APN Secretariat Director presented the suggestions made by the APN members to promote science-policy linkages and recognition of the APN in the international community. Possibilities include a regional/national conference/workshop/seminar and participation in strategically targeted regional/international events. Dr. Matthews pointed out that there is some flexibility in the APN budget and mechanisms to discuss such activity could be considered by the SC.

Funding for Young Scientists

The APN Secretariat Director presented a paper on considering funding young scientists that is intended to attract new proponents and young scientists to submit proposals to the APN. It was pointed out, however, that funding limitations make a specific new programme in this area unfeasible at the present time. It was suggested and agreed that the APN should focus on attracting more quality proposals in general, at the same time keeping in mind the need to encourage submission of such proposals from young scientists who have institutional affiliations in the region.

ACTION: Secretariat, SC, SPG Sub-Committee

ITEM 16: GEOSS Update

Dr. Jinlong Fan reported on the Earth Observation Activities in China focusing on GEO activities and progress. The Chair suggested and it was generally agreed that the APN Secretariat coordinate closely with Dr. Fan and distribute information materials to members regarding the GEONETCast.

Mr. Howard Diamond gave a presentation on "Taking Advantage of GEOSS for the Communication of Hydro-Meteorological and Climate Information for Development". Future partnerships and collaboration are expected.

Section III provides the presentations given by Dr. Fan and Mr. Diamond.

ACTION: Secretariat

US National Activity Session

US scientists made a series of presentations on various US programmes that the USA considers to also be relevant to the APN. A CD that includes all of these presentations was provided to the APN Secretariat for wide distribution.

The Agenda of the US National Activity Session is provided as **Attachment IV**.

ACTION: Secretariat

IGM Session (SPG Members observe)

ITEM 17: Proposed Budget Plan 2007/2008

The APN Secretariat presented the proposed budget for 2007/08. Total revenues for the fiscal year are expected to be US\$ 1,876,000, with US\$ 1,385,000 allocated for scientific activities and US\$ 491,000 for administrative expenses. The Chair suggested, and it was agreed, that the APN should send brief notes to all the donor member countries, informing them of the budget and expressing thanks for supporting the APN. The nFP for New Zealand suggested and it was also agreed that a brief budget summary be included in the information to be sent to the donor countries with only the major headings in the figures included.

The budget included an allocation of US\$ 15,000 for sub-regional cooperation. It was noted that a proposal is being awaited from the Southeast Asia Sub-Regional Committee for their budget requirements in implementing the model. In this connection, the SPG Member for India, Dr. A.P. Mitra, stated that nFPs for South Asia had also met on ad hoc basis during the IGM and decided to hold a meeting of the regional group to streamline and prioritise APN-related activities. The ad hoc group requested the IGM to set aside about US\$ 5,000 for such a meeting in South Asia region. It was agreed that the APN Secretariat should seek a way to support such a meeting out of this budget allocation.

The IGM approved the proposed budget for 2007/08.

ACTION: Secretariat

ITEM 18: SPG Report to IGM

ARCP Funding

On behalf of the SPG, SPG Co-Chair Dr. Nobuo Mimura reported that the total budget available for the new and continued projects in ARCP is US\$ 685,000. Recommendations for continued funding were presented to the IGM for their approval. It was emphasised that the recommendations for the continued projects were based on the progress reports, which were compared against the original objectives outlined in the project proposals. Eight continuing multi-year projects were approved for continuation of which five have financial requirement from the APN in this fiscal year. The SPG Members considered 24 proposals for new awards of which twelve were recommended to the IGM for funding. The approved allocations are summarised below:

8 continuing multi-year projects	US\$ 174,000
11 new projects	US\$ 487,000
1 seed grant	US\$ 10,000
Others	US\$ 14,000

It was noted that while the above budget allocates the full amount requested by the proponents, the APN Secretariat will negotiate with project leaders to try to find ways to reduce the costs. It was suggested that the Secretariat, in conducting such negotiations, explore, as agreed earlier in the meeting, the possibility of the host institution/member country sharing in the costs of the project.

A full list of the ARCP Projects approved for funding is provided as **Attachment V**.

CAPaBLE Funding

The SC Chair reported on behalf of the CDC that a total of US\$ 495,000 is available for CAPaBLE funding this year for new and continued projects. Recommendations for continuing six multi-year projects were presented to the IGM for their approval. Of the

thirteen new CAPaBLE proposals considered, seven were recommended for funding. The reviews from the international global change community had been very helpful in deciding proposals for funding. Following detailed discussions on the budget allocation, the IGM endorsed the budget allocation of project funds as follows:

3 continuing multi-year Comprehensive Research Projects	US\$ 180,000
3 continuing multi-year Capacity Building projects (2 requested 2 nd year funding)	US\$ 65,000
7 new projects	US\$ 250,000

In view of the many meritorious proposals received under both the ARCP and CAPaBLE, the Chair recommended that the APN review the letter that is normally sent to unsuccessful proponents making clear that the non-funding was due to funding constraints and encouraging them to apply again in the future. This should not imply, however, that they should submit exactly the same proposal.

A full list of CAPaBLE Projects approved for funding is provided as **Attachment VI**.

Science Agenda

SPG Co-Chair Dr. Mimura presented the results of the SPG Pre-Meeting on the Science Agenda and suggested ways to attract more good proposals in the future.

Three such ways are improving information dissemination; removing barriers in application procedures; and making the call for proposals more attractive by providing seed grants, exploring co-funding opportunities, having awards for APN best projects, and making special arrangements for new or young applicants. In connection with these, it was suggested that the SPG look at the question of the criteria to provide guidance in launching the calls for proposals. The APN Secretariat, together with IGES, should also look into how the contract and contract negotiations could be simplified, taking into consideration the certain regulations specified by member countries.

With regards to the Science Agenda, Dr. Mimura reported that the SPG Pre-Meeting had recommended that the APN identify as emerging scientific themes the following:

- Climate: change and variability, observation, GEOSS, adaptation;
- Water: water quality, flood and drought;
- Agriculture and food security;
- Biodiversity;
- Air Quality;
- Health; and
- Education (especially the Decade of Education for Sustainable Development).

The Chair suggested that, based on the meeting's earlier discussions (e.g., regarding the AWCI), water issues should be an increasing high priority in the APN and that ways should be found to emphasise it in the Science Agenda. He also suggested that the APN should consider addressing science that could provide a sound basis for adaptation to and mitigation of global/climate change.

It was agreed that the SPG be asked to consider the recommendations regarding possible future scientific themes including those that had been proposed by the SPG Pre-Meeting and in this IGM/SPG Meeting and present recommendations to the APN that would enable the SPG and IGM to consider and approve at their next Meeting(s) a series of priority scientific themes for the APN.

ACTION: Secretariat

SPG Session (IGM Members observe)

ITEM 19: Election of SPG Officers and Any Other Business

Candidates for SPG Co-Chairs were:

1. G.H.P. Dharmaratna (SPG Member for Sri Lanka); and
2. Andrew Matthews (SPG for New Zealand)

They were elected by acclamation.

It was noted that both Co-Chairs would serve for two years. However, it was also agreed that, in order to assure continuity of leadership, two years from now, at least one of the Co-Chairs should extend his term one more year, thus enabling the APN to resume its normal process of electing one SPG Co-Chair at each IGM.

The following SPG Members were elected to serve on the Sub-Committee Group:

1. Subramaniam Moten (SPG for Malaysia); and
2. Luis Tupas (SPG for the USA)

The Chair, on behalf of both the IGM and the SPG, expressed special thanks to Drs. Nobuo Mimura and Jamsran Tsogtbaatar, whose terms as SPG Co-Chairs end at this joint IGM/SPG Meeting, especially for their very hard work and their dedication to the APN.

IGM and SPG Session

ITEM 20: Evaluation of the Operating Plan

Dr. Matthews introduced the Operating Plan for 2007/08 and asked the APN Secretariat Director to highlight issues for discussion. The APN Secretariat Director explained the Operating Plan and highlighted both the short-term and medium-long-term aspects. He shared that the SC, SPG and CDC already had significant discussions on the Operating Plan and that their suggestions are well reflected in the document. It was also proposed that the Short-Term Plan include, under the item on the institutional agenda, to "conduct sub-regional liaison trials, starting with (but not limited to) the Southeast Asian sub-region".

The Chair suggested, and it was agreed, that nFPs and SPG Members be invited to provide input on the Operating Plan with a deadline one month after the end of the IGM meeting, paying close attention to evaluation of performance of Phase 2. The APN Secretariat was asked to consult with the SC should there be substantive changes in the Operating Plan.

ACTION: nFPs, SPG Members, Secretariat

ITEM 21: Election of SC Members

The APN Secretariat Director presented as nominees for SC: namely, Dr. Michael Stoddart (Australia), Ms. Liana Bratasida (Indonesia), Mr. Naoya Tsukamoto (Japan), Mr. Samuel Peñafiel (Philippines), and Mr. Petipong Ayudhya (Thailand). It was noted that Dr. Stoddart and Mr. Ayudhya were prepared to withdraw their nominations after communications with the Chair. Ms. Bratasida, Mr. Tsukamoto and Mr. Peñafiel were elected by acclamation to be the new members of the SC. It was recalled that the SC includes the SPG Co-Chairs (until the end of their term) and the nFP of the host country of the next IGM/SPG (for a one-year term) and that the SC has the authority to co-opt additional nFPs and/or other experts.

The newly-elected SC met briefly and informed the Meeting that they would like to co-opt Dr. Stoddart (nFP Australia), Mr. Ayudhya (nFP Thailand), Mr. Brown (nFP USA), Mr. Seung-Hee Kim (nFP Korea), and Prof. Roland Fuchs (START) to serve on the SC. They agreed to serve in such capacities and the IGM indicated its satisfaction with the overall composition of the new SC.

The list of new Steering Committee Members is provided as **Attachment VI**.

ITEM 22: Hosts for 13th/14th IGM and Any Other Business

Sri Lanka confirmed its willingness to host the 13th IGM/SPG. The meeting accepted this invitation with acclamation. Thus, Mr. M.A.R.D. Jayatillaka was asked and agreed to serve on the SC for the next year.

The APN Secretariat Director asked any country to volunteer to host the 14th IGM/SPG to contact the Secretariat. It was noted that Malaysia had sent email messages indicating its readiness to host the 15th IGM/SPG, but that formal confirmation of this offer would be needed.

Any Other Business

The APN Secretariat Director again expressed the thanks of the APN to the USA, to the USCCSP, and to the NSF for hosting the 12th IGM/SPG Meeting. The Chair thanked the nFPs, the SPG Members, and the observers for their very thoughtful and very positive participation in the Meeting. The Chair then expressed the thanks of the participants to the Secretariat and its Director for the excellent support that they had provided to the Meeting.

Meeting Adjourns

List of Participants
APN 12th Inter-Governmental Meeting (IGM) and
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Opening Remarks – Mr. Hiroki Hashizume
Director, APN Secretariat
21 March 2007

First, on behalf of the APN Secretariat, I would like to express my special thanks to all the participants, who are attending the meetings far from their homeland. This is a considerable commitment, one that we are extremely grateful for. I would also like to thank our stakeholders, in particular Mr. Louis Brown, Chair, Working Group on International Research and Cooperation, U.S. Climate Change Science Program (USCCSP), Directorate for Geosciences, National Science Foundation, our national Focal Point for the United States of America (USA), Dr. Luis M. Tupas, SPG Member for the USA, people in USCCSP and also the East-West Center for their help in hosting and organising our 12th IGM/SPG Meeting in Hawaii. We have many new friends here with us this meeting. I would like to welcome all of you to our network.

Responding to the proposal by the USA in 1990 to create regional networks for North-South scientific cooperation at the inter-governmental level to 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. Now, we have 21 member countries. With the contribution from Japan, USA, Australia, New Zealand and the Republic of Korea, we have financially supported 139 research and capacity building projects in 11 years.

The USA has always been one of the most committed member countries of the network since the birth of the APN. I am particularly happy to be able to hold the IGM/SPG Meeting in the USA for the first time in the history of the APN, especially at the East-West Center where we had the Steering Committee Meeting in 2000. On this occasion, let me again express my deepest appreciation to our friends of the USA.

It is one of the striking characteristics of the APN that both scientists and governmental officials are working together for the enhancement of global change research. Scientists in the region cooperatively develop research projects. Twenty-one (21) leading scientists, one from each member country, or Scientific Planning Group Members review the project proposals and select which among those are to be funded.

The IGM, Inter-Governmental Meeting consists of national Focal Points or representatives of each member countries. As a decision-making body of the APN, IGM approves policies, budget, rules and procedures, and work plans of the APN including endorsement of the project funding recommended by the SPG. Since 2004, we have been holding IGMs and SPG meetings together with several parallel sessions to synergise the two important forces. This IGM/SPG Meeting is really the best occasion to formulate plans of actions to enhance global change research in the Asia-Pacific region.

Global change, most notably depicted by climate change, is becoming the focus of various international agenda these days. Reports about these such as the one by Sir Nicholas Stern and the other by the IPCC WG 1 were widely reported in media. I am sure APN funded researches have significantly contributed to the work. In the year ahead, a lot more will be coming up, leading to the COP 13-COP/MOP 3 to UNFCCC to be held in Bali, Indonesia, in our region in December. In spite of the probable international attention to the Asia-Pacific region, we know research on global change is still far from enough in our region and that is exactly why we all get together here.

Following last year's experience in Bangkok, this 12th IGM/SPG Meeting will be spent more on discussing countries' update, science-policy interactions, expected roles of members, and preparation for Bali COP/MOP. These again have made our agenda full and may keep us busily locked up in conference rooms in Hawaii coming all the way from our native places. As such, I would like to ask for your cooperation to our Chairs, who will be elected later this morning so that we can have fruitful discussion and so that you may be able to have a little more free time on Waikiki Beach after the conclusion of our meetings.

In 10 days, we are getting into the third year of the Second Strategic Plan. I am sure we have been quite steadily working along the three agendas given in the Strategic Plan. We have appeared at important international occasions including the United Nations Commission on Sustainable Development (UNCSD) 14, Subsidiary Body for Scientific and Technological Advice (SBSTA) 24 of UNFCCC and Group on Earth Observations (GEO) III, and initiated a new trial to promote sub-regional liaison. There are a lot more to be reported in the Item 2 by Dr. Andrew Matthews, Chair of the Steering Committee.

I look forward to your continued positive contributions and cooperation throughout the next three days and beyond, for further success in the year ahead. Thank you very much.

Framework Document

Note: This version includes the amendments approved at the 12th IGM/SPG Meeting

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Framework of the Asia-Pacific Network for Global Change Research

Introduction

Changes in the Earth system are clearly impacting upon the societies and economies of the countries within the Asia-Pacific region, which supports more than half of the world's population. Recognising this, the APN was established in 1996 as an inter-governmental network in the Asia-Pacific region to foster global change research¹ in the region, increase developing country participation in that research, and strengthen interactions between the science community and policy-makers.

The purpose of this document is to define the Framework and organisational arrangements and procedures of the APN. The Framework provides a vehicle for implementation of the Second Strategic Plan (2005-2010). The mission, vision and goals from the Strategic Plan are copied below.

1. 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 to:

- 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.

2. Core strategies

The core strategies of the APN are to:

- i. Encourage and promote research that has the potential, in addition to improving understanding of global change and its implications in the region, to contribute to the establishment of a sound scientific basis for policy-making with regard to issues for which global change is an important factor.
- ii. Identify, in consultation with policy-makers and practitioners, present and future needs for such research.

¹ "The APN defines global change research as "research regarding global change (the set of natural and human-induced changes in the Earth's physical and biological systems that, when aggregated, are significant at a global scale) and its implications for sustainable development in the Asia-Pacific region."

3. Vision

Changes in the Earth system are clearly impacting the societies and economies of the countries within the Asia-Pacific region. These countries support more than half of the world's population. 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.

The APN seeks to identify such emerging issues and to promote and encourage regional cooperative research to address these. In doing so, the APN assures that the results of this research contribute to development of a sound scientific basis for policy- and decision-making related to issues for which global change is an important factor.

The APN strives to enable developing countries of the region to participate increasingly in, and to benefit fully from, cooperative research in the region. Finally, recognising the interactive role of regional processes in the overall Earth system, the APN also seeks to link the research it sponsors with research conducted in other regions and under the aegis of global-scale programmes.

4. 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
- Goal 4. Cooperating with other global change networks and organisations
- Goal 5. Facilitating the development of research infrastructure and the transfer of know-how and technology

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 implications for project proposals that are found, by the SPG, to fit the APN research priorities so that it can make recommendations to the IGM;
- 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 one of its Focal Points to act as its 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. two 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 three 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
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:

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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 (nFPs) are responsible for representing their countries in the activities of the APN, especially their countries' programmes 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 programmes 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 programmes, 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 IGMs 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 Programme 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 programmes 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 programme, institution, country, and/or international organisations. Each SPG Member is expected to work closely with the national Focal Point (nFP) from his/her country and, in particular, to make sure that the nFP is kept up-to-date on activities and views of the SPG.

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

- review and evaluation of research proposals received by the APN and the preparation of recommendations to the APN Inter-Governmental Meeting (IGM) for APN funding of appropriate proposals; this could involve serving on various small ad hoc groups that support these activities;
- evaluation and review of the APN Strategic Plan and of themes that the APN may consider appropriate and may select for emphasis in the implementation of this Plan;
- consideration and identification of research-driven capacity building of value to the APN; and
- when called upon, to represent the SPG in other APN activities or with national and/or international programmes 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 programmes, 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 programme, 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 programme; development of funding for the APN and its programmes from member countries, international agencies and the private sector, either on a cash or in-kind basis; interacting with the international global change research programmes 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 programme, planning and operations; inviting input to the APN programme, 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 programmes, 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; programme; 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 programmes; 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.

USA National Activity Session AGENDA

**Asia-Pacific Network for Global Change Research (APN)
USA National Activity Session: Building Partnerships for the Future
1400 – 1830
Thursday, 22 March 2007
East-West Center
Honolulu, USA**

1400 – 1430

Establishing Partnerships for GEOSS with a Focus on the APN Region

Dr. Sidney W. Thurston
International Coordinator
NOAA Office of Climate Observation (OCO)

1430 – 1500

***The Regional Pacific Islands Global Climate Observing System (PI-GCOS)
Program: Working with Regional Partners to Build a Sustainable and Robust
Climate Observing Infrastructure for the Pacific Islands Region***

Howard J. Diamond
U.S. GCOS Program Manager & Director, World Data Center for Meteorology, Asheville

1500 – 1530

***Emergence of a Pacific Climate Information System (PaCIS):
Building Partnerships for the Future***

Eileen L. Shea
Director
NOAA Integrated Data and Environmental Applications (IDEA) Center

1530 – 1600

Afternoon Tea

1600 – 1630

Serving Climate Data at the Asia-Pacific Data-Research Center (APDRC/IPRC)

Dr. Jim Potembra
Asia-Pacific Data Research Center (APDRC)
School of Ocean and Earth Science and Technology (SOEST)
University of Hawaii

1630 – 1700

Modelling and Predicting Monsoon

Prof. Bin Wang
International Pacific Research Center (IPRC)

1700 – 1730

***Pacific Land Grant Alliance: Communities, Environments and Economies
in Harmony – Preparing for Regional Opportunities***

Dr. Andrew G. Hashimoto

Dean and Director

College of Tropical Agriculture and Human Resources

University of Hawaii

1730 – 1800

***International Sea Grant: Emerging Opportunities for
Training, Capacity Building, and Education***

Rene Eppi

Director

International Activities Office

NOAA Research

1800 – 1830

Open Discussions & Queries to USA Presenters

1900 – 2100

Reception

2007 ARCP Projects

2006 Proposal/ Project Reference Number	2007/08 Project Reference Number	Title of the Project	Project Leader	Email Address	Relevance to 2SP Science Agenda	Summary of the Project	Regional Collaboration Countries Involved	IGM Recommended	
								Project Duration	2007/08 Funds
ARCP2006-06NMY	ARCP2007-01CMY	Sediment Dynamics and Down-stream Linkages in Tropical Streams as Affected by Projected land-cover/Land-use and Climatic Change	Dr. Alan D. Ziegler, The University of Hawaii, USA	adz@hawaii.edu	climate; ecosystems, biodiversity and land use	RESEARCH on effects of climate change and land use/cover change to water quality, erosion and sediment delivery in headwater streams in Montane mainland Southeast Asia	Thailand, China, India, Japan, Viet Nam, USA	3 years	40000
ARCP2006-07NMY	ARCP2007-02CMY	International Integrated Water Data Access and Transfer in Asia (IIWaDATA) Project	Dr. Toshio Koike, The University of Tokyo, JAPAN	tkoike@hydro.t.u-tokyo.ac.jp	climate; use of resources and pathways to sustainable development	ESTABLISHMENT of water data sharing and exchange policies and data management strategies in the Asian region	Japan, China, Thailand, Mongolia, Pakistan, India, Viet Nam, Bangladesh, Indonesia, Philippines	2 years	43000
ARCP2006-08NMY	ARCP2007-03CMY	Integrating Support System for Managing Environmental Change and Human Impact on Tropical Ecosystems in East Asia and the Pacific	Prof. Kazuo Nadaoka, Tokyo Institute of Technology, JAPAN	nadaoka@mei.titech.ac.jp	ecosystems, biodiversity and land use; changes in atmospheric, terrestrial and marine domains	RESEARCH on causes and consequences of present and future environmental change in tropical ecosystems and its application in management decisions	Fiji, Indonesia, Japan, Philippines, Samoa, Thailand	2 years	N/A
ARCP2006-09NMY	ARCP2007-04CMY	Integrated Vulnerability Assessment of Coastal Areas in the Southeast Asia and East Asian Region	Dr. Laura T. David, University of the Philippines, PHILIPPINES	ldavid@upmsi.ph	climate; ecosystems, biodiversity and land use; changes in the atmospheric, terrestrial and marine domains; use of resources and pathways to sustainable development	WORKSHOPS/RESEARCH on vulnerability of SE/E Asia coastal areas considering the coupled human and ecological systems	Cambodia, Indonesia, Japan, Malaysia, Philippines, Thailand, Viet Nam	3 years	N/A

ARCP2006-10NMY	ARCP2007-05CMY	Linking Climate Change Adaptation to Sustainable Development in Southeast Asia	Dr. Rodel D. Lasco, World Agroforestry Centre, PHILIPPINES	r.lasco@cgiar.org	climate; use of resources and pathways to sustainable development; crosscutting & science-policy linkages	SYNTHESIS of climate change adaptation and related research in SEA and analysis of its links to sustainable development	Philippines, Indonesia, Viet Nam, Lao PDR	2 years	N/A
ARCP2006-12NMY	ARCP2007-06CMY	Climate Crop Disease Risk Management: An International Initiative in the Asia Pacific Region	Prof. Samsul Huda, University of Western Sydney, AUSTRALIA	s.huda@uws.edu.au	climate; ecosystems, biodiversity and land use	RESEARCH on integration of climate, crop and epidemiological research in the development of regional predictive model for proactive agricultural risk management	Australia, India, Bangladesh, Cambodia, USA	2 years	35,000
ARCP2006-13NMY	ARCP2007-07CMY	Investigation on the Impacts of Urban-Rural Air Pollution on Air Quality and Climate in Southeast Asia	Dr. Nguyen Thi Kim Oanh, Asian Institute of Technology, THAILAND	kimoanh@ait.ac.th	climate; changes in the atmospheric, terrestrial and marine domains; cross-cutting and science-policy linkages	RESEARCH on characterisation and evaluation of air pollution levels in Southeast Asia in relation to climate change and human health	Thailand, Japan, Viet Nam	2 years	30,000
ARCP2006-15NMY	ARCP2007-08CMY	Assessment and Management of Change in Coastal Zone Caused by Salinity Intrusion	Dr. Gregory De Costa, Open Polytechnic of New Zealand, NEW ZEALAND	gregory.d.ecosta@penpolytechnic.ac.nz	use of resources and pathways for sustainable development	RESEARCH on changes in coastal zones caused by salinity intrusion	New Zealand, Australia, Japan, India, Sri Lanka, Pakistan	2 years	26,000
2006ARCP-FP03-Skole	ARCP2007-09NSY	Carbon Financial Markets, Rural Poverty, and Global Climate Change in SE Asia - Scoping Workshop, Training and Project Site Development	Dr. David L. Skole; Michigan State University, USA	skole@mstate.edu	climate; ecosystems and land use; and the use of resources for sustainable development	WORKSHOP, Training and Project Site Development about Carbon Financial Markets, Rural Poverty, and Global Climate Change in SE Asia	Cambodia, Lao PDR, Viet Nam, and USA	1 year	30,000
2006ARCP-FP08-Baguinon	ARCP2007-10NMY	Collaborative Studies in Tropical Asian Dendrochronology: Addressing Challenges in Climatology and Forest Ecology	Dr. Nestor T. Baguion, University of the Philippines Los Baños (UPLB), PHILIPPINES	ntbaguion2001@yahoo.com	climate; ecosystems, biodiversity, and land use.	A STUDY about Tropical Asian Dendrochronology: Addressing Challenges in Climatology and Forest Ecology	Philippines, India, USA, Thailand, Sri Lanka, Malaysia,	2 years	70,000

2006ARCP-FP11-Park	ARCP2007-11NMY	Regional collaborative research on climate change impacts on surface water quality in eastern Monsoon Asia: Towards sound management of climate risks	Dr. Ji-Hyung Park, Kangwoon National University Republic of KOREA	jihyungpark@kanqwoon.ac.kr	climate; ecosystem and water resources management for sustainable development	A regional collaboration RESEARCH on climate change impacts on surface water quality in eastern Monsoon Asia: Towards sound management of climate risks	Cambodia, China, Indonesia, Malaysia, Republic of Korea, Thailand	2 years	42,000
2006ARCP-FP14-Adrianov	ARCP2007-12NMY	Marine biodiversity of the coastal zones in the NW Pacific: Status, regional threats, expected changes and conservation	Dr. Andrey V. Adrianov, Institute of Marine Biology, RUSSIA	inmarbio@mail.pri.morye.ru	ecosystems, biodiversity and land use	A RESEARCH about biodiversity of the coastal zones in the NW Pacific: status, regional threats, expected changes and conservation	Republic of Korea, China, Russia	2 years	40,000
2006ARCP-FP15-Li	ARCP2007-13NMY	Quantification of land use urbanisation level in three developing Asia countries based on the analysis of scale effects in landscape pattern	Prof. Jianlong Li, Nanjing University, CHINA	jlli2008@nju.edu.cn ; jianlongli@hotmail.com	ecosystems, biodiversity and land use	A RESEARCH on quantification of land use urbanisation level in three developing Asia countries based on the analysis of scale effects in landscape pattern	China, Viet Nam, Philippines	2 years	30,000
2006ARCP-FP17-Dutta	ARCP2007-14NMY	Climate Perturbation and Coastal Zone Systems in Asia Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy	Dr. Dushmanta Dutta, Monash University, AUSTRALIA	dushman.ta.dutta@sci.monash.edu.au	climate; changes in the atmosphere, terrestrial, and marine domain	A RESEARCH on climate perturbation and coastal zone systems in Asia Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy	Australia, Bangladesh, Japan, Sri Lanka, Thailand and Viet Nam	2 years	40,000
2006ARCP-FP19-Parish	ARCP2007-15NSY	Assessing the mitigation and adaptation options for tropical peatlands to reduce GHG emissions and increase resilience to Climate change	Faizal Parish, Global Environment Centre, MALAYSIA	fparish@genet.po.my	climate; ecosystems, biodiversity and land use; changes in atmospheric;	RESEARCH on assessing the mitigation and adaptation options for tropical peatlands to reduce GHG emissions and increase resilience to climate change	Australia, Indonesia, Japan, Malaysia, Thailand	1 year	40,000
2006ARCP-FP22-Chen	ARCP2007-16NMY	Asian Mega-deltas: Monsoon circulation in relation to deltaic-coastal hazards and future mitigation – millennial to seasonal dimensions	Prof. Zhongyuan Chen; East China Normal University; CHINA	Z.Chen@ecnu.edu.cn	Climate; changes in atmospheric, terrestrial and marine domain.	RESEARCH on environmental , developments and regional workshops about on monsoon circulation in relation to hazard mitigation on deltaic-coastal regions	USA, Viet Nam, Japan, Bangladesh, China, Pakistan, India, Cambodia, Australia, Thailand, Myanmar, Canada, Brunei Darussalam, Indonesia, Korea	2 years	38,000

2006ARCP-FP23-Espaldon	ARCP2007-17NMY	Assessing vulnerability of communities to natural disaster and understanding policy implications of adaptation responses in disaster-prone areas in selected Asian countries (Philippines, Viet Nam and China)	Dr. Ma. Victoria O. Espaldon; School of Environmental Science and Management (SESAM); PHILIPPINES	voespaldon@yahoo.com	Science Policy linkage	A STUDY for the capacity of communities to deal natural disaster (e.g. landslides), evaluate existing policies and measures in place to respond to the occurrence of such disasters, and make recommendations which can improve the capacity to cope with them	Philippines, Viet Nam, China	2 years	70,000
2006ARCP-FP25-Nawa	ARCP2007-18NSY	Using CDM Opportunities to Mitigate the Release of Greenhouse Gases by Improving Waste Management Practices	Dr. Nawa Raj Khatiwada; Nepal Development Research Institute; NEPAL	nawa@ndri.org.np ; nawaraj9@yahoo.com	Climate: Use of resources and pathways for sustainable development	ASSESSMENT of impact of better waste management and introduction of strategy for utilising funds available under the CDM initiative	Nepal, Japan, Indonesia	1 year	40,000
2006ARCP-FP26-Sheikh	ARCP2007-19NMY	Development of Indices and Indicators for Monitoring Trends in Climate Extremes and its Application to Climate Change Projection	Mr. Muhammad Munir Sheikh, Global Change Impact Studies Centre (GCISC), PAKISTAN	gcisc@comsats.net.pk , munir.sh.eikh@gcisc.org.pk , +mmunirsheikh@yahoo.com , wontk@metri.re.kr	Climate	A WORKSHOP on development of indices and indicators for monitoring trend in climate extremes and its application to climate change projection; (1) Development and acquisition of daily climate data, (2) New indices of climate extreme relevant	Australia, USA, Bangladesh, India, Nepal, Pakistan, Sri Lanka	2 years	47,000

<p>2006ARCP-FP26-Sheikh (Kwon)</p>	<p>ARCP2007-20NSG</p>	<p>Development of Indices and Indicators for Monitoring Trends in Climate Extremes and its Application to Climate Change Projection</p>	<p>Dr. Won-Tae Kwon, Korea Meteorological Administration (KMA), Republic of KOREA</p>	<p>wontk@metri.re.kr</p>	<p>Climate</p>	<p>SEED GRANT for the development of indices and indicators for monitoring trend in climate extremes and its application to climate change projection; (1) Development and acquisition of daily climate data, (2) New indices of climate extreme relevant</p>	<p>Australia, Bangladesh, Cambodia, China, Fiji, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Thailand, USA, Viet Nam</p>	<p>1 year</p>	<p>10,000</p>
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2007 CAPaBLE Projects

2006 Proposal/ Project Reference Number	2007/08 Project Reference Number	Title of the Project	Project Leader	Email Address	Relevance to 2SP Science Agenda	Summary of the Project	Regional Collaboration Countries Involved	IGM Recommended	
								Project Duration	2007/08 Funds
Comprehensive Research Projects (CRPs)									
CRP2006-01NMY	CRP2007-01CMY	Improving Policy Responses to Interactions between Global Environmental Change and Food Security across the Indo-Gangetic Plain	Dr. Ajaya Dixit, Nepal Water Conservation Foundation, NEPAL	nwcf@wlink.com.np	GEC-induced changes in water availability and access & food systems	RESEARCH on the key technical, policy and resource management concerns related to how GEC-induced changes in water availability and access will affect the food systems	South Asia: Nepal, Bangladesh, India, Pakistan (Australia, New Zealand, USA)	3 years	60,000
CRP2006-02NMY	CRP2007-02CMY	Integrated Model Development for Water and Food Security Assessments and Analysis of the Potential of Mitigation Options and Sustainable Development Opportunities in Temperate Northeast Asia	Prof. Xiaodong Yan, START Regional Centre for Temperate Asia, CHINA	yxd@tea.ac.cn	water scarcity and land degradation due to climate change	RESEARCH to development of an integrated model system to assess potential mitigation options and sustainable development opportunities in relation to water and food security	East Asia: China, Mongolia, Russia (New Zealand)	3 years	60,000
CRP2006-03NMY	CRP2007-03CMY	Climate Change in Southeast Asia and Assessment on Impact, Vulnerability and Adaptation on Rice Production and Water Balance	Dr. Attachai Jintrawet, Multiple Cropping Centre, THAILAND	attachai@chiangmai.ac.th	climate change, hydrological regime and rice production	RESEARCH on the climate change characteristic in Southeast Asia in 40 years and its impacts on the hydrological regime and food production	Southeast Asia: Thailand, Lao PDR, Viet Nam, Cambodia (Australia)	3 years	60,000
Capacity Building (CB) Projects									
2005CB06-NMY		Socio-economic Impact and Lessons Learning from the Management of Social Forestry Program Implemented in Bangladesh	Dr. Quazi Liaquat Ali, Ministry of Environment and Forests, BANGLADESH	liaquat@bangla.net	scientific capacity building at national level	Analysis of approaches to the social forestry program in Bangladesh	Bangladesh	2 years	N/A

CBA2006-04NMY	CBA2007-01CMY	Removing Barriers to Capacity Building in Least Developed Countries: Transferring Tools and Methodologies for Managing Vulnerability and Adaptation to Climate Change	Mr. Bhujangarao Dharmaji / Dr. Channa Bambaradeniya, IUCN - The World Conservation Union, SRI LANKA	cnb@iucnsl.org	climate; crosscutting and science-policy linkages	CAPACITY BUILDING by transfer of Technology on vulnerability and adaptation to climate change to negotiators, policy makers, researchers and NGOs	Sri Lanka, Bangladesh, Lao PDR, Cambodia, Nepal, United Kingdom	2 years	30,000
CBA2006-05NMY	CBA2007-02CMY	Climate Change and Variability Implications on Biodiversity -- Youth Scenario Simulations and Adaptations	Prof. Bill Aalbersberg, University of South Pacific, FIJI	aalbersberg@usp.ac.fj	climate; ecosystems, biodiversity and land use	CAPACITY BUILDING of the youth on climate change implications on biodiversity	Fiji, Solomon Islands, Kiribati, Vanuatu	2 years	35,000
2006CB-FP02-Nunn	CBA2007-03NSY	Understanding Environmental Decision-making In The Rural Pacific Islands	Dr. Patrick D. Nunn, The University of the South Pacific, Fiji Islands	nunn_p@usp.ac.fj	Crosscutting issues and science-policy linkage	RESEARCH about Understanding Environmental Decision-making in the rural Pacific Islands	Pacific Island countries – Cook Islands, Fiji, Kiribati, Vanuatu	1.5 years	43,000
2006CB-FP09-Iino	CBA2007-04NSY	Developing chemical analysis capability in India and Pakistan and risk perception of policy makers and people in Asia	Dr. Fukuya Iino, United Nations University (UNU), JAPAN	iino@hq.unu.edu	Climate change	An International WORKSHOP for regional research community, especially young scientists, into professional activity in area of experimental and theoretical studies of atmospheric composition, air quality and their interrelations with anthropogenic load and climate change in Northern Asia	Russia, Japan, India, Pakistan	1 year	20,000
2006CB-FP10-Kelkar	CBA2007-05NSY	New risks of climate change – Building capacity to protect the most vulnerable	Ms. Ulka Kelkar, TERI (The Energy and Resources Institute), INDIA	ulkak@teri.res.in	Climate; Pathways for sustainable development; Cross-cutting issues and science-policy linkages	CAPACITY BUILDING to protect the most vulnerable communities on new risks of climate change	India	1 year	20,000

2006CB-FP11- Chatterjee	CBA2007-06NMY	Communicating Economic Implications of climate change impacts and net benefits of adaptation measures to Policy Makers to enable them to take informed decisions	Dr. Anish Chatterjee; Development Alternatives; INDIA	achatterjee@deval.t.org.um athur@devalt.org	Climate change	A series CAPACITY BUILDING activities of training, data analysis, and workshop to demonstrate to the policy makers (at the local level) the ways to estimate climate change damage costs (both 'how much' and 'on whom') and deciding on the kind of investments to be made for different adaptation measures	India	2 years	30,000
2006CB-FP16-Bin Wang	CBA2007-07NSY	Workshop on "The Monsoon System: Prediction of Change and Variability"	Prof. Bin Wang; University of Hawaii; USA	wangbin@hawaii.edu	Climate	A WORKSHOP on The Monsoon System: Prediction of Change and Variability	China, India, Malaysia, Republic of Korea, USA,	1 year	50,000
2006CB-FP17- Gordov	CBA2007-08NSY	Capacity building to study interrelations between atmospheric composition, anthropogenic load and climate change in Northern Asia	Dr. Evgeny GORDOV; Siberian Center for Environmental Research and Training/ Institute of Monitoring of Climatic and Ecological Systems SB RAS; RUSSIAN FEDERATION	gordov@scert.ru	Climate change	An International WORKSHOP for regional research community, especially young scientists, into professional activity in area of experimental and theoretical studies of atmospheric composition, air quality and their interrelations with anthropogenic load and climate change in Northern Asia	Russia, Japan	1 year	38,000
2006CB-FP18- Soejachmoen	CBA2007-09NSY	Capacity Building in Asian Countries on Climate Change Issues Related to Future Regime	Ms. Moekti Handajani Soejachmoen; Yayasan Pelangi Indonesia; INDONESIA	kuki@pelangi.or.id	climate	Increasing the CAPACITY of research institutes and negotiators in developing countries, namely Indonesia, Thailand, India, Bangladesh and China in participating in the international climate negotiation.	Indonesia, Japan, China, Thailand, Bangladesh, India, expected Republic of Korea and Pacific Islands country	1 year	45,000

List of New Steering Committee Members

The following APN members were appointed as new Steering Committee Members:

For two-year term:

National Focal Points:

Mr. Samuel Peñafiel, Philippines, Chair

Ms. Liana Bratasida, Indonesia

Mr. Naoya Tsukamoto, Japan

SPG Co-Chairs:

Dr. Andrew Matthews, New Zealand

Mr. G. H. P. Dharmaratna, Sri Lanka

For one-year term:

National Focal Point of the Host Country of the 13th IGM/SPG Meeting:

Mr. M.A.R.D. Jayatillaka, Sri Lanka

Opt-in Members:

Dr. Michael Stoddart (nFP, Australia)

Mr. Seung-Hee Kim (nFP, Republic of Korea)

Mr. Petipong Pungbun Na Ayudhya (nFP, Thailand)

Mr. Louis BROWN (nFP, United States of America)

Dr. Roland FUCHS (Expert on Global Change, START)

SECTION II

**Item Papers of the 12th APN Inter-Governmental Meeting
and
12th Scientific Planning Group Meeting**

Agenda
Annual Meeting of the Asia-Pacific Network for Global Change Research (APN)
12th Inter-Governmental Meeting and Scientific Planning Group Meeting
Honolulu, USA, 21-23 March 2007

Time	21 March Day 1		Time	22 March Day 2		Time	23 March Day 3		
	IGM	SPG		IGM	SPG		IGM	SPG	
08:15-08:30	Bus to East-West Center		08:15-08:30	Bus to East-West Center		08:15-08:30	Bus to East-West Center		
08:30-9:00	Participants arrive at venue		08:30-9:00	Participants arrive at venue		08:30-9:00	Participants arrive at venue		
9:00-9:30	(9:00-9:15) Opening US Representative, TBA (No Paper)		9:00-9:30	(9:00-10:00) Science-Policy Update * Country Report: Policy Section * Future Science-Policy Activities, i.e. COP13/MOP 3 in Bali Chair/Vice Chair Item 13 (Paper & PPT)		9:00-9:30	(9:00-9:30) Proposed Budget Plan 2007/08 Mr. Yukihiro Imanari, Secretariat Item 17 (Paper & PPT)		SPG Members Observe the IGM Session
	(9:15-9:30) Welcome Mr. Hiroki Hashizume, Director, APN Secretariat (No Paper)						(9:30-11:00) SPG Report to IGM SPG Co-Chairs 1 .ARCP Funding Item 18 2 . CAPaBLE Funding Item 18 3. Science Agenda 07/08 Item 18 (Paper and PPT)		
9:30-10:00	(9:30-9:50) Group Photograph Japanese Garden (level 1)		09:30-10:00	(10:00-11:00) Global Change Programme Updates Item 14 (PPT & No Paper)		09:30-10:00	(9:30-11:00) SPG Report to IGM SPG Co-Chairs 1 .ARCP Funding Item 18 2 . CAPaBLE Funding Item 18 3. Science Agenda 07/08 Item 18 (Paper and PPT)		SPG Members Observe the IGM Session
	(9:50-10:00) Election of Officers Delegates will elect a Chair from the host country and a Vice Chair from a member country								
10:00-10:30	(10:00-10:15) Adoption of Agenda & Introduction to SC Election IGM Chair/Vice Chair Item 1 (Paper will be the Agenda)		10:00-10:30	(10:00-11:00) Global Change Programme Updates Item 14 (PPT & No Paper)		10:00-10:30	(9:30-11:00) SPG Report to IGM SPG Co-Chairs 1 .ARCP Funding Item 18 2 . CAPaBLE Funding Item 18 3. Science Agenda 07/08 Item 18 (Paper and PPT)		SPG Members Observe the IGM Session
	(10:15-10:45) Review of 2006/2007 Activities: Report from Steering Committee Dr. Andrew Matthews, SC Chair Item 2 (Paper & PPT)								
10:30-11:00	(10:45-11:00) Tea/Coffee Break		10:30-11:00	(10:45-11:00) Tea/Coffee Break		10:30-11:00	(10:45-11:00) Tea/Coffee Break		

11:00-11:30	(11:00-11:15) Financial Report 2006/07 Mr. Yukihiro Imanari, Sec. Item 3 (Paper & PPT)	SPG Members Observe IGM Session	11:00-11:30	(11:00-11:15) Tea/Coffee Break	11:00-11:30	(11:00-11:15) Tea/Coffee Break	
	(11:15-12:00) Institutional Issues * Membership Development * Framework Document * APN Financial Management * APN Recognition * APN 2007 Brochure Mr. Hiroki Hashizume, Secretariat Item 4 (Paper & PPT)			(11:15-12:15) Open Discussion *Regional Activity * Funding for Young Scientists Item 15 (Paper)		IGM Observe the SPG Session	(11:15-11:30) Election of SPG Officers & AOB Item 19 (No Paper & PPT)
11:30-12:00			11:30-12:00		11:30-12:00	(11:30-12:15) Evaluation of Operating Plan SC Chair, Dr. A. Matthews Item 20 (Paper & PPT)	
12:00-12:30			12:00-12:30		12:00-12:30		
12:30-13:00	(12:00-13:00) Lunch East-West Center		12:30-13:00	(12:15-13:00) GEOSS Update Dr. Jinlong Fan, National Satellite Meteorological Center, CMA Dr. Howard Diamond, NOAA Item 16 (PPT)	12:30-13:00	(12:15-12:45) Election of SC Members & AOB Chair/Vice-Chair Item 21 (No Paper)	
13:00-13:30	(13:00-13:30) ARCP Process and Project Management Item 5 (Paper & PPT)		13:00-13:30		13:00-13:30		
13:30-14:00	(13:30-14:00) CAPaBLE Update: Report from CDC Item 6 (Paper & PPT)		13:30-14:00		13:30-14:00	(13:00-15:00) Lunch East-West Center	
14:00-14:30	(14:00-14:30) Southeast Asia Sub-Regional Committee Update Ms. Liana Bratasida Item 7 (Paper & PPT)		14:00-14:30	National Activity East-West Center	14:00-14:30		
14:30-15:00	(14:30-14:45) Proposed New Activities Mr. Hiroki Hashizume, Secretariat Item 8 (Paper & PPT)		14:30-15:00	National Activity East-West Center	14:30-15:00		

	(14:45-15:00) Resources Development: Report from RDC Dr. Andrew Matthews, RDC Chair Item 9 (Paper & PPT)				
15:00-15:30	(15:00-15:30) Country Report Update Ms. Liana Bratasida Item 10 (Paper & PPT)	15:00-15:30		15:00-15:30	(15:00-16:00) Chairperson's Summary Item 23 (Paper)
15:30-16:00	(15:30-15:45) Tea/Coffee Break	15:30-16:00		15:30-16:00	
16:00-16:30	(15:45-17:30) Member Country Updates Item 11 (Paper)	16:00-16:30		16:00-16:30	(16:00) IGM and SPG Joint Closing
16:30-17:00		16:30-17:00		16:30-17:00	Bus to Hotel
17:00-17:30		17:00-17:30		17:00-17:30	Free Time
17:30-18:00		(17:30-18:15) Member Country Discussion Chair/Vice Chair Item 12 (No Paper)	17:30-18:00		
18:00-18:30	18:00-18:30		18:00-18:30		
18:30-19:00	Bus to Hotel	18:30-19:00	Bus to Hotel	18:30-19:00	
19:00-21:00	Hosted Reception Dinner	19:00-21:00	Hosted Reception Dinner	19:00-21:00	

Review of 2006-2007 Activities

Major Activities since 11th IGM/SPG

- Supporting/managing 15 projects (10 new and 5 continuing) from funded activities budget under the ARCP process (***See Item IGM/SPG-12-05-App3 for a complete list of ARCP 2006/07 projects**)
- Supporting/managing 11 new capacity building projects and 3 new CRP Projects from funded activities budget under CAPaBLE (***See Item IGM/SPG-12-06-App2 for a complete list of CAPaBLE 2006/07 projects**)
- APN members and Secretariat participated at various national and international fora (more details below)
- Continued discussions with NSF for direct funding
- Liaison Trial Model in APN Sub-region (SEA)

Publications

- Published 11th IGM/SPG Proceedings
- Published Global Change and Integrated Coastal Management Book
- Published 7th International Conference on The Environmental Management of Enclosed Coastal Seas Report (with International EMECS Center)
- Published 2005/2006 Annual Report
- Published Project Bulletin, Vol.2
- Published 4 New APN Posters
 - APN General Poster
 - APN CAPaBLE Poster
 - ESSP OSC Poster: Strengthening Partnerships
 - GEOSS Poster
- Quarterly newsletters issues (soft copy only)



APN's Participation at Various Fora/Meetings

- APN members/Secretariat attended/made presentations at:
 - MAIRS-Workshop on Science Framework. Kunming, China (Y. Imanari)
 - United Nations Commission on Sustainable Development: 14th CSD/Partnership Fair. New York, USA (L. Stevenson)
 - EMECS 7 Conference (AP Session on CZM). Caen, France (H. Hashizume, J. Chambers)
 - UNFCCC/SBSTA 24. Bonn, Germany (A. Matthews)
 - 1st International Symposium for Climate Change Adaptation. Seoul, Korea (L. Bratasida)
 - 14th Environment Congress for Asia and the Pacific (ECO Asia). Saitama, Japan (L. Bratasida, H. Hashizume)
 - 1st APN Southeast Asia Sub-Regional Meeting, Jakarta, Indonesia (APN Secretariat, nFPs from Southeast Asia)
 - 4th APN Steering Committee Meeting, Jakarta, Indonesia (SC Members, APN Secretariat)
 - CZAP – Coastal Zones of the Asia-Pacific. Batam, Indonesia (M. Tapia)
 - OECC – 16th Asia-Pacific Seminar of Climate Change. Indonesia (E. Adiningsih)
 - 15th PICES Annual Meeting. Yokohama, Japan (H. Hashizume)

- APN/IHDW 5th International Human Dimensions Workshop. Chiang Mai, Thailand (A. Matthews, M. Tapia)
- IGFA Annual Meeting, Montreal, Canada (H. Hashizume)
- START 2nd International Young Scientists' Conference. Beijing, China (J. Chambers, P. Pulhin)
- ESSP Open Science Conference. Beijing, China (J. Chambers, P. Pulhin)
- GEO III. Bonn, Germany (A. Matthews)
- GEOSS Symposium on Integrated Observation for Sustainable Development in the AP Region. Tokyo, Japan (A. Matthews, H. Hashizume, Y. Imanari)

APN Project Meetings

- The following APN Project meetings took place throughout the year:
 - IOC/Global Sea Level Observing System (GLOSS) Training Course
 - ARCP2006-02CMY. 1st Capacity Building Workshop: Application of the Human Ecosystems Model to Urban Environmental Management in ASEAN: at AIT. Thailand
 - ARCP2006-07NMY. International Task Team Workshop for the IIWaDATA Project associated with the International Workshop for Earth Observations on Water Management Services, Bangkok Thailand.
 - ARCP2006-10NMY. Synthesis Meeting: Linking Climate Change Adaptation to Sustainable Development in SE Asia, Los Banos, Philippines
 - ARCP2006-05CMY. Data Workshop: "Asian Ozone Pollution in Eurasian Perspective." New Delhi, India
 - CBA2006-08NSY. International Workshop: Coping with Agrometeorological Risks and Uncertainties: Challenges and Opportunities. New Delhi, India
 - ARCP2006-12NMY. Planning Workshop: Climate and Crop Disease Risk Management: An International Initiative in the AP Region. Hyderabad, India
 - ARCP2006-01CMY. Project Workshop: Standardisation & Systemisation of Carbon-budget Observation in Asian Terrestrial Ecosystems Based on AsiaFlux Framework. Chiang Mai, Thailand
 - CBA2006-10NSY. IDGEC Synthesis Conference: Institutions for Sustainable Development. Bali, Indonesia
 - CBA2006-04NMY. Sub-Regional Workshop on removing barriers to LCD: Transferring Tools and Methodologies for Managing Vulnerability and Adaptation to Climate Change. Hyderabad, India
 - ARCP2006-04CMY. International Workshop: Agriculture Land Policy in East Asia and South Asia - Rapidly Changing Landscapes and its Impacts on Regional Food Security and its Future Scenario. Hyderabad, India
 - ARCP2006-07NMY. 2nd Asian Water Cycle Symposium, Tokyo, Japan (M. Tapia)

Issues Beyond 12th IGM

- Resources development
- Improvement of science-policy linkage
- Strengthening of Member Governments' Sense of Ownership

Final Financial Report for 2005/2006

All figures in US\$

	Financial Report (Final)	Financial Report (Draft) ²⁾	Draft Budget ¹⁾
1. INCOME	<u>2,235,000</u>	<u>2,233,000</u>	<u>2,166,000</u>
Ministry of the Environment of Japan	1,260,000	1,260,000	1,259,000
Hyogo Prefectural Government	327,000	325,000	323,000
NSF/USCCSP	475,000	475,000	425,000
Environment Australia through AGO (AUS\$ 30,000)	23,000	23,000	23,000
Carry Over from FY 04/05 to FY 05/06	150,000	150,000	136,000
2. EXPENDITURE	<u>1,782,000</u>	<u>2,090,000</u>	<u>2,166,000</u>
A. Scientific Activities	<u>1,364,400</u>	<u>1,653,000</u>	<u>1,699,000</u>
Annual Regional Call for Proposals(ARCP)	636,000	756,000	790,000
CAPaBLE Comprehensive Research Projects (CRP)	144,000	180,000	180,000
CAPaBLE Capacity Building Projects	192,000	261,000	275,000
APN Scoping Workshops on Global Earth Observations and the Capacity Building Needs of the Region - Focus: Climate	91,200	91,000	65,000
Other Hyogo Activities	27,300	26,000	25,000
Advisor for 2nd Strategic Plan Implementation	8,000	7,000	32,000
IHDW	40,000	40,000	
MCED Book Publication	10,000	10,000	
GLOS	5,000	5,000	
Programme Fellowship	50,800	50,000	50,000
Travel for Scientific Activities	30,000	30,000	30,000
IGM/SPG	68,100	110,000	110,000
Liaison Officers	16,300	35,000	31,000
Publication & Website Management	20,700	27,000	45,000
Contingency for Scientific Activities	0	0	29,000
Reserve for Exchange Rate Fluctuations	25,000	25,000	37,000
B. Administrative Expenses	<u>417,600</u>	<u>437,000</u>	<u>467,000</u>
Travel Costs	10,000	10,000	13,000
Salaries and Social Welfare	309,400	309,500	346,000
Communications, Postage	21,000	18,000	20,000
Others	42,700	65,000	53,500
APN's Contribution to IGES's Adm. Overheads	34,500	34,500	34,500
3. Outstanding Balance of Commitments for Specified Projects	<u>225,000</u>		
4. Carry Over to FY 06/07	<u>228,000</u>	<u>143,000</u>	

1) As presented at the 10th IGM/SPG in April 2005 in Kobe, Japan

2) As presented at the 11th IGM/SPG in March 2006 in Bangkok, Thailand

Draft Financial Report for 2006/2007

All figures in US\$

	Financial Report (Draft) FY 06/07		Budget Plan FY 06/07	
REVENUES	2,039,000		1,882,000	
Ministry of the Environment, Japan	1,034,000		1,034,000	
Hyogo Prefectural Government, Japan	294,000		292,000	
NSF/USCCSP, USA	435,000		375,000	
Australian Greenhouse Office, Australia	22,000		22,000	
New Zealand Climate Change Office, New Zealand	16,000		6,000	
Ministry of Environment, Republic of Korea	10,000		10,000	
Carry Over from FY05/06 to FY 06/07	228,000		143,000	
EXPENDITURES		2,039,000		1,882,000
Scientific Activities		1,359,000		1,374,000
Annual Regional Call for Proposals (ARCP)	629,000		690,000	
CAPaBLE	594,000		505,000	
- Comprehensive Research Projects (CRPs)	180,000		180,000	
- Capacity Building Projects	410,000		275,000	
- Collaborative Activities (e.g. GEOSS and CB WS)	4,000		50,000	
And Other Scientific Activities	41,000		35,000	
- EMECS 2006 (Caen, France) ²⁾	22,000		15,000	
- Int'l Seminar on Biodiversity and Sustainable Society ³⁾	16,000		10,000	
- SBSTA	3,000		10,000	
Resources Development Committee	0		4,000	
Travel Support				
Programme Fellowship	47,000		47,000	
Travel for Scientific Activities	22,000		24,000	
Liaison Trial Activities	0		25,000	
Publications & Website Management	26,000		28,000	
Contingency for Scientific Activities	0		10,000	
Reserve for Exchange Rate Fluctuations	0		6,000	
Administrative Expenses		511,000		508,000
12th IGM/SPG (including 4th SC Meeting)	120,000		100,000	
Travel for Administrative Purposes	9,000		10,000	
Salaries and Related Costs	290,800		306,500	
- Salaries	240,000		255,700	
- Insurance and Social Benefits	42,000		42,000	
- Contribution to Severance Allowance Fund (under IGES)	8,800		8,800	
Communications, Postage, Remittance Fee	14,000		17,000	
Others	46,300		43,500	
- General Office Expenses	9,400		13,500	
- Leasing of Office Equipment	14,500		20,000	
- Books, Newspapers and Magazines, Maintenance of PC and Server	20,000		7,500	
- Depreciation on Fixed Assets	2,400		2,500	
IGES Administrative Charge (3% of MOEJ's contribution)	31,000		31,000	
Expected Carry Over to FY 2007/08		169,000		

1) including US\$ 40,000 for CAPaBLE AOA (IHDW)

2) & 3) These activities were explicitly conducted by using contributions from Hyogo Prefectural Government

Exchange Rate FY 2007/2008: US\$ 1.00 = JPYen 120

In-kind Support and Additional Contributions from the Member Countries

The work of the APN is heavily dependent on the support from its member countries. Although some of the member countries may not contribute to the annual income of the APN in the sense of pledging funds, all of them are helping to make the work of the APN successful by providing in-kind support. Moreover, this also includes hosting APN activities and sharing their scientific and management expertise.

The evidence of this grateful in-kind support is clearly shown by the attendance by the country delegates, national Focal Points and Scientific Planning Group Members, on many occasions of the APN activities, for instance at the 12th IGM/SPG Meetings.

Special thanks should be addressed to the Government of the USA and Hyogo Prefectural Government, Japan, for their additional support they have provided in the Fiscal Year 2006/2007: a remarkable portion of the overall meeting costs of the 12th IGM/SPG are shouldered by the US Government, and Hyogo Prefectural Government is hosting the APN Secretariat by providing it with office space for free. Also, the salaries of two secretariat staff are covered by the in-kind support from the prefecture.

It must be noted that these in-kind support are provided to the APN in addition to their annual financial contributions. The APN is very thankful for their commitments.

Membership Development

APN Members (national Focal Points and SPG members)

Following the 11th IGM in Bangkok, Thailand, new national Focal Points (nFP) were appointed from three member countries, in addition to a new Scientific Planning Group (SPG) Member for the Philippines. The role of national Focal Point for Fiji, Nepal and the Russian Federation is either vacant or inactive. The Secretariat will seek assistance from these APN member countries to nominate national Focal Points.

FP	Former	New
1. Bangladesh	Mr. Quazi Liaquat Ali	Mr. Md. Nazrul Islam Khan
2. Cambodia	Mr. Seng Ung	Mr. Sem Sundara
3. Fiji	Mr. Cama Tuiloma	No One
4. Pakistan	Mr. Fida Muhammad	Mr. Shahzad Iqbal
5. Republic of Korea	Mr. Byoung-og Cho	Mr. Seung Hee Kim
SPG	Former	New
6. Philippines	Dr. Agustin Ausin Piñol	Dr. Vicente D. Cabrera

APN Secretariat

The APN Secretariat has undergone some changes since the 11th IGM. The Scientific Officer and Communications and Development Officer are currently on Maternity Leave. The role of Coordinator was recently established and the former Administrative Assistant has returned from Maternity Leave. New members joined the Secretariat in the positions of Programme Fellows for Scientific Affairs and Communications and Development.

Position	Former	New
1. Coordinator	None	Ms. Maricel Tapia
2. Administrative Assistant	Ms. Nao Horiguchi	Ms. Kanako Tamada
3. Programme Fellow for Scientific Affairs	Ms. Maricel Tapia	Ms. Aniq Fadhillah
4. Programme Fellow for Communications and Development	Mr. Kris Berse	Ms. Perlyn Pulhin

New Member Country

Following a visit to Singapore by Dr. Anond Snidvongs, APN in 2005, the APN Secretariat has been in communication with the Ministry of Environment and Water Resources of Singapore. On 22 August 2006, the Director of the Secretariat, the Communications and Development Officer, together with Dr. Snidvongs, met with Mr. Koh Kim Hock, Director, International Relations, MEWR, and talked on their participation in the APN. An invitation to the 12th IGM was sent to him as an observer. Discussions will continue in the future. In the mean time, Singapore is an APN approved country.

Somebody from the National Environment Commission, Bhutan sent an email to the Secretariat last January, asking the procedures on how to become an APN member country. Information was provided but no further response yet has been received from the Government of the Kingdom of Bhutan.

Proposed Amendment to the Framework

[CURRENT PROVISIONS]

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.

[NEW ADDITION]

8. Additional Arrangements

- iii. Expected roles of the nFPs, SC Members, SPG Members and the Secretariat are specifically elaborated in the Appendix 4 (page xx) as guidance.

Appendix 4.

Guidance for APN national Focal Points (nFPs)

National Focal Points (nFPs) are responsible for representing their countries in the activities of the APN, especially their countries' programmes 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 programmes 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 programmemes 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 programmes, 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 IGMs 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 Programme 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 programmes 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 programme, institution, country, and/or international organisations. Each SPG Member is expected to work closely with the national Focal Point (nFP) from his/her country and, in particular, to make sure that the nFP is kept up-to-date on activities and views of the SPG.

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

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

private sector, either on a cash or in-kind basis; interacting with the international global change research programmes 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 programme, planning and operations; inviting input to the APN programme, 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 programmes, 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; programme; 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 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 programmes; 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.

C. The Scientific Planning Group

4. The SPG Sub-Committee

- i. convenes prior to the SPG meeting
- ii. reviews and prioritises, with the cooperation of the Secretariat, **[INSERTION→]** 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. two 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

[NEW ADDITION]

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 three 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.

APN Financial Management

The annual revenues of the APN in the region of US\$ 2 Million used to be, more or less, constant in the previous couple of years.

Currently, all so called 'developed countries' among the member countries of the APN are financially contributing towards the APN and its work.

In addition to these countries the Hyogo Prefectural Government is also supporting APN financially. We are very grateful for this valuable commitment of the host prefecture of the secretariat.

Current financial sponsors are:

Japan	:	Ministry of the Environment; Hyogo Prefectural Government;
USA	:	National Science Foundation (NSF)/US Climate Change Science Program (USCCSP);
Australia	:	Australian Greenhouse Office (AGO), Department of the Environment and Water Resources (formerly the Department of the Environment and Heritage);
New Zealand	:	New Zealand Climate Change, Ministry for the Environment;
Republic of Korea	:	Ministry of Environment.

While the contributions from Japan, Australia, New Zealand and ROK are received and administered at the APN Secretariat in Kobe, Japan, the funds the APN receives from NSF/USCCSP are kindly administered by the International START Secretariat, Washington DC, USA, on behalf of the APN².

The reason for this special arrangement is that the APN, due to lack of a legal status, is not eligible to receive any financial support from the US. Discussions with NSF have started and are still ongoing.

The APN Secretariat is operating under the financial administration of the Institute for Global Environmental Strategies (IGES), Japan. IGES also fulfils one of the most important conditions to be eligible in receiving funds from NSF directly: the financial statements of IGES, in which the APN figures are included³, are audited annually by an external auditor.

However, it is very important to stress that in the management of APN's financial resources the decisions of the IGM, the highest decision making body of the APN, are always mirrored. In a Memorandum of Understanding between the APN and IGES it is clearly stated that the APN is solely responsible for the independent management of its funds.

² The work of the International START Secretariat for the APN includes: based on APN's selection of projects receiving funds from NSF, reformatting and submitting proposals documents to NSF; drawing contracts (using a template prepared by the APN Secretariat); remitting funds to grantees; checking financial reports and forwarding them to NSF, etc.

³ In the APN accounting figures that are incorporated in the overall financial statement of IGES, neither the NSF/USCCSP funds nor the expenses using this money are included, as it is not credited to APN's special account at IGES. In the financial reports the APN Secretariat presents to IGM/SPG, however, NSF/USCCSP's contribution is well included.

APN Recognition

Each year the APN has been funding about 30 projects. The grant condition requires each project to clearly acknowledge the APN as the financial contributor with APN's logo on the reports, presentation materials, etc. The conditions were met in most projects. However, website of some institutions that get finance from the APN do not have links to the APN's site or do not show APN's logo. Also, failure to acknowledge APN is occasionally observed in few instances when funded workshops are held in extremely hurried or mixed up settings.

Needless to say, the recipients' full recognition of the APN as the funding source is essential for the APN and its donors which generously contribute to the APN and bear accountability to their tax payers. Extreme lack of recognition may even deserve withdrawal of the funding. Not only project proponents but also all those in the APN community are absolutely expected to promote the APN in every appropriate occasion. Whenever lack of recognition is observed, it needs to be corrected. When miss-recognition or misunderstanding on the activities of the APN is overlooked particularly by those who have been involved in the APN activities, such negligence may bring about a wrong message and may create another misunderstanding among people who are not familiar with the APN. For the appropriate recognition of the APN, the nFPs and SPG Members, particularly those who are new to the APN, should fully understand how APN works and must be wholly aware of its funding scheme.

The secretariat will pay more attention to the situation in the coming years and ask cooperation from members in the APN for further recognition of the APN.

APN 2007 Brochure

WHO ARE MEMBERS OF THE APN?

The APN currently has 21 member countries:

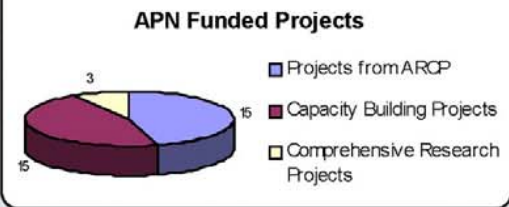
Australia	Japan	Philippines
Bangladesh	Lao PDR	Republic of Korea
Cambodia	Malaysia	Russian Federation
China	Mongolia	Sri Lanka
Fiji	Nepal	Thailand
India	New Zealand	United States of America
Indonesia	Pakistan	Viet Nam

* Individuals and organisations in the Pacific Island States 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.

HOW IS THE APN STRUCTURED?

The structure of the APN is built around a joint annual meeting of policy-makers (Inter-Governmental Meeting, IGM) and scientists (Scientific Planning Group, SPG). The IGM is the main decision-making body of the APN and approves the APN's programmes of work and budget for the next year, including the research programmes and related activities to be funded, based largely on recommendations from the SPG. The Steering Committee and the APN Secretariat support the IGM and SPG. The APN funds its research programmes based on an annual open call for proposals under its regional research and capacity development programmes (ARCP and CAPaBLE).

The APN is able to provide support for research and capacity development activities that fall within its areas of interest. In 2006/2007, the APN funded 33 projects; three (3) Comprehensive Research Projects, fifteen (15) Capacity Building Projects and fifteen (15) from the Annual Call for Regional Proposals (ARCP) process.



The above sponsors provide direct funding for the APN that is complimented by in-kind support from APN members, such as hosting workshops and seminars; and the sharing of scientific and management expertise.

HOW TO CONTACT THE APN?

If you want to establish a closer link with the APN or would like more information on the APN's activities, please contact the APN Secretariat:

APN Secretariat
 IHD Centre Building, 5th Floor
 1-5-1 Wakinojima Kaigan Dori
 Chuo-Ku, Kobe 651-0073, JAPAN
 Tel: +81-78-230-8017
 Fax: +81-78-230-8018
 Email: info@apn-gcr.org
 Website: www.apn-gcr.org

APN
 Asia-Pacific Network for Global Change Research

Published in 2007

WHAT IS THE APN AND WHY IS IT NEEDED?

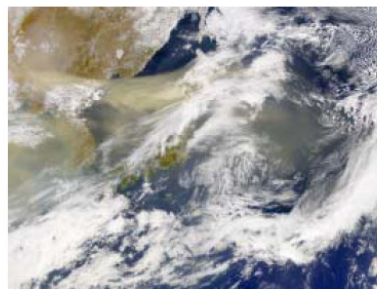
Changes in the Earth system are affecting the societies and economies of countries within the Asia-Pacific region, which supports more than half of the world's population. Recognising this, the Asia-Pacific Network for Global Change Research (APN) was established in 1996 as a network of governments in the Asia-Pacific to foster global change research in the region, increase developing country involvement in that research, and strengthen interactions between the science community and policy-makers. The APN defines **global change research** as "research regarding global change (the set of natural and human-induced changes in the Earth's physical and biological systems that, when aggregated, are significant at a global scale) and its implications for sustainable development in the Asia-Pacific region."



WHAT IS THE APN'S VISION?

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.

The APN seeks to identify such emerging issues and to promote and encourage regional cooperative research to address these. In doing so, the APN assures that the results of this research contribute to development of a sound scientific basis for policy-and-decision-making related issues for which global change is an important factor.



The APN strives to enable developing countries of the region to participate increasingly in, and to benefit from, cooperative research in the region. Finally, recognising the interactive role of regional processes in the overall Earth system, the APN also seeks to link the research it sponsors with research conducted in other regions and under the aegis of global-scale programmes.



WHAT ARE THE APN'S GOALS?

To achieve its objectives, the APN has identified the five goals as follows:

- 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
- Goal 4:** Cooperating with other global change networks and organisations
- Goal 5:** Facilitating the development of research infrastructure and the transfer of know-how & technology

WHAT IS THE APN'S SCIENTIFIC AGENDA?

The APN enables activities that generate and transfer knowledge on the physical and human dimensions of change in the Earth system with a focus on:

1. Climate
2. Ecosystems, biodiversity and land use
3. Changes in the atmospheric, terrestrial and marine domains
4. Use of resources (such as food, water, energy, materials) and pathways for sustainable development
5. Cross-cutting issues and science-policy linkages

WHAT ARE THE APN'S PROGRAMMES?

The APN supports activities in the area of global change relevant to the APN's thematic areas and through:

The ARCP Programme

As part of its programme of activities the APN issues an Annual Regional Call for Proposals (ARCP). Particular areas of interest are: synthesis and analysis of existing research; new research which addresses knowledge gaps in key areas; research planning/scoping activities; the development of policy products such as integrated assessments, impact assessments, climate models, etc.

The CAPaBLE Programme

The CAPaBLE programme enhances scientific capacity in developing countries to improve decision-making in focus areas of global change and sustainable development. Emphasis is placed on: scientific capacity development for sustainable development; science-policy interfacing; awareness raising activities and; dissemination activities.

ARCP and Project Management

Annual Regional Call for Proposals (ARCP) Summary

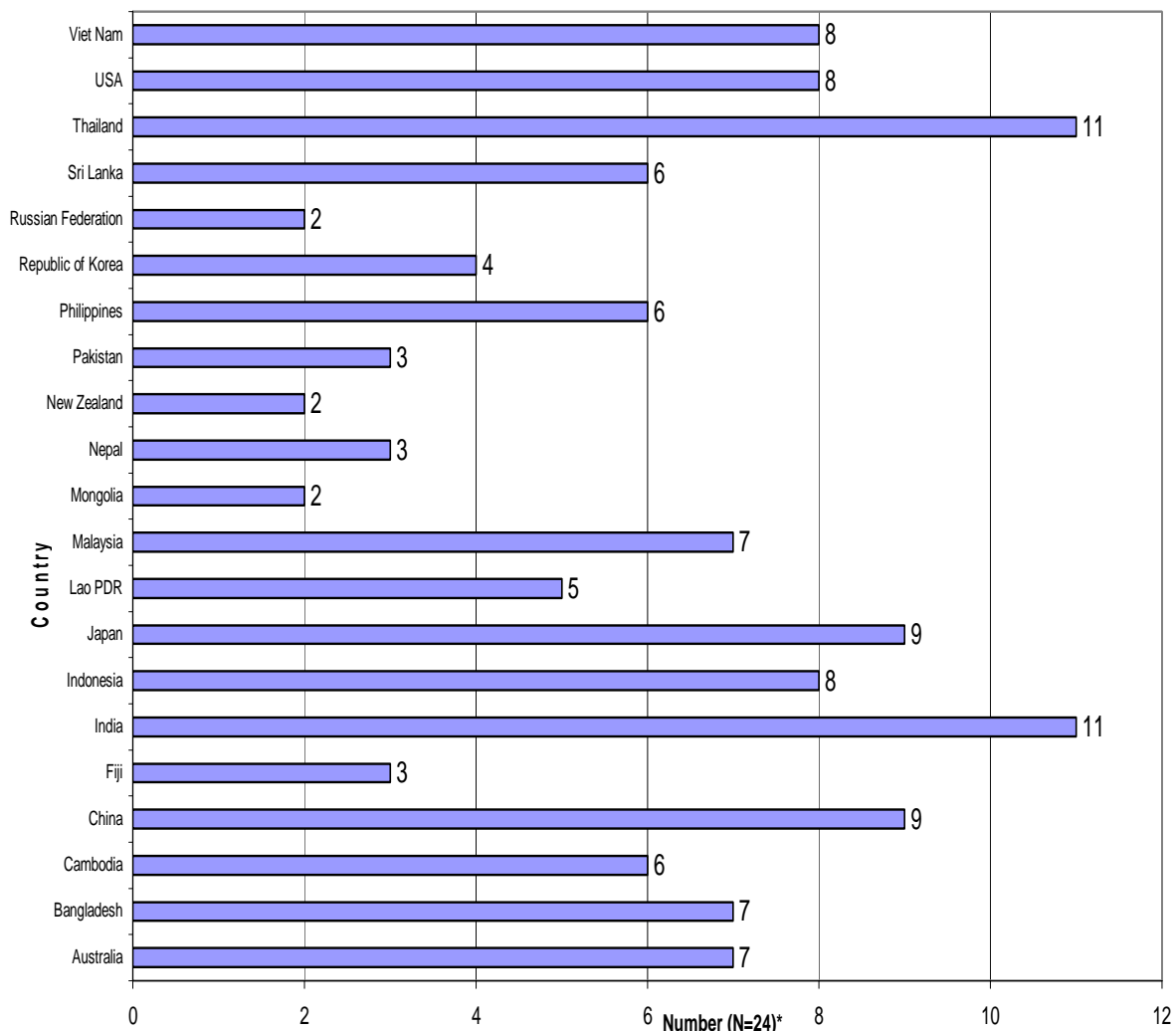
1. Proposals and Review Summary

- The 2006 Calls for Proposals (ARCP and CAPaBLE) had **one combined and optional** Pre-Proposals Stage during which **20 pre-proposals** were received. Of the 20 pre-proposals, **11** were intended for ARCP. A summary of the pre-proposals is attached as [Item 5 Appendix One](#).
- 7 of the 11 pre-proposals (64%) intended for ARCP were re-submitted to the APN as full proposals.
- The APN received 21 full proposals that met the basic criteria for eligibility. 2 proposals were asked to merge due to commonalities. Four proposals were shifted to ARCP from CAPaBLE after the Rapid Assessment Stage. This makes for **24 proposals considered under ARCP this year**. A summary of all the proposals received is attached as [Item 5 Appendix Two](#).
- Number of proponents new to the APN and its ARCP process: 12 (approximately 48%).

2. APN countries involved in the proposed projects

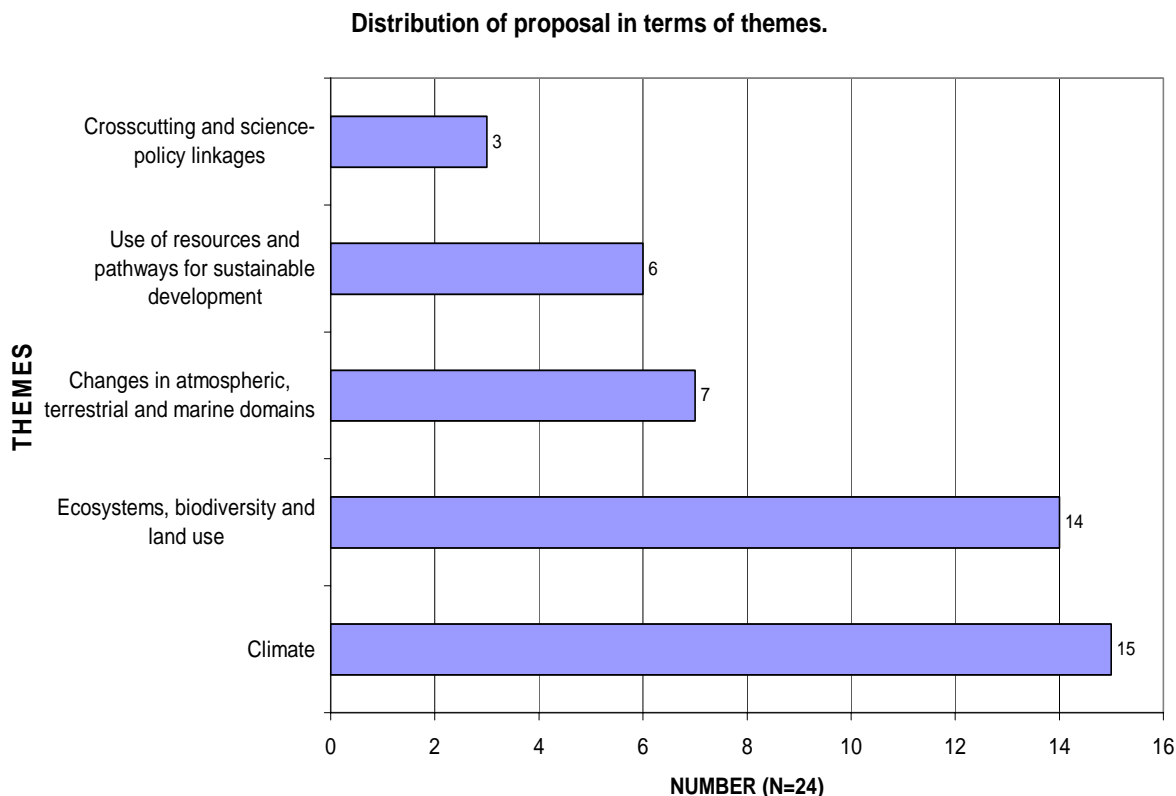
- All of APN approved countries are involved as collaborators in the proposals submitted.

APN countries involved in the proposed projects

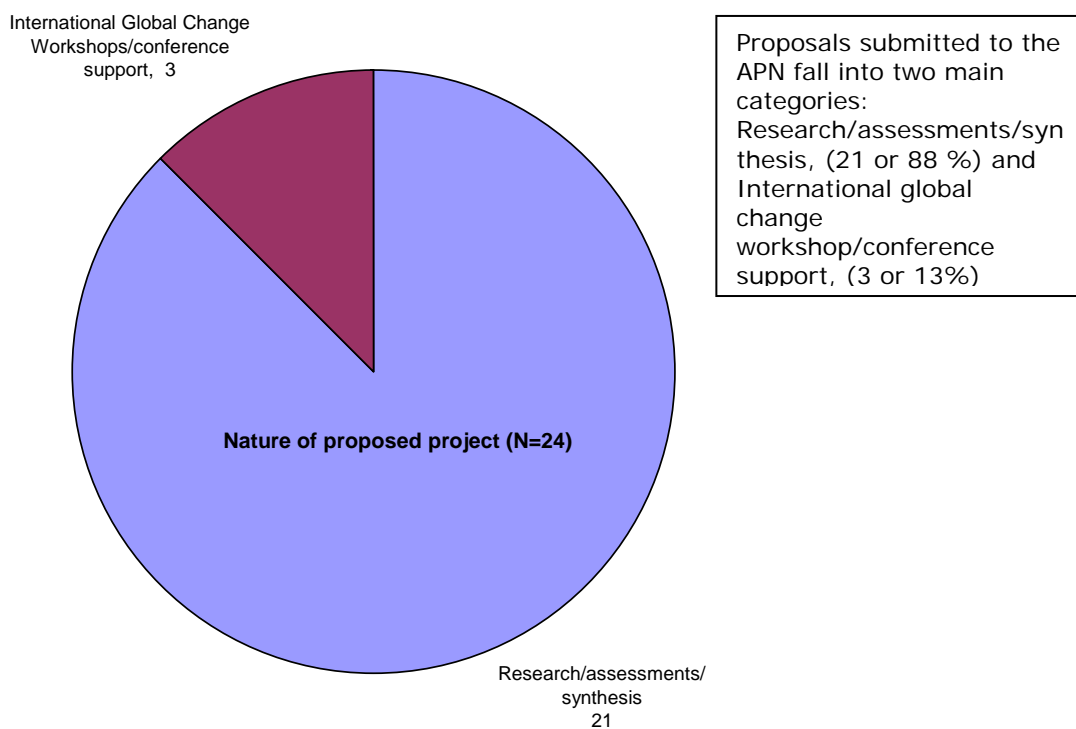


3. Proposal distribution in themes

Almost all of the proposals submitted to APN focused on more than one theme. The majority of proposals focused on Climate (33%), followed by ecosystems, biodiversity and land use (31%) and changes in atmosphere, terrestrial and marine domains (16%).



4. Nature of proposed project



ARCP Project Management

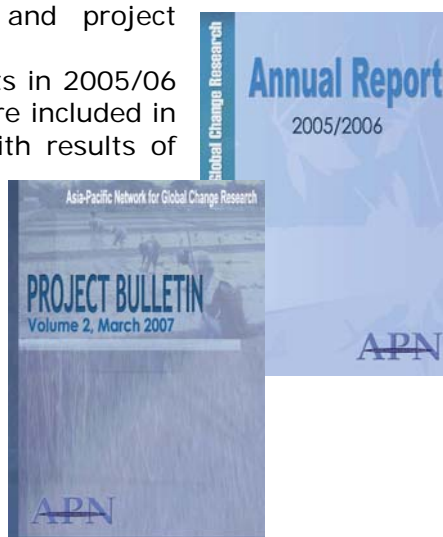
1. Projects

15 projects are being supported under the 2006 ARCP process. A summary of the projects awarded are detailed in Appendix Three. This list indicates what projects received funding from NSF funds, administered by the START International Secretariat, and what projects received funding directly from the APN Secretariat.

- APN funds disbursed via START Secretariat: **6 projects**
- APN funds disbursed via APN Secretariat: **8 projects**
- APN funds disbursed from both Secretariats: **1 project**

2. Management

- The projects in 2006/07 followed a revised Terms of Agreement, which also set rules on unspent funds and project evaluation.
- Project report submission is consistent
- Project Review Questionnaire was revised not only to assess the implementation and outcomes of the funded projects but also to evaluate the APN's funding process and project management
- Communications between Secretariat and project leaders continues to increase
- Strategic follow-up on completed projects in 2005/06 for peer-reviewed publications – these are included in the 2005/06 Annual Report together with results of completed projects.
- Project Bulletin was published in March 2007, to inform APN members, stakeholders and other interested parties of the projects being funded by the APN



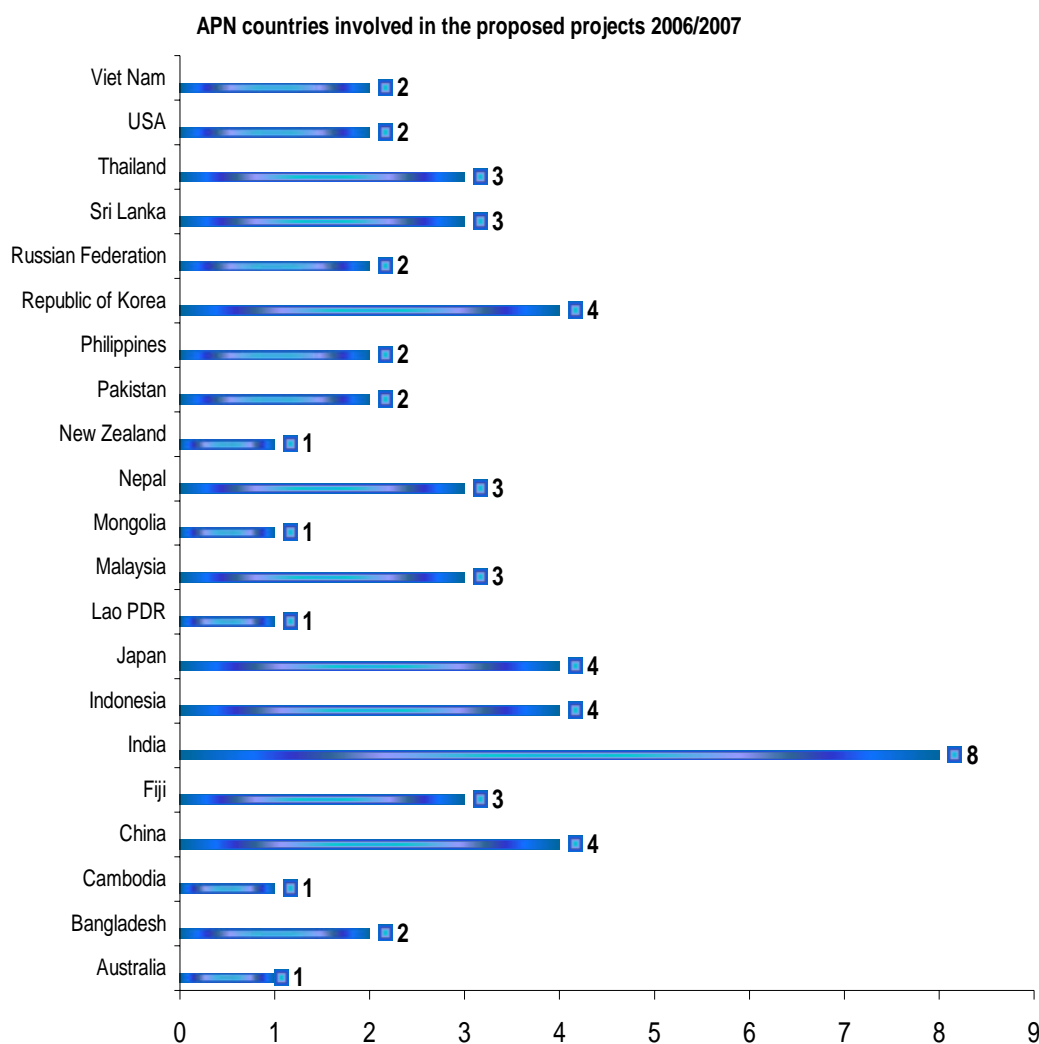
CAPaBLE Update

1. Proposals and Review Summary

- The APN received **20 pre-proposals** from its combined ARCP and CAPaBLE Pre-proposals Stage, of which **9** were intended under CAPaBLE (please refer to [Item 5 Appendix One](#) for a summary of the pre-proposals). 2 out of the 9 pre-proposals (22%) were re-submitted to the APN as full proposals under the CAPaBLE Programme.
- The APN received **19 full proposals** that met the basic criteria for eligibility. After the Rapid Assessment Stage, one proposal was eliminated, four proposals moved to ARCP, and another one was suggested to shift to ARCP following development of collaboration but the proponent did not resubmit. Hence, there are a total of **13 proposals** considered for funding under the CAPaBLE programme. A summary of all the proposals received is attached as [Item 6 Appendix One](#).
- Number of proponents new to the APN and its CAPaBLE process: 9 (approximately 47%).

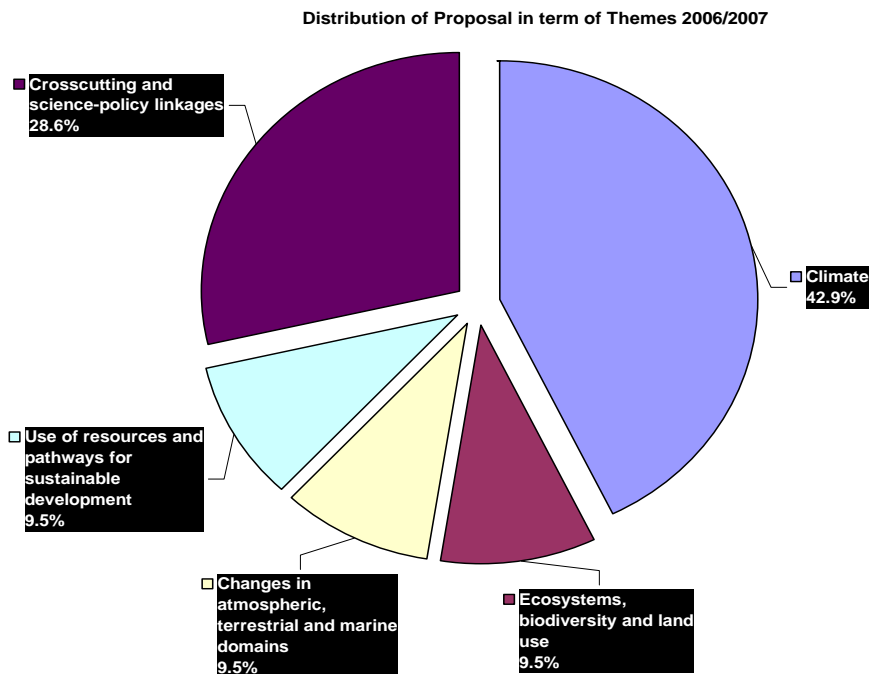
2. APN countries involved in the proposed projects

- All of APN approved countries are involved as collaborators in the proposals submitted.

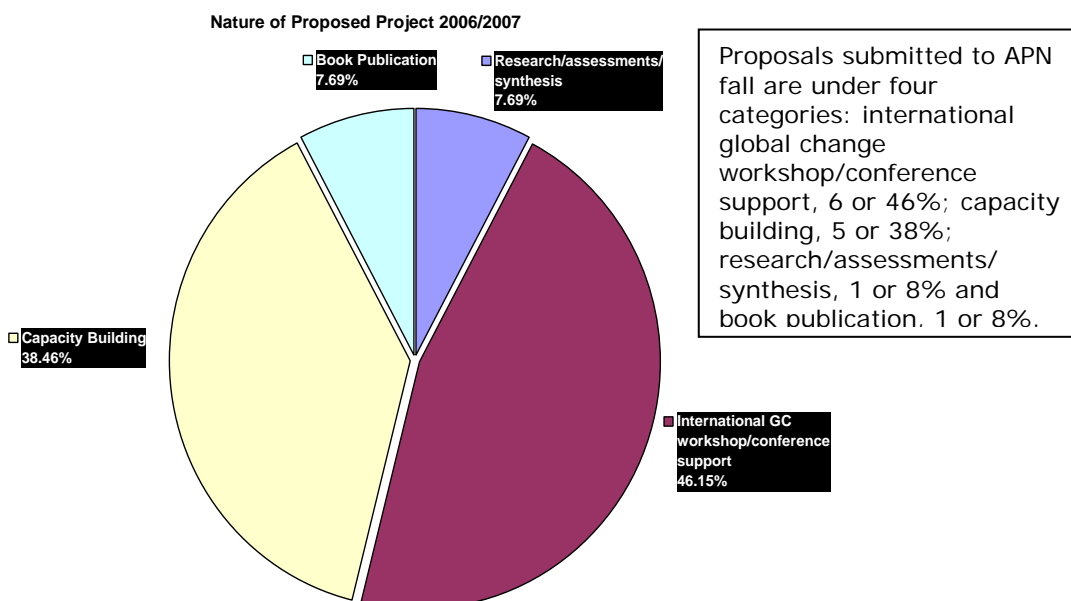


3. Proposal distribution by themes

Almost all of the proposals submitted to APN focused on more than one theme. The majority of proposals focused on Climate (9), followed by Crosscutting and science policy linkages (6) and others (2) on use of resources and pathways for sustainable development; Changes in atmospheric, terrestrial and marine domains and also Ecosystems, biodiversity and land use.



4. Nature of proposed project



5. Currently funded projects

Under the CAPaBLE Phase 1 activities, **6 capacity building projects** and **2 comprehensive research projects** are currently ongoing. One of which received its funding from the 2004/2005 budget and the remaining from the 2005/06 budget.

Meanwhile, **11 capacity building** and **3 comprehensive research** projects are currently being funded under the CAPaBLE Phase 2 activities from the 2006/07 budget. Two capacity building projects received their grant from NSF funds which is disbursed via the START International Secretariat.

A summary table of 2006/2007 ongoing projects both under Phases 1 and 2 is attached as Appendix Two.

6. Reference Material: History of CAPaBLE

It is recognised that there are a number of new delegates at the IGM. As such, a short history of the CAPaBLE process to date is outlined below as reference material.

OVERVIEW

The Scientific Capacity Building and Enhancement for Sustainable Development in Developing Countries (**CAPaBLE**) Programme was a concrete initiative introduced by Prime Minister Koizumi through the Ministry of the Environment (GEB) and Hyogo Prefecture Government to specifically realise parts *107 to 114* of the Plan of Implementation for the World Summit on Sustainable Development (WSSD), and was registered as a **WSSD Type II Partnership/Initiative by the Japanese Government in Johannesburg, September 2002**.

The objectives of the Programme are targeted to enhance scientific capacity in developing countries in the Asia-Pacific Region to improve their decision-making in target areas related to climate change, water and food security, and global change that are directly linked to their sustainable development.

Initially, the CAPaBLE Programme, which was endorsed by **APN's IGM in March 2003**, was a 5-year Programme. However, the success of the Programme has been so outstanding in just 2 years that the IGM, the governing body of the APN, recommended that CAPaBLE become an integral part of APN's activities. This is now reflected in the APN Second Strategic Plan for 2005-2010. The success of CAPaBLE to date has also impressed the governments of Australia, New Zealand and the USA to the point of contributing financial donations earmarked for CAPaBLE activities. This is a major achievement for the APN in terms of securing financial resources from member countries.

Improving the scientific and technical capabilities of nations in the region has been one of the goals of the APN and capacity building projects have been included in the activities since the beginning. Therefore, why does a programme such as CAPaBLE have to be created? It has been created because **we** have to make a difference. In addition to the existing pillar of APN, the Call for Proposals, CAPaBLE has become the second pillar of APN activities and has played a very important role in the transition period from the first phase of APN (1999-2004) to its second phase (2005-2010).

In two years, through contributions both monetary and in-kind, from all of APN's member countries and other policy and scientific bodies at the global level, CAPaBLE has funded 15 projects so far expanding the entire Asia-Pacific Region at all levels from the

community level to national, regional. Successful interregional activities particularly related to climate risks and food security has also been achieved. It is this unique flexibility of the CAPaBLE Programme that has contributed to its success in such a short timescale.

Of particular relevance to the CAPaBLE Programme is Part 111 of the Johannesburg Plan of Implementation:

Establish regular channels between policy-makers and the scientific community for requesting and receiving science and technology advice for the implementation of Agenda 21, and create and strengthen networks for science and education for sustainable development, at all levels, with the aim of sharing experiences and best practices, and building scientific capacities, particularly in developing countries.

Undoubtedly, the CAPaBLE Programme is enhancing scientific capacity in developing countries to improve decision-making relating to environmental issues of the greatest concern, and particularly climate change and water/food security. This effort is being achieved through a two-track process of capacity enhancement for experienced leading scientists and capacity building in global change for aspiring scientists, educational trainers, policy-makers and civil society:

Capacity Building

- Targeting specific countries
- Targeting specific topics
- Partnership activities with other networks, programmes, APN member & approved countries and other interested stakeholders
- Dissemination for policy-makers and civil society

Capacity Enhancement

- Comprehensive Research Activities planned and implemented by leading developing country scientists targeting specific topics

The IPCC plays a very important role in the success of CAPaBLE, particularly in disseminating the scientific outcomes to policy and decision-making bodies. Currently, two comprehensive research projects targeted at Working Groups II and III of the IPCC TAR are working hard to achieve outcomes that can be disseminated in the IPCC 4AR due for publication in 2007. The continued support of Japan and other developed countries within the APN is crucial for realising the priorities and objectives of assessments such as the IPCC.

Furthermore, with additional support from APN's developed-country member governments and the adoption of a true partnership approach, CAPaBLE is now recognised as a well known, well established and successful programme throughout the Asia-Pacific region and the rest of the world.

Through the continued support of the Japanese Government, the APN has developed the following strategies to ensure that the CAPaBLE Programme continues to meet its objectives as outlined in the Type II partnership proposal registered by Japan at the WSSD in 2002. These include:

1. Creating a profile for CAPaBLE to ensure that it continues to be a strong pillar of APN activities that stands alone from the first pillar – the Annual Regional Call for Proposals (ARCP).
2. Continuing its capacity building and capacity enhancement efforts in science and education at all levels from the local and community levels, to the national, regional and global levels, particularly in developing countries.

3. Widening its capacity building and capacity enhancement activities in the broader context of global change, and not limit its activities to climate change or water and food security.
4. Committing the necessary time and funds to attract investments into the CAPaBLE Programme. The **PARTNERSHIP** (see page 3) approach of the CAPaBLE Programme is being used as the major key for seeking and securing investment from other stakeholders. In so doing, the APN is endeavouring to show current investors that there is a good reason to continue investing in the CAPaBLE Programme.

PARTNERSHIP APPROACH

In the 2 years since its launch, the CAPaBLE Programme has created effective partnerships, both directly and indirectly, with the following programmes and institutions:

AGO	Australian Greenhouse Office
AIACC	Assessments of Impacts and Adaptations to Climate Change
BUP	Bangladesh Unnayan Parishad, Bangladesh
BMD	Bangladesh Meteorological Department, Bangladesh
DHM	Department of Hydrology and Meteorology, Nepal
DPI	Department of Primary Industries, Queensland Govt., Australia
DRI	Disaster Reduction and Human Renovation Institution, Kobe, Japan
ERI	Energy Research Institute: National Development and Reform Commission, China
GCOS	Global Climate Observing System (WMO/IOC/UNEP/ICSU)
GEOSS	Global Earth Observation System of Systems
IRI	International Research Institute for Climate and Society, USA
NCAR	National Centre for Atmospheric Research, USA
UNFCCC	United Nations Framework Convention on Climate Change
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
NOAA	National Oceanic and Atmospheric Administration, USA
NIWA	National Institute of Water and Atmospheric Research, New Zealand
PMD	Pakistan Meteorological Department, Pakistan
SPREP	South Pacific Regional Environment Programme
USCCSP	US Climate Change Science Program
NSF	US National Science Foundation
NSF	National Science Foundation, Sri Lanka
NIES	National Institute for Environmental Studies, Japan
USP	University of the South Pacific
IAI	Inter-American Institute for Global Change Research
WCRP	World Climate Research Programme
START	System for Analysis, Research and Training
IGBP	International Geosphere-Biosphere Programme
IHDP	International Human Dimensions Programme for Global Change
AIT	Asian Institute of Technology, Thailand
IIM	Indian Institute of Management, Ahmedabad, India
GCISC	Global Climate Impact Studies Centre, Pakistan
WHO	World Health Organisation, Kobe Centre and Headquarters in Geneva
IFRCCC	International Federation of Red Cross/ Red Crescent Centre on Climate Change, The Netherlands
UNEP	United Nations Environment Programme

CAPaBLE ACHIEVEMENTS

1. Projects

- In 4 years since the launch of the CAPaBLE Programme, **37 projects** have been approved, 32 of which are capacity building activities and 5 are comprehensive research projects.

2. Input to Policy Processes at the National, Regional and Global Levels

- **IPCC**
 - 2 comprehensive research projects specifically targeted to input into Working Groups II and III of the IPCC 4AR
 - GHG Inventories; working closely with the GHG Inventory Office, Japan (NIES)
- **UNFCCC**
 - Transfer of Technologies
 - 22nd Report of SBSTA

75. The SBSTA welcomed efforts of the national, regional and international global change research programmes to further promote and coordinate research in response to the needs of the Convention, and invited them to provide periodic updates on their scientific activities. In this respect, the SBSTA also welcomed the establishment of the Earth System Science Partnership by the International Geosphere–Biosphere Programme, the International Human Dimensions Programme on Global Environmental Change, the World Climate Research Programme and DIVERSITAS, and the efforts of these programmes and of regional institutions and networks including, but not limited to, the **Asia–Pacific Network for Global Change Research** and the Inter American Institute for Global Change Research.

<http://unfccc.int/resource/docs/2005/sbsta/eng/04.pdf>
 - GHG Inventories and National Communications
 - UNFCCC Workshop on the preparation of national communications from non-Annex I Parties, Manila, Philippines, 26 - 30 April 2004
 - http://unfccc.int/files/meetings/workshops/other_meetings/application/pdf/enb12232e.pdf
 - COP Side Events
 - COP11/MOP1 Side Event (Joint NIES/APN-CAPaBLE)
 - Kyoto Mechanisms on GHG Inventories
- **Inter-American Institute for Global Change Research**
 - Joint Inter-regional Project for local farming and sustainability in the face of climate change
- **Annual Asia-Pacific Seminar on Climate Change**
 - September, 2003, 2004 and 2005
 - Held in conjunction with the UNFCCC Article 6 Workshop, the goal of the September 2005 Seminar was to facilitate and exchange of views, experiences and best practices on climate change-related efforts in the Asia-Pacific region. For the 15th Seminar, participants focused on three themes based on recommendations of the 14th Seminar: co-benefits of greenhouse gas (GHG) mitigation, clean development mechanism (CDM), and adaptation to climate change.
 - The Chairperson's Summary quotes in sections 25 and 26 are as follows:

25. The Seminar stressed the linkage of UNFCCC Art. 6 activities and efforts on mainstreaming adaptation. To ensure the greater involvement of stakeholders, ways of communicating to the public regarding accurate information on local impacts may be carefully examined. At global level, UNFCCC clearing house on Art. 6, which is under development, can be a useful vehicle to exchange information on effective adaptation policies and measures.

26. Regional cooperation in adaptation is considered crucial especially in sharing information, views and experience, as well as capacity building. In this regard, participants commended the activities under the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) of the Asia-Pacific Network on Global Change Research (APN).

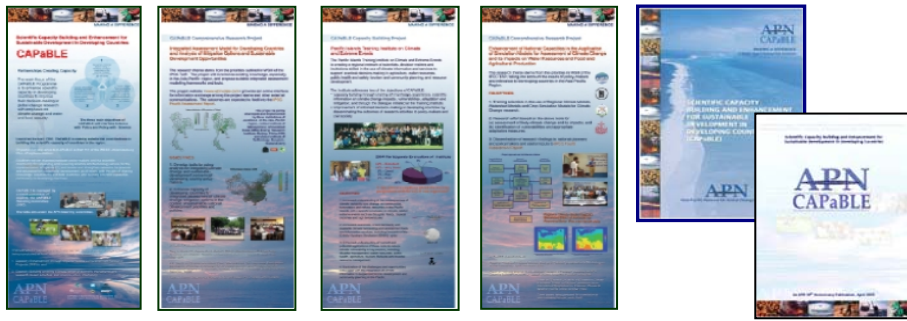
- **Eco-Asia**
 - June 2003, 2004 and 2005
- **GEO and most recently GEOSS**
 - Capacity Building Scoping Workshop for needs in the region – focus on climate change
- **CAPaBLE has been showcased and commended at many events and is becoming globally recognised for its efforts in educational and scientific capacity building for sustainable development in the Asia-Pacific Region**
 - Conference on Sustainability, Perth WA, September 2003
 - Climate & Policy Dialogue, Tokyo 2003
 - PALM, Okinawa 2003
 - Samoan Government and SPREP – specific “grass roots” education and training research project on climate extremes and sustainability
 - NIWA, National Institute of Water and Research
 - PACE-SD, USP in Fiji is now established as a centre of excellence by the UNU for sustainable development and leading major CAPaBLE project in the Pacific. Director, Koshy Kanayathu, is also current Project Leader and APN Scientific Planning Group Member (covering the Pacific Island Countries)
 - Fijian Government
 - Pakistani Government
 - Sri Lankan Government
 - Laotian Government
 - SOPAC
 - 5th Ministerial Conference on Economic Development (MCED), Korea, March 2004
 - Partnership Fair during the 14th UN Commission on Sustainable Development, in New York, USA, on 1-12 May 2006
- **Direct (earmarked) financial investments for CAPaBLE have been made directly from the APN Member Governments of:**
 - Australia
 - Japan
 - New Zealand
 - USA.

3. CAPaBLE Publications and Publicity

- 8-page brochure prepared for distribution at various scientific and political arenas
- 24-page CAPaBLE Publication for 10th Anniversary highlights **nine capacity building projects** and **two comprehensive research projects**.
- Four professional posters created: one general poster of CAPaBLE; two comprehensive research projects and one project for the Pacific Islands Training Institute
- A general poster of CAPaBLE for its Phase 2 activities was created.



- Currently, a publication is being planned for CAPaBLE Phase 1 activities.



APN Regional Committee Southeast Asia Trial Model



Who?

The Southeast Asia Regional Committee will be made up of national Focal Points from the following Southeast Asian countries: Cambodia, Indonesia, Laos PDR, Malaysia, Philippines, Thailand and Viet Nam (see above). The SEA Regional Committee will appoint a Chair for a one-year term. The position of Chair will rotate among its members. The SEA Regional Sub-Committee can co-opt experts as members to participate in regional activities for a term of one-year (renewable).

What?

Regional Committee Members will establish and maintain regular contact between each country, SPG Members and with APN project leaders, in the region. Project leaders will be asked to submit reports to each respective country nFP to update and provide outcomes from APN-funded projects. When possible, Sub-Regional Committee Members will attend project workshops and meetings to provide a networking opportunity. Furthermore, members of the sub-regional committee will disseminate information about national activities being conducted in their country that are relevant to the APN. Regional Committee Members will also represent and promote the APN in the region and provide a report to the APN Secretariat once a quarter for submission in the APN Newsletter. Potential regional activities will be explored, as well as information sharing from previous or existing APN funded projects. Furthermore, NFPs will be requested to provide summary briefings to their Ministry about the APN and its work, as appropriate.

How?

The work facilitated by the Regional Committee will largely be carried out electronically, however Sub-Regional Committee Members have the opportunity to meet once a year, during the IGM/SPG, to discuss priority issues. If additional meetings are deemed necessary, this can be arranged by the Sub-Regional Chair, provided that there is available budget. The Regional Committee Chair will report to the IGM each year to provide an update on activities carried out in the region by the Committee.

Organisation:

Sub-Regional Committee Members are responsible for maintaining contact with each other; communication will be facilitated by the Chair. Members will submit a quarterly summary, using a one-page template, to the Chair, and all summaries will be collated into one regional summary for the newsletter and IGM report, by the Chair. Administrative support will be largely provided by each national Focal Points office, with some assistance from the APN Secretariat.

Guidelines for Rules and Procedures of the Sub-Regional Committee for Southeast Asia

During the Sub-Regional Committee meeting held in Jakarta, 24 August, it was requested that the Secretariat provide a guide for rules and procedures to assist with drafting the contents of the Terms of Reference, based on the Framework Document. Below are some procedures that should be considered when drafting a Terms of Reference for the Sub-Regional Committee.

1. Mandate

The Sub-Regional Committee for Southeast Asia will:

- i. maintain regular contact among countries in the region
- ii. maintain regular contact among SPG Members in the region
- iii. maintain regular contact between APN project leaders and nFPs in the region
- iv. attend APN-project workshops, as necessary
- v. represent and promote the APN at various fora in the region
- vi. provide summary briefings to each respective Ministry about the APN and its work
- vii. report to the IGM at the APN annual meeting
- viii. submit quarterly reports to the Secretariat for submission in the APN Newsletter and website
- ix. plan and implement what is deemed appropriate in order to enhance regional activities to develop and promote the APN

2. Participation

- i. The Sub-Regional Committee for Southeast Asia includes:
 - a) National Focal Points, of each member country in the Southeast region; Cambodia, Indonesia, Laos PDR, Malaysia, Philippines, Thailand and Viet Nam.
- ii. The SEA Regional Sub-Committee can co-opt experts as members to participate on the committee and in regional activities for a term of one-year (renewable).
- iii. The SEA Regional Sub-Committee can invite additional representatives to attend its meeting as observers.

3. Procedures

- i. The Sub-Regional Committee elects one of its Focal Points to act as its Chair for a term of one-year (renewable).
- ii. The Chair is responsible for managing sub-regional communications and activities.
- iii. The Sub-Regional Committee will meet once a year to discuss activities in the region.

Proposed New Activities

1. Side event at UNFCCC

Climate change has been one of the major activities of the APN over the past few years reflecting the current international global change agenda. In May 2006, the SC Chair participated in a Special Side Event on Research Needs relating to the Convention organised by the UNFCCC secretariat and in a side event on Asia-Pacific Initiative towards a Sustainable and Environmentally-Sound Society organised by the National Institute of Environmental Studies, Japan during the 24th session of SBSTA.

In December 2007, the COP13-COP/MOP3 of UNFCCC is going to be held in Bali, Indonesia. Since it is obviously the biggest international event on climate change of the year, and most importantly, it is in the Asia-Pacific, it is considered to be the ideal occasion to promote the APN.

Organising a side event during the session may be an orthodox option. In order to make the occasion most effective, it needs to be carefully and effectively organised with full support of all the member countries, many of who are expected to be in the COP-MOP. The secretariat expects the IGM to support the idea and to suggest effectively conducting the side event on such issues as;

Topic, such as,	research needs capacity building needs good practice of capacity building research on adaptation, etc.
Organiser, such as,	APN alone Co-organise with --
Content, such as	potential speakers expected outcome

Based on the suggestion, the Secretariat with the assistance of the SC, would develop the details.

2. GEOSS

In 2005/2006, the APN organised two-time “Scoping Workshops on Global Earth Observations and the Capacity Building Needs of the Region: Focus – Climate”, whose outline was introduced at the 11th IGM. The SC Chair participated in GEO III in December 2006 in Bonn, and the SC Chair and the Secretariat participated in the GEOSS Symposium on Integrated Observation for Sustainable Development in the Asia-Pacific Region organised by GEO Secretariat in collaboration with the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) in January 2007 in Tokyo. Through these activities, significance of GEOSS for the APN was confirmed. The GEOSS is expected to be further highlighted in 2007 since GEO Ministerial Summit is going to be held in November (Cape Town, South Africa) almost two years after the third Earth Observation Summit (Feb. 2005, Brussels).

- a. One of the major conclusions of the Scoping WSs was organising a training programme on such as climate modelling, socio-economic impact and adaptation to climate change. A specific step to realise a training programme will be facilitated in 2007/2008. A workshop to develop a curriculum for a training programme should be organised.
- b. On the occasion of the Tokyo Symposium, the MEXT, the Japan’s principal organisation to GEO showed interest to collaborate with the APN in the “Asian Water Cycle Initiative” (see the letter attached). As the APN WSs pointed out, linkages between users/modellers of observation data and observers/data creators are important. Because many in the APN community belong to the former and the MEXT is close to the latter, collaboration between the APN and MEXT is mutually significant. Prof. Koike, University of Tokyo is the possible collaborating partner of APN. In 2007/2008, kick-off discussion between the APN and the AWCI people is expected.

Based on the suggestion, the Secretariat with the assistance of the SC would develop the details.

March 8, 2007

Mr. Hiroki HASHIZUME
Director, Secretariat
Asia-Pacific Network for Global Change Research
IHD Centre Bldg. 5F, 1-5-1
Wakinohama Kaigan Dori
Chuo-ku, Kobe 651-0073, Japan

Dear Mr. Hashizume,

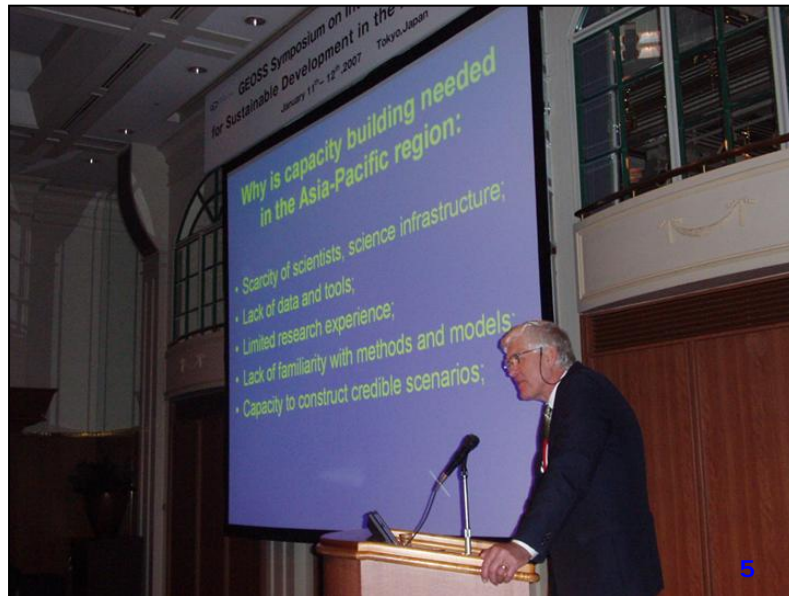
It was a pleasure to meet you and your APN colleagues at the GEOSS Symposium on Integrated Observation for Sustainable Development in the Asia Pacific Region held in January, 2007 in Tokyo. At the Symposium, I think we had a very good meeting to discuss possible cooperation between MEXT and APN.

As the Ministry engaged in promoting the establishment of GEOSS, MEXT hopes to strengthen the partnership with observation data users in the Asia Pacific region which is well represented by APN. In this regard, MEXT welcomes development of any cooperative activities between Asian Water Cycle Initiative represented by Professor Koike, University of Tokyo and APN through the further communications.

Best regards,



Shuichi SAKAMOTO
Director,
Office of Earth and Environmental Science and Technology,
Ocean and Earth Division, Research and Development Bureau
Ministry of Education, Culture, Sports, Science and Technology (MEXT)



5

Asia Water Cycle Initiative and APN

Issue:

- floods and droughts, characterised by the large fluctuations of the Asian-Australian monsoon rainfall system result in human and socio-economic losses and effect food security.
- water scarcity, pollution and environmental degradation
- climate change impact on such a vulnerable region with critical water-related issues.

12th APN IGM/SPG Meeting 21-23 March 2007, Honolulu, USA

6

Asia Water Cycle Initiative and APN

Need:

- research to underpin integrated water management approaches ;
- to share timely, quality, long-term information on water quantity and quality;
- to construct a comprehensive, coordinated and sustained observational system of systems;
- to establish common regional approaches in A-P region;
- to develop the capacity to maximise use and engagement in this initiative.

12th APN IGM/SPG Meeting 21-23 March 2007, Honolulu, USA

7

Asia Water Cycle Initiative and APN

Possible activities:

- **Partner in meetings and workshops for coordination at various levels:**
science research meetings, advisory meetings and task team meetings; workshops for capability development so as to maximise the benefit and enable participation in this programme.
- **Partner in demonstration projects:**
to check current research understanding and improve technical feasibility of further outreach and applicability.

12th APN IGM/SPG Meeting 21-23 March 2007, Honolulu, USA

8

Resources Development: Report from the RC

Following the report from the Resources Development Committee (RDC) following action points were agreed upon at the 11th IGM, which was held in Bangkok, Thailand, in March 2006:

Short term – Year One (2005/06) and Year Two (2006/07)

- Work with those presently funding APN programmes and activities to assure long-term stability of such funding.
- Based on the review of discussions held in the past, formulate financial working plan with concrete and targeted action points (divided in two groups, one with actions to raise additional funds, and the other with actions to reduce expenses).
- Encourage members from developing countries to consider sharing costs of travelling to IGM/SPG.

Medium term – Year Three (2007/08) and Year Four (2008/09)

- Establish a Resources Development Plan.
- Consider the possibility of looking to member countries to invest in the APN, with in-kind or financial contributions.
- Continue to mobilise funds for scientific and CB activities from sources within and outside of the APN region.

At its 4th Meeting in August 2006 in Jakarta, Indonesia, the Steering Committee (SC) further discussed ways forward to achieve the set goals and to approach new donors for financial support of the APN and its activities.

In the light of decrease in the overall annual budget it was stressed again that the APN must be well prepared with relevant products to be offered to potential donors. Showcasing APN's success in research and capacity building at international fora is another important step towards budget increase. A suggestion was also made to have a brief meeting with current and potential donor countries, at the IGM, and discuss needs and strategies in dealing with other Ministries in respective countries.

With the above action points from the 11th IGM/SPG and recommendations from the 4th SC Meeting in mind following steps were undertaken:

1. Being invited to the IHDP/APN International Human Dimensions Workshop (13–26 October 2006, Chiang Mai, Thailand) Dr. Andrew Matthews, SC Chair and national Focal Point/SPG Member for New Zealand, took the opportunity to discuss with two representatives of the Asian Development Bank possible collaborations on specific projects, for instance on water issues.
2. The APN was approached by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, who is interested to collaborate with the APN in the support of Prof. Toshio Koike's "Asian Water Cycle Initiative (AWCI)"⁴. Dr. Andrew Matthews, SC Chair and national Focal Point/SPG Member for New Zealand, and the APN Secretariat are in close contact with Prof. Koike as well as MEXT to further elaborate the potential of this cooperation.

⁴ The Asian Water Cycle Initiative (AWCI) was launched in recognition of the need for accurate, timely, long-term, water cycle information as a basis for sound and effective water resources and risk management in the Asian region in November 2005.

3. In January 2007 the APN Secretariat had some discussions with one of the major trading companies in Japan, which is currently preparing the establishment of a fund for environmental research. This company interested to learn about the APN and the possibility of collaborating in specifically identified topics. Further discussions are scheduled after the meetings in Honolulu, USA, in March 2007.

Some of the action points from the above list have not been tackled yet. Notably, the financial working plan (short term goal) and the resources development plan (medium term goal) must be followed up in the coming Fiscal Year 2007/08.

Country Reports Summary

The Country Report was introduced at the 11th IGM in Bangkok, Thailand, and aimed to identify the scientific priorities in each member country and in the region at large in relation to global change, identify best practices and opportunities to promote interactions between science and policy, and find ways to strengthen member government's sense of ownership. An analysis of the 19 (out of 20) country reports received is presented below.

1. Science Agenda

A range of research topics have been identified by the APN members as priority areas in their respective countries. The research topics were categorised into the following themes: climate; use of resources and pathways for sustainable development; changes in oceans and coastal systems; ecosystems, biodiversity and land use; changes in atmospheric composition; vulnerability and adaptation to global change; and cross-cutting and science-policy linkage. These themes are also consistent with the present APN Science Agenda demonstrating its current relevance.

The country reports showed that **climate** is the highest concern in the Asia-Pacific region as perceived by the APN members, with 16 countries (84%) including it in their priority list. It is also noteworthy that climate appears on top of the list of most countries that identified it as a research priority. A sub-regional analysis of the scientific priorities (East Asia, Southeast Asia, South Asia, and Oceania) also showed climate as the top concern in each sub-region. Among the research topics identified under climate are: climate change, climate variability and climate extremes; climate change impacts, adaptation and vulnerability; climate (predictive) modelling and scenarios; and glacier and snow mass melting.

Below is a summary list of research topics by theme taken from the country reports:

Research Topics by Theme

Theme 1. Climate

- Climate change, climate variability and climate extremes
- Climate change impacts, adaptation and vulnerability
- Climate (predictive) modelling and scenarios
- Glacier and snow mass melting

Theme 2. User of Resources (Food/Water/Energy/Materials) and Pathways for Sustainable Development

- Water resource supply and allocation
- Use of resources (food and water) for sustainable development

Theme 3. Changes in Oceans and Coastal Systems

- Coastal zone vulnerability and management
- Sea level rise and adaptive measures

Theme 4. Ecosystems, Biodiversity and Land Use

- Land use change, land degradation and desertification
- Biodiversity conservation
- Ecosystems change and management

Theme 5. Changes in Atmospheric Composition

- Emission scenarios of climate forcing pollutants
- Changes in air quality and its impact on human health

Theme 6. Vulnerability and Adaptation to Global Change

- Vulnerability of natural and human systems to global change
- Adaptation of key sectors (agriculture, water, health, fragile ecosystems) to global change

Theme 7. Crosscutting and Science-Policy Linkage

- Science-policy linkage: development of policy options for appropriate responses to global change
- Development of research infrastructure and transfer of know-how
- Cooperating with other global change networks and organisations
- Multiple stresses caused by climate change, air and water pollution, land use change, degradation of natural environment
- Integrated regional assessment of global change in Monsoon Asia
- Support for GEOSS

2. Policy Agenda

The following are the key points gleaned from the member countries' reports on how to improve science-policy linkage.

1) Existing Mechanisms for Science-Policy Linkage among Member Countries.

Reports from the member countries showed that there are existing institutions or mechanisms in some APN countries that work on the linkage between science and policy. For instance, some countries have national inter-ministerial committees that look into the issue of global change/climate change and formulate plans to address these problems. Scientific agencies and the academe are included in this committee to provide scientific inputs to policy- and decision-making process. Some governments have also initiated national programmes or projects to support research on global change and to combat global change-related problems experienced by the country. Another noteworthy practice in one country is that the government agencies 'commission' or purchase research to underpin or help develop their policies.

2) Regional/National Conference. Organising a regional or national conference is suggested by a number of countries to promote the interaction of science and policy. It is proposed to bring scientists and policy-makers in this event, and showcase the research findings of APN-funded projects. The conference could also provide a venue to highlight main issues of global change as well as review best practices. Likewise, this could be a good opportunity to promote the APN among governments, and build awareness, trust and ownership of APN activities.

3) Science-Policy Dialogue. Scientists are strongly encouraged to present significant research findings to policy-makers. This approach has yielded a positive outcome in one member country, for instance, in leading the policy-makers to act on the problem of glacier depletion by establishing an early warning system to save lives and property. The APN could also facilitate the involvement of policy analysts from appropriate ministries to attend APN workshops in their country so they are informed on 'hot' research issues and see the relevance of APN activities. It is also suggested to promote communications between nFPs and SPGs.

4) Information Dissemination. Publications on research results and its use for policy/legislative actions are suggested to be sent to legislators who are chairs of environment/global change committees. It is also recommended to disseminate global change issues through the mass media, exhibitions, and public lectures to educate the public and the decision-makers.

5) Strengthening APN members/organs. The nFPs are strongly recommended to understand the projects being implemented in their countries, and the Secretariat should exert more effort in informing nFPs on the details of the projects, accomplishments, and outcomes. The nFPs are also encouraged to play a more active role in enhancing understanding and appreciation of APN activities in their own countries.

6) APN Operational Procedures. Scientists applying for proposals under the ARCP and CAPaBLE should liaise with nFP and SPG, and proposals should also be sent to them.

7) Need for Capacity Building. There exists a need for some APN countries to develop their capacity to conduct research in global change and link this into policy-making.

3. Institutional Agenda

In response to finding ways of strengthening member governments' sense of ownership, the following were suggested based on the results of the country reports:

1) Development of active research partnerships. It is time for APN to develop active research partnerships with its member countries in terms of co-funding and asking for financial support (e.g., developing a sliding scale from \$1 or 50 cents in every \$10 coming from the state, to \$5 in every \$10 for the better-off states). Member countries should also consider the possibility of co-organising or co-sponsoring global change activities with APN at the national level.

2) Recognition of APN and its supported projects at regional/ international events. National global change research activities should be synergised with regional activities since many of them are regional in scope and have common scientific priorities. Effort should also be made to make APN projects implemented in particular country(s) to be recognised at international events. Furthermore, it is important for the APN to have 'high level' presence at strategically targeted international global change policy fora (e.g., UNFCCC, CSD, PALM, etc.) to connect with the appropriate policy people to reinforce the relevance of the APN work programme.

3) Special funding allocation for members' activities. It was recommended to have special allocations for organising APN member countries' activity or developing a project with participation of members following, for instance, IPCC and UNFCCC guidelines and principles. These should produce real benefits for them.

4) Strengthening APN members/organs. There should be more accountability of APN organs and performance indicators should be developed and implemented to provide feedback to each organ. Governments should also be advised on the desirable person to be appointed as nFP and ensure a minimum assignment (e.g., 2 years). Visit programmes should be arranged for nFPs and SPGs to APN-funded projects in their respective countries to promote awareness and evaluate progress of the projects.

5) Regular identification of country priorities. It is recommended to regularly seek to understand the policy issues and global change opportunities where, through partnerships, APN may be of help. It might be helpful to convene a meeting of nFPs, SPGs, and focal agencies for UNFCCC at least once every two years to identify policy and research needs and priorities in relation to global change. Alternatively, a questionnaire could be sent to major institutions and policy-makers to get their views/opinions and priorities.

6) IGM host country to hold back-to-back symposium/seminar. The IGM host country is recommended to hold a symposium/workshop back-to-back with IGM to

discuss how to improve the benefits from APN. This should also involve the local stakeholders in the host country as participants.

7) Reinforcement of relevant APN programmes to appropriate ministries. It is suggested to continually reinforce with the appropriate ministries using all means of communication – face-to-face, electronic, printed media, etc. – summaries of relevant programmes that APN is supporting.

Member Country Updates

Country Report Template

a. Science Agenda

Based on the results collated from the Country Reports submitted at the 11th IGM, we were able to determine that the priority scientific theme for APN member countries is "*Climate*." With this in mind, please address the questions below for discussion during the 12th IGM.

1. What is the current progress, or situation, on climate change research, in your country?

2. Have there been developments in research on climate change in the past few years? If so, please specify.

3. What challenges does your country face in climate change research?

** It is recommended that this task be conducted together with the SPG Member for your country.*

4. If "Climate" is not a priority area for your country, please indicate the priority research area in your country.

b. Policy Agenda**Second Strategic Plan, P11, Section 3.2, No. 3**

One of APN's strategies is to: *"Involve APN national Focal Points, who represent their governments, by seeking their guidance on best practices and opportunities to promote interactions between science and policy"*

In linking science and policy, APN would like to maximise on the existing mechanisms in your country and considers it an important step that the activities of the APN and the outcomes of these reached the appropriate policy and decision makers, as well as the people/groups who act as their advisers or lobby with public officials/legislators to pursue global change issues.

1. What are the existing mechanisms/practices in your country that promote linkage of science and policy, what venues are available to present scientific findings to policy and decision makers, and how scientific needs of policy/decision makers are shown to scientists?

2. Please identify people/groups (e.g., legislators pursuing environmental issues; advisory committees on environmental issues) in your country that are key links in the process of decision and policy making on global change issues, particularly with regards to climate.

c. Institutional Agenda

One of APN's strategies is to: *"Encourage participation of all countries in the Asia-Pacific region."*

1. What can the APN do to enhance research on climate change in your country?

Science-Policy Update

At the 11th IGM in Bangkok, Thailand, March 2006, an extensive brainstorming session and discussion on Science-Policy Interactions were held on Day 2. The Chairperson's Summary emphasises the following points:

- There is a need for the APN to be more proactive and propose research areas of interest to member countries;
- A "road map" that identifies gaps, in addition to how these gaps may be filled, based on national requirements, needs to be devised;
- The APN should utilise the media as a general opportunity to disseminate global change research issues in the APN region;
- There is a need for regular meetings with policy-makers, taking all opportunities to develop a regular rapport with policy-makers; and
- Country reports should be collated and analysed and then the information should be distributed to members.

The analysis of Country Reports, now submitted by the member countries for the second time, gives some interesting hints regarding regional, sub-regional and national research areas of interest and requirements. A detailed presentation of the Country Reports was given to the plenary meeting on Day 1.

The significance of science-policy linkage is also mirrored in APN's calls for proposals: one of the major criteria for selection requires from the proponents to clearly define the policy-relevance of their proposed activities and indicate how the results could be used in decision-making processes.

The compilation of these results in APN's Annual Reports and Project Bulletins are another excellent tool to input APN's scientific achievements to policy-makers, too.

Approaching the media is an action point that has not been tackled yet in the past twelve months. Strategies on how to attract media's attention in the APN and its activities must be devised. The timing seems to be rather good as through the presentations of the IPCC Fourth Assessment Reports the public interest in global change issues is awakened.

Opportunities of discussions with policy-makers and –analysts at occasions of international fora should be utilised as much as possible. Representation of the APN by Dr. Andrew Matthews participating in UNFCC SBSTA Meeting (Bonn, Germany, May 2006) and GEO III Meeting (Bonn, Germany, November 2006), Ms. Liana Bratasida, SC Member, participating in 14th ECO Asia Meeting (Saitama, Japan, June 2006), or APN Secretariat members attending the 14th Session of the United Nations Commission on Sustainable Development (UNCSD)(New York, USA, May 2006) or IGFA Meeting (Montreal, Canada, November 2006) are good examples of that approach.

Based on the event calendar of global change related international events for 2007 and beyond the APN will continue to elaborate its travel plan by taking into account the possibilities of dialogue with policy-makers (for instance the COP13 & COP/MOP3, to be held on Bali, Indonesia, in December 2007).

The science-policy linkage should be a two-way process: while scientists are required to think about it when submitting proposals to the APN, it is also crucial to approach policy and decision-makers for their contribution to bridge the gap between science and policy.

Open Discussion

1. Regional Activity

Because the APN is a regional network and it covers a vast area of Asia-Pacific, regional or sub-regional activities for the enhancement of global change research are the keys to the success of the APN. Projects under ARCP and CAPaBLE pillars are definitely the core sub-regional activities and so are the sub-regional liaison practices. However, there may be other ways. Several countries made suggestions in the country reports to promote science-policy linkages and/or recognition of the APN in the international community which would lead to the further development of APN and global change research.

A. One of the suggestions is a regional/national conference/workshop/seminar to showcase research findings of APN-funded projects. If such a meeting is convened with the participation of decision makers and policy analysts, it will be particularly significant not only in policy development but also in raising the awareness, trust and sense of ownership on APN activities among scientists and governments. Although an activity for a single country is not considered a genuine APN activity, a (sub-) regional meeting organised and participated by several countries can be considered more worthwhile one. Such an activity may constitute the new liaison trial.

B. Another suggestion is the participation in strategically targeted regional/international events, such as UNFCCC, CDC, IPCC in order to link with the policy people towards reinforcing APN work programme. Participation in international events on behalf of the APN has been largely planned and implemented by the Secretariat with cooperation of SC Members, nFPs and SPG Members. This is to utilise limited financial resources in the most effective way and to represent the APN under time pressure. However, such international/regional occasions may be more effectively identified and participated by member countries. Even the participation of a single country can be effective as long as it can act on behalf of the APN.

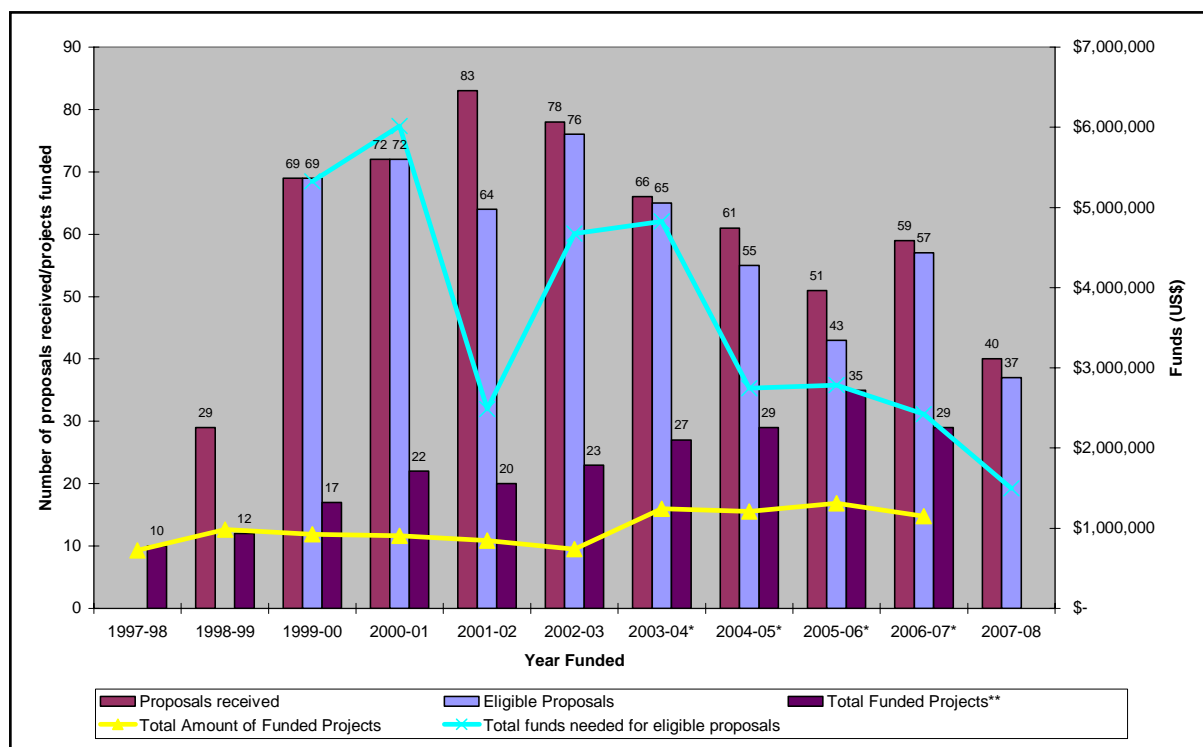
[Possible issues for discussion] In the near future, should we initiate a programme to encourage member countries' participation in international/regional events? The programme, for instance, may proceed this way: first, to call for proposals of candidate activities second to review the relevance of the proposals by the Secretariat and the SC; and third, to be adopted by the IGM/SPG together with special budget allocated for them.

2. Funding for Young Researchers

Although the rate of proponents new to the APN is relatively high (49% for ARCP and CAPaBLE in the eligible proposals for 2006/2007), the rate of successful funding is significantly lower than those by the experienced.

Eligible Proposals (2006/2007)	Experienced 29 (51%)	New 28 (49%)
	↓ 66%	↓ 36%
Funded Proposals (2006/2007)	Experienced 19 (66%)	New 10 (34%)

We are absolutely confident that the APN's review/appraisal process is fair, neutral and authoritative and it is believed to keep the quality of the funding projects high. However, the fact that we had significantly smaller number of proposals for the year 2007/2008 than for previous years may indicate a need to further encourage submission of proposals by those new to the APN. Because the APN promotes researches, participation by young researchers in particular is expected and should be encouraged.



[Possible issues for discussion] How could we attain more quality proposals from young researchers? For instance, in the near future, should we introduce special research funds for young researchers in addition to CAPaBLE whose capacity building programme is largely for young researchers? Then, would it be fair to prioritise young researchers in the light of encouraging substantive quality researches on global change? Is it possible that the newly established scheme would simply lead to sophistication of proposal submission by young researchers who are heavily guided by researchers experienced in the APN processes? Is it enough to encourage inclusion of younger collaborators in proposed projects?

Proposed Budget Plan for 2007/2008

	Proposed Budget Plan FY 07/08		Financial Report (Draft) FY		Budget Plan FY 06/07	
REVENUES	1,876,000		2,039,000		1,882,000	
Ministry of the Environment, Japan	917,000		1,034,000		1,034,000	
Hyogo Prefectural Government, Japan	280,000		294,000		292,000	
NSF/USCCSP, USA	460,000		435,000		375,000	
Australian Greenhouse Office, Australia	23,000		22,000		22,000	
New Zealand Climate Change Office, New Zealand	17,000		16,000		6,000	
Ministry of Environment, Republic of Korea	10,000		10,000		10,000	
Carry Over from FY05/06 to FY 06/07			228,000		143,000	
Carry Over from FY06/07 to FY 07/08	169,000					
EXPENDITURES	1,876,000		1,870,000		1,882,000	
Scientific Activities	1,385,000		1,359,000		1,374,000	
Annual Regional Call for Proposals (ARCP)	685,000		629,000		690,000	
CAPaBLE	495,000		594,000		505,000	
- Comprehensive Research Projects:	180,000		180,000		180,000	
- Capacity Building Projects:	315,000		410,000		275,000	
- Collaborative Activities (eg GEOSS and CB WS)	--		4,000		50,000	
Other Scientific Activities	80,000		41,000		35,000	
- EMECS 2006 (Caen, France)	--		22,000		15,000	
- Int'l Seminar on Biodiversity and Sustainable Society	--		16,000		10,000	
- SBSTA	--		3,000		10,000	
- Synthesis Activity	20,000					
- Capacity Building Activity in GEOSS related Issues ¹⁾	40,000					
- APN/AWCI Collaboration	10,000					
- COP/MOP 13 (Bali, Indonesia, 03~14 December 2007)	10,000					
Resources Development Committee Travel Support	--		0		4,000	
Programme Fellowship	45,000		47,000		47,000	
Travel for Scientific Activities	22,000		22,000		24,000	
Liaison Trial Activities	15,000		0		25,000	
Publications & Website Management	28,000		26,000		28,000	
Contingency for Scientific Activities	10,000		0		10,000	
Reserve for Exchange Rate Fluctuations	5,000		0		6,000	

Administrative Expenses	491,000		511,000		508,000	
IGM/SPG (including SC Meeting)		100,000		120,000		100,000
Travel for Administrative Purposes		8,000		9,000		10,000
Salaries and Related Costs		306,000		290,800		306,500
- Salaries	254,000		240,000		255,700	
- Insurance and Social Benefits	42,000		42,000		42,000	
- Contribution to Severance Allowance Fund (under IGES)	10,000		8,800		8,800	
Others		50,000		60,300		60,500
- Communications, Postage, Remittance Fee	13,000		14,000		17,000	
- General Office Expenses	6,000		9,400		13,500	
- Leasing of Office Equipment	15,000		14,500		20,000	
- Books, Newspapers and Magazines, Maintenance of PC and Server	14,000		20,000		7,500	
- Depreciation on Fixed Assets	2,000		2,400		2,500	
IGES Administrative Charge (3% of MOEJ's contribution)		27,000		31,000		31,000
1) Hyogo Activity: Follow Up Activity of the two Scoping Workshops on Global Earth Observations and CB Needs in the Region						
Exchange Rates FY 2007/2008:						
US\$ 1.00 = JPYen 125						
US\$ 1.00 = AUS\$ 1.30						
US\$ 1.00 = NZ\$ 1.47						

2007/2008 ARCP Multi-year Projects Recommendation for Funding

Project Number	Title	Proponent	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Year 1: 2006/07	Year 2: 2007/08 Requested	Year 2: 2007/08 Awarded	Remarks
ARCP2006-06NMY	Sediment Dynamics and Down-stream Linkages in Tropical Streams as Affected by Projected land-cover/Land-use and Climatic Change	Dr. Alan D. Ziegler, The University of Hawaii, USA	adz@hawaii.edu	climate; ecosystems, biodiversity and land use	RESEARCH on effects of climate change and land use/cover change to water quality, erosion and sediment delivery in headwater streams in Montane mainland Southeast Asia	Thailand, China, India, Japan, Viet Nam, USA	40,000	40,000	40,000	Research; 3 years. Amount requested for 2007/08 same as indicated in the proposal
ARCP2006-07NMY	International Integrated Water Data Access and Transfer in Asia (IIWaDATA) Project	Dr. Toshio Koike, The University of Tokyo, JAPAN	tkoike@hydrat.u-tokyo.ac.jp	climate; use of resources and pathways to sustainable development	ESTABLISHMENT of water data sharing and exchange policies and data management strategies in the Asian region	Japan, China, Thailand, Mongolia, Pakistan, India, Viet Nam, Bangladesh, Indonesia, Philippines	43,000	43,000	43,000	Research; 2 years. Amount requested for 2007/08 same as indicated in the proposal
ARCP2006-08NMY	Integrating Support System for Managing Environmental Change and Human Impact on Tropical Ecosystems in East Asia and the Pacific	Prof. Kazuo Nadaoka, Tokyo Institute of Technology, JAPAN	nadaoka@mei.titech.ac.jp	ecosystems, biodiversity and land use; changes in atmospheric, terrestrial and marine domains	RESEARCH on causes and consequences of present and future environmental change in tropical ecosystems and its application in management decisions	Fiji, Indonesia, Japan, Philippines, Samoa, Thailand	56,500	N/A		Research; 2 years. Received 80% of full amount for the entire project duration

ARCP2006-09NMY	Integrated Vulnerability Assessment of Coastal Areas in the Southeast Asia and East Asian Region	Dr. Laura T. David, University of the Philippines, PHILIPPINES	ldavid@upmsi.ph	climate; ecosystems, biodiversity & land use; changes in the atmospheric, terrestrial & marine domains; use of resources & pathways to sustainable development	WORKSHOPS/RESEARCH on vulnerability of SE/E Asia coastal areas considering the coupled human and ecological systems	Cambodia, Indonesia, Japan, Malaysia, Philippines, Thailand, Viet Nam	80,000	N/A		Research; 3 years. Received 80% of full amount for the entire project duration
ARCP2006-10NMY	Linking Climate Change Adaptation to Sustainable Development in Southeast Asia	Dr. Rodel D. Lasco, World Agroforestry Centre, PHILIPPINES	r.lasco@cgiar.org	climate; use of resources and pathways to sustainable development; crosscutting & science-policy linkages	SYNTHESIS of climate change adaptation and related research in SEA and analysis of its links to sustainable development	Philippines, Indonesia, Viet Nam, Lao PDR	35,000	N/A		Research; 2 years. Received 80% of full amount for the entire project duration
ARCP2006-12NMY	Climate Crop Disease Risk Management: An International Initiative in the Asia Pacific Region	Prof. Samsul Huda, University of Western Sydney, AUSTRALIA	s.huda@uws.edu.au	climate; ecosystems, biodiversity and land use	RESEARCH on integration of climate, crop and epidemiological research in the development of regional predictive model for proactive agricultural risk management	Australia, India, Bangladesh, Cambodia, USA	35,000	35,000	35,000	Research; 2 years. Amount requested for 2007/08 same as indicated in the proposal
ARCP2006-13NMY	Investigation on the Impacts of Urban-Rural Air Pollution on Air Quality and Climate in Southeast Asia	Dr. Nguyen Thi Kim Oanh, Asian Institute of Technology, THAILAND	kimoanh@ait.ac.th	climate; changes in the atmospheric, terrestrial and marine domains; cross-cutting and science-policy linkages	RESEARCH on characterisation and evaluation of air pollution levels in Southeast Asia in relation to climate change and human health	Thailand, Japan, Viet Nam	30,000	30,000	30,000	Research; 2 years. Amount requested for 2007/08 same as indicated in the proposal
ARCP2006-15NMY	Assessment and Management of Change in Coastal Zone Caused by Salinity Intrusion	Dr. Gregory De Costa, Open Polytechnic of New Zealand, NEW ZEALAND	gregory.decosta@openpolytechnic.ac.nz	use of resources and pathways for sustainable development	RESEARCH on changes in coastal zones caused by salinity intrusion	New Zealand, Australia, Japan, India, Sri Lanka, Pakistan	44,000	26,000	26,000	Research; 2 years. Amount requested for 2007/08 same as indicated in the proposal
									174,000	

2007/2008 ARCP New Projects Recommendation for Funding

Project Number	Title	Proponents	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	Funding Awarded for Year 1	Funding Awarded for Year 2	Maximum Funding Awarded	Remarks
2006ARCP-FP02-Venkataraman	Atmospheric chemical transport modelling for carbonaceous aerosol impact on climate and health: Case study of India and Thailand	Chandra Venkataraman , Indian Institute of Technology- Bombay Powai, INDIA	chandra@iitb.ac.in , chandra@che.iitb.ac.in	climate; changes in the atmospheric ; use of resources and pathways for sustainable development	Training about atmospheric modelling and model simulations at University of Iowa, database preparation of emissions scenarios and ambient air quality measurements in India and Thailand, collaborator meetings and post-project workshops for policy makers.	India, Thailand, USA	3 years	0	0		No Funding Allocated
2006ARCP-FP03-Skole	Carbon Financial Markets, Rural Poverty, and Global Climate Change in SE Asia - Scoping Workshop, Training and Project Site Development	Dr. David L. Skole; Michigan State University, USA	skole@msu.edu	climate; ecosystems and land use; and the use of resources for sustainable development	Workshop, Training and Project Site Development about Carbon Financial Markets, Rural Poverty, and Global Climate Change in SE Asia	Cambodia, Lao PDR, Viet Nam, and USA	1 year	30,000		30,000	Funding Allocated
2006ARCP-FP04-Sellers	Urban Development and Environmental Sustainability: Examples from China and India	Jefferey M. Sellers, University of Southern California, USA	sellers@usc.edu	ecosystems, biodiversity and land use	A study about Urban Development and Environmental Sustainability: Examples from China and India using Satellite data	Singapore, China, Japan, India and USA	3 years	0	0		No Funding Allocated

2006ARCP -FP05- Geetha	Impact of Climate variability and change on water and food security in the coastal regions of western Bay of Bengal	Dr. V. Geethalakshmi ; Tamil Nadu Agricultural University (TNAU), INDIA	geetha@t.nau.ac.in + vgeeth@yahoo.com	climate	A study about impact of climate change on water and food security in the coastal regions of Bay of Bengal including an interactive workshop and data analysis	India, Sri Lanka, Bangladesh, Japan, and USA	2 years	0	0		No Funding Allocated
2006ARCP -FP06- Sloss	The response of coastal environments, terrestrial vegetation and human habitation to Holocene climate change, sea-level fluctuations and extreme events, Savaii, Samoa	Dr. Craig Sloss, School of People, Environment & Planning, NEW ZEALAND	C.R.Sloss@massey.ac.nz	climate; ecosystems, changes in the atmospheric, terrestrial and marine domains	A multi-disciplined environmental research about the response of coastal environments, terrestrial vegetation and human habitation to Holocene climate change, sea-level fluctuations and extreme events in Savaii, Samoa	New Zealand, Fiji, Australia and China	1 year	0	0		No Funding Allocated
2006ARCP -FP07- Tangang	Climate variability and climate change scenario in Malaysia and Indonesia	Assoc. Prof. Dr. Fredolin T. Tangang, National University of Malaysia, MALAYSIA	tangang@pkriscc.ukm.my , ftangang@gmail.com	climate	A Series of research about climate variability and climate change scenario In Malaysia and Malaysia	Malaysia, Indonesia, India, Canada	3 years	0	0		No Funding Allocated
2006ARCP -FP08- Baguinon	Collaborative Studies in Tropical Asian Dendrochronology: Addressing Challenges in Climatology and Forest Ecology	Dr. Nestor T. Baguinon, University of the Philippines Los Baños (UPLB), PHILIPPINES	ntbaguinon2001@yahoo.com	climate; ecosystems, biodiversity, and land use.	A study about Tropical Asian Dendrochronology: Addressing Challenges in Climatology and Forest Ecology	Philippines, India, USA, Thailand, Sri Lanka, Malaysia,	2 years	70,000	70,000		Full Funding Allocated for Two Years

2006ARCP -FP10- Murdiyars o	Pooling Perspectives to Understand the Causes of Landslides in Southeast Asia: Is deforestation responsible?	Prof. Daniel Murdiyars, Center for International Forestry Research (CIFOR), INDONESIA	d.murdiyars@cgiar.org	Ecosystems, Biodiversity, and land use	A study by making Pooling Perspectives to Understand the Causes of Landslides in Southeast Asia: Is deforestation responsible?	Australia, Indonesia, Laos PDR, Philippines, Thailand, Viet Nam	1 year	0	0		No Funding Allocated
2006ARCP -FP11- Park	Regional collaborative research on climate change impacts on surface water quality in eastern Monsoon Asia: Towards sound management of climate risks	Dr. Ji-Hyung Park, Kangwon National University, Republic of KOREA	jihyungpark@kangwon.ac.kr	climate; ecosystem and water resources management for sustainable development	A regional collaboration research on climate change impacts on surface water quality in eastern Monsoon Asia: Towards sound management of climate risks	Cambodia, China, Indonesia, Malaysia, Republic of Korea, Thailand	2 years	42,000	38,000	80,000	Funding Allocated
2006ARCP -FP12- Shrestha	Land use change and land degradation in the Lower Mekong Basin countries	Dr. Rajendra P Shrestha, Asian Institute of Technology, THAILAND	rajendra@ait.ac.th	Ecosystems, Biodiversity and Land Use	A research on land use change and land degradation in the Lower Mekong Basin countries	Viet Nam, Cambodia, Lao PDR, Thailand	2 years	0	0		No Funding Allocated
2006ARCP -FP13- Ailikun	International workshop on semi-arid land surface atmosphere interaction	Dr. Ailikun, Chinese Academy of Sciences, CHINA	ailli@tea.ac.cn	Climate; Changes in the atmosphere, terrestrial, and marine domain	An international workshop on semi-arid land surface atmosphere interaction	China, Japan, Mongolia	1 year	0	0		No Funding Allocated

2006ARCP -FP14- Adrianov	Marine biodiversity of the Coastal zones in the NW Pacific: Status, regional threats, expected exchanges and conservation	Dr. Andrey V. Adrianov, Institute of Marine Biology, RUSSIAN FEDERATION	inmarbio@mail.pri.morye.ru	ecosystems, biodiversity and land use	A research about biodiversity of the coastal zones in the NW Pacific: status, regional threats, expected changes and conservation	Republic of Korea, China, Russia	2 years	40,000	(30,000)	(70,000)	Funding Allocated
2006ARCP -FP15-Li	Quantification of land use urbanisation level in three developing Asia countries based on the analysis of scale effects in landscape pattern	Prof. Jianlong Li, Professor, Nanjing University, CHINA	jlli2008@nju.edu.cn ; jianlongli@hotmail.com	ecosystems, biodiversity and land use	A research on quantification of land use urbanisation level in three developing Asia countries based on the analysis of scale effects in landscape pattern	China, Viet Nam, Philippines	2 years	30,000	10,000	40,000	Funding Allocated
2006ARCP -FP16- Gusain	Development of Sustainable & Replicable Mechanism for Environment Friendly Technology Package & Delivery Mechanism for Efficient Cooking Devices and Fuels	P.P.S. Gusain, Society for Development Alternatives, INDIA	mmahata@devait.org ; manoj_mahata@rediffmail.com	Use of resources and pathways for sustainable development ; changes in atmospheric domain; cross cutting issues and science policy linkages	A research about developing a sustainable and replicable mechanism for environment friendly technology package and delivery mechanism for efficient cooking devices and fuels.	Nepal, India, Bangladesh	2 years	0	0		No Funding Allocated
2006ARCP -FP17- Dutta	Climate Perturbation and Coastal Zone Systems in Asia Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy	Dr. Dushmanta Dutta, Monash University, AUSTRALIA	dushmanta.dutta@ci.monash.edu.au	climate; changes in the atmosphere, terrestrial, and marine domain	A research on climate perturbation and coastal zone systems in Asia Pacific Region: Holistic Approaches and Tools for Vulnerability Assessment and Sustainable Management Strategy	Australia, Bangladesh, Japan, Sri Lanka, Thailand and Vietnam	2 years	40,000	40,000	80,000	Funding Allocated

2006ARCP -FP18- Duke	Scientific assessments for effective management of coastal impacts & response to climate change by monitoring mangroves in the Asia Pacific region	Norman Duke, University of Queensland, AUSTRALIA	n.duke@uq.edu.au	climate; changes in atmospheric, terrestrial and marine domain; ecosystems, biodiversity, and land use	Research to produce a scientific assessments for effective management of coastal impacts and response to climate change by monitoring mangroves in the Asia Pacific region	Australia, Malaysia, Fiji, USA, India, Thailand, Sri Lanka, Philippines, Indonesia	1 year	0	0		No Funding Allocated
2006ARCP -FP19- Parish	Assessing the mitigation and adaptation options for tropical peatlands to reduce GHG emissions and increase resilience to Climate change	Faizal Parish, Global Environment Centre, MALAYSIA	fparish@genet.po.my	climate; ecosystems, biodiversity and land use; changes in atmospheric;	Research on assessing the mitigation and adaptation options for tropical peatlands to reduce GHG emissions and increase resilience to climate change	Australia, Indonesia, Japan, Malaysia, Thailand	1 year	40,000		40,000	Funding Allocated
2006ARCP -FP20- Hazarika	Drought Assessment and Monitoring from Space for Food Security and Sustainable Development	Dr. M. K. Hazarika, Asian Institute of Technology (AIT), THAILAND	manzul@ait.ac.th	climate; ecosystems, biodiversity and land use; use of the resources and pathways for sustainable development	A research about drought Assessment and monitoring from space for food security and sustainable development	Bangladesh, Cambodia, India, Lao PDR, Thailand, Viet Nam	2 years	0	0		No Funding Allocated
2006ARCP -FP22- Chen	Asian Mega-deltas: Monsoon circulation in relation to deltaic-coastal hazards and future mitigation – millennial to seasonal dimensions	Zhongyuan Chen; East China Normal University; CHINA	Z.Chen@ecnu.edu.cn	Climate; changes in atmospheric, terrestrial and marine domain	Environmental research, developments and regional workshops about on monsoon circulation in relation to hazard mitigation on deltaic-coastal regions	USA, Viet Nam, Japan, Bangladesh, China, Pakistan, India, Cambodia, Australia, Thailand, Myanmar, Canada, Brunei Darussalam, Indonesia, Korea	2 years	38,000	(20,000)	(58,000)	Funding Allocated

2006ARCP -FP23- Espaldon	Assessing vulnerability of communities to natural disaster and understanding policy implications of adaptation responses in disaster-prone areas in selected Asian countries (Philippines, Viet Nam and China)	Dr. Ma. Victoria O. Espaldon; School of Environmental Science and Management (SESAM); PHILIPPINES	voespaldon@yahoo.com	Science-policy linkage	A study for the capacity of communities to deal natural disaster (e.g. landslides), evaluate existing policies and measures in place to respond to the occurrence of such disasters, and make recommendations which can improve the capacity to cope with them	Philippines, Viet Nam, China	2 years	70,000		70,000	Full Funding Allocated for Two Years
2006ARCP -FP24- Asaduzzaman	Soil Salinity and Rice Productivity Management in the Coastal Zone of Banglades	Dr. M. Asaduzzaman; Bangladesh Science Foundation; BANGLADESH	masad@agni.com	Changes in the terrestrial and marine domain; ecosystem; crosscutting issues and science-policy linkage	A microbiological and field research about reducing salinity and N in coastal soil are to increase rice productivity	Pakistan, India, Bangladesh	2 years	0	0		No Funding Allocated
2006ARCP -FP25- Nawa	Using CDM Opportunities to Mitigate the Release of Greenhouse Gases by Improving Waste Management Practices	Dr. Nawa Raj Khatiwada; Nepal Development Research Institute; NEPAL	nawa@ndri.org.np ; nawaraj9@yahoo.com	Climate; Use of resources and pathways for sustainable development	Assessment of impact of better waste management and introduction of strategy for utilising funds available under the CDM initiative	Nepal, Japan, Indonesia	1 year	40,000		40,000	Funding Allocated

2006ARCP -FP26- Sheikh	Development of Indices and Indicators for Monitoring Trends in Climate	Muhammad Munir Sheikh, Global Change Impact Studies Centre (GCISC),	gcisc@comsats.net.pk , munir.sheikh@gcisc.org.pk , mmunirshikh@yahoo.com , wontk@metri.re.kr	Climate	Hold an Annual workshop on development of indices and indicators for monitoring trend in climate extremes and its application to climate change projection; (1) Development and acquisition of daily climate data, (2) New indices of climate extreme relevant	Bangladesh, India, Nepal, Pakistan, Sri Lanka, Cambodia, China, Fiji, Indonesia, Lao People's Democratic Republic, Malaysia, Mongolia, Philippines, Republic of Korea, Thailand, Australia, Japan, New Zealand, Russian Federation and USA	2 years	47,000	38,000	85,000	Funding Allocated (Pakistan)
2006ARCP -FP26- Sheikh (Kwon)	Extremes and its Application to Climate Change Projection	PAKISTAN					1 year	10,000		10,000	Seed grant (ROK)
2006ARCP -FP27- Dawei	Agrometeorological services supporting preparedness, decision and policy making in the livelihood of farmers to alleviate consequences of extreme weather and climate events in agricultural production	Dawei Zeng, Professor of Resources and Environmental Science College,	zhengdawei44@263.net	Climate, The use of resources and pathways for sustainable development	Hold a workshop on Agrometeorological services supporting preparedness, decision and policy making in the livelihood of farmers to alleviate consequences of extreme weather and climate events in agricultural production; travel support; and developing the project pilot in several countries.	Viet Nam, India, Cambodia, and Indonesia	2 years	0	0		No Funding Allocated

Note: The budget allocated for FP08 and FP23 will be remitted in Year 1 (to ensure manageable MY funding mortgage next year) . However project will still be subject to review after Year 1.

2007/2008 CAPaBLE Multi-year Projects Recommendation for Funding

Project Number	Title	Proponent	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Year 1: 2006/07	Year 2: 2007/08	Year 2: 2007/08	Comments
								Requested	Awarded	
2005CB06-NMY	Socio-economic Impact and Lessons Learning from the Management of Social Forestry Program Implemented in Bangladesh	Dr. Quazi Liaquat Ali, Ministry of Environment and Forests, BANGLADESH	liaquat@bangla.net	scientific capacity building at national level	Analysis of approaches to the social forestry program in Bangladesh	Bangladesh	20,000	N/A		Capacity building; 2 years. Received 80% of funds for the entire project duration.
CBA2006-04NMY	Removing Barriers to Capacity Building in Least Developed Countries: Transferring Tools and Methodologies for Managing Vulnerability and Adaptation to Climate Change	Mr. Bhujangarao Dharmaji/ Dr. Channa Bambaradeniya, IUCN - The World Conservation Union, SRI LANKA	cnb@iucn.sl.org	climate; crosscutting and science-policy linkages	Transfer of Technology on vulnerability and adaptation to climate change to negotiators, policy makers, researchers and NGOs	Sri Lanka, Bangladesh, Lao PDR, Cambodia, Nepal, United Kingdom	30,000	30,000	30,000	Capacity building; 2 years. Amount requested for 2007/08 same as indicated in the proposal.
CBA2006-05NMY	Climate Change and Variability Implications on Biodiversity -- Youth Scenario Simulations and Adaptations	Prof. Bill Aalbersberg, University of South Pacific, FIJI	aalbersberg@usp.ac.fj	climate; ecosystems, biodiversity and land use	Capacity building of the youth on climate change implications on biodiversity	Fiji, Solomon Islands, Kiribati, Vanuatu	35,000	35,000	35,000	Capacity building; 2 years. Amount requested for 2007/08 same as indicated in the proposal.
CRP2006-01NMY	Improving Policy Responses to Interactions between Global Environmental Change and Food Security across the Indo-Gangetic Plain	Dr. Ajaya Dixit, Nepal Water Conservation Foundation, NEPAL	nwcf@wink.com.np	GEC-induced changes in water availability and access & food systems	Research on the key technical, policy and resource management concerns related to how GEC-induced changes in water availability and access will affect the food systems	South Asia: Nepal, Bangladesh, India, Pakistan (Australia, New Zealand, USA)	60,000	60,000	60,000	Comprehensive research project; 3 years. Amount requested for 2007/08 same as indicated in the proposal.

CRP2006-02NMY	Integrated Model Development for Water and Food Security Assessments and Analysis of the Potential of Mitigation Options and Sustainable Development Opportunities in Temperate Northeast Asia	Prof. Xiaodong Yan, START Regional Centre for Temperate Asia, CHINA	yxd@tea.ac.cn	water scarcity and land degradation due to climate change	Development of an integrated model system to assess potential mitigation options and sustainable development opportunities in relation to water and food security	East Asia: China, Mongolia, Russia (New Zealand)	60,000	60,000	60,000	Comprehensive research project; 3 years. Amount requested for 2007/08 same as indicated in the proposal.	
CRP2006-03NMY	Climate Change in Southeast Asia and Assessment on Impact, Vulnerability and Adaptation on Rice Production and Water Balance	Dr. Attachai Jintrawet, Multiple Cropping Centre, THAILAND	attachai@chiangmai.ac.th	climate change, hydrological regime and rice production	Research on the climate change characteristic in Southeast Asia in 40 years and its impacts on the hydrological regime and food production	Southeast Asia: Thailand, Lao PDR, Viet Nam, Cambodia (Australia)	60,000	60,000	60,000	Comprehensive research project; 3 years. Amount requested for 2007/08 same as indicated in the proposal.	
							CB Projects	65,000			
							CRP Projects	180,000			

2007/2008 CAPaBLE New Projects Recommendation for Funding

Project Number	Title	Proponents	Email	Relevance to 2SP Science Agenda	Summary of Project	Regional Collaboration Countries Involved	Project Duration	Funding Awarded	Maximum Funding Awarded	Remarks
2006CB-FP02-Nunn	Understanding Environmental Decision-making In The Rural Pacific Islands	Patrick D. Nunn; The University of the South Pacific; Fiji Islands	nunn_p@sp.ac.fj	Crosscutting issues and science-policy linkage	Research about Understanding Environmental Decision-making in the rural Pacific Islands	Pacific Island countries – Cook Islands, Fiji, Kiribati, Vanuatu	1.5 years	43,000	43,000	Funding Allocated
2006CB-FP05-Sonak	Managing ecosystems for human well-being	Dr. Sangeeta Sonak; The Energy and Resources Institute (TERI); India	ssonak@teri.res.in	Ecosystem; land use and land cover change; Biodiversity; Science Policy	A book publication about better ecosystem management and human well-being research in five different ecosystem.	India, Sri Lanka, Nepal	1 year	0		No funding allocated
2006CB-FP07-Dhakal	Addressing Climate Change through Women-Child Awareness (ACCWA) Project	Janardan Dhakal; Wildlife and Environment Nepal (WE-Nepal); Nepal	samjhana.bista@gmail.com , rbogati27@hotmail.com , janardandhakal@gmail.com	Climate	A series capacity building activities to make a behavior change among women and children in order to contribute reduction of climate change and its effects	Nepal	1 year	0		No funding allocated
2006CB-FP09-Iino	Developing chemical analysis capability in India and Pakistan and risk perception of policy makers and people in Asia	Fukuya Iino; United Nations University (UNU); Japan	iino@hq.unu.edu	Climate change	An International workshop for regional research community, especially young scientists, into professional activity in area of experimental and theoretical studies of atmospheric composition, air quality and their interrelations with anthropogenic load and climate change in Northern Asia	Russia, Japan	1 year	24,000	24,000	Funding Allocated

2006CB -FP10- Kelkar	New risks of climate change – Building capacity to protect the most vulnerable	Ms. Ulka Kelkar, TERI (The Energy and Resources Institute); India	ulkak@teri.res.in	Climate; Pathways for sustainable development, and; Cross-cutting issues and science-policy linkages	Building capacity to protect the most vulnerable communities on new risks of climate change	India	1 year	20,000	20,000	Funding Allocated
2006CB -FP11- Chatterjee	Communicating Economic Implications of climate change impacts and net benefits of adaptation measures to Policy Makers to enable them to take informed decisions	Dr. Anish Chatterjee; Development Alternatives; India	achatterjee@devalt.org , umathur@devalt.org	Climate change	A series capacity activities of training, data analysis, and workshop to demonstrate to the policy makers (at the local level) the ways to estimate climate change damage costs (both 'how much' and 'on whom') and deciding on the kind of investments to be made for different adaptation measures	India	1 year	30,000	30,000	Funding allocated; Suggested to implement the project for 2 years (Year 1: 15,000; Year 2: 15,000)
2006CB -FP12- Chrisandini	Who's Who in Indonesia's Adaptation	Ms. Chrisandini, Yayasan Pelangi Indonesia; Indonesia	chris@pelangi.or.id	Climate change	An activity to establish a national directory of list of data and research on adaptation to climate change	Indonesia	8 months	0		No funding allocated
2006CB -FP13- Shukla	Role of Periurban areas in Global Environment Change	Ms. Megha Shukla; TERI (The Energy and Resources Institute); India	meghas@teri.res.in	Changes in the terrestrial and marine domain; crosscutting issues and science-policy linkage	An activity to brainstorm the role of periurban areas in changing global environment by bringing local communities, researchers, and responsible authorities all together at the local and national level	India	1 year	0		No Funding Allocated
2006CB -FP15- Wijesuriya	Capacity building on confronting adverse environmental impacts on rubber cultivations in non-traditional comparatively drier areas of Sri Lanka	Wasana Wijesuriya; Rubber Research Institute of Sri Lanka (RRISL); Sri Lanka	wasanaw@slt.net.lk	Climate change	A series workshop on capacity building for rubber farmers about creating awareness on climate change and variability, adaptation measures relevant to rubber cultivation and CDM	Sri Lanka	1 year 3 months	0		No funding allocated

2006CB -FP16- Bin Wang	Workshop on "The Monsoon System: Prediction of Change and Variability"	Prof. Bin Wang, University of Hawaii; USA	wangbin@hawaii.edu	Climate	A workshop on The Monsoon System: Prediction of Change and Variability	China, India, Malaysia, Republic of Korea, USA,	1 year	50,000	50,000	Funding Allocated
2006CB -FP17- Gordov	Capacity building to study interrelations between atmospheric composition, anthropogenic load and climate change in Northern Asia	Evgeny Gordov, Siberian Center for Environmental Research and Training/Institute of Monitoring of Climatic and Ecological systems SB RAS; Russian Federation	gordov@scert.ru	Climate change	An International workshop for regional research community, especially young scientists, into professional activity in area of experimental and theoretical studies of atmospheric composition, air quality and their interrelations with anthropogenic load and climate change in Northern Asia	Russia, Japan	1 year	38,000	38,000	Funding Allocated
2006CB -FP18- Soejach moen	Capacity Building in Asian Countries on Climate Change Issues Related to Future Regime	Moekti Handajani Soejachmoen; Yayasan Pelangi Indonesia; Indonesia	kuki@pelangi.or.id	climate	Increasing the capacity of research institutes and negotiators in developing countries, namely Indonesia, Thailand, India, Bangladesh and China in participating in the international climate negotiation.	Indonesia, Japan, China, Thailand, Bangladesh, India, expected Republic of Korea and Pacific Islands country	1 year	45,000	45,000	Funding Allocated
2006CB -FP19- Srivastava	6th Biennial International Human Dimensions Workshop in conjunction with the 7th Open Meeting on the Human Dimensions of Global Environmental Change Research Community	Leena Srivastava; The Energy and Resources Institute; India	leena@teri.res.in	All APN Science Agenda	Support for the planning process of the workshop and conference, particularly the capacity building components of both events	Asia and the Pacific Region	1 year	0		No funding allocated

12th APN IGM/SPG Meeting
 21-23 March 2007, Honolulu, USA

Item 18-3

Science Agenda

Nobuo Mimura

APN
Asia-Pacific Network for Global Change Research

Item 18-3 2

Two issues

- How to attract more good proposals
- Science agenda

12th APN IGM/SPG Meeting
 21-23 March 2007, Honolulu, USA

APN

Item 18-3 3

Trends

Proposals
(ARCP+CAPaBLE+ Multi Yr)

Year	Proposals
'98	30
'99	70
2000	75
01	85
02	80
03	70
04	65
05	55
06	65
07	50

Funded

Year	Funded Projects
'98	12
'99	18
2000	22
01	20
02	22
03	25
04	28
05	25
06	28
07	25

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Country Involvement

Country Involvement under ARCP and CAPaBLE Projects per-Year

Year	ARCP Funded Projects	CAPaBLE Funded Projects
1998	171	0
1999	147	0
2000	141	0
2001	128	0
2002	161	0
2003	105	57
2004	155	41
2005	164	25
2006	78	78
2007	157	57

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Item 18-3

How to attract more good proposals.

1. Let them know
2. Remove barriers
3. Make more attractive

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Item 18-3

1. **Let them know**
 - Increase the recognition to APN in the region
Brochure, Annual Report, Project Bulletin, DVD
 - Inform scientists of the opportunity of APN
Call for proposals on E-mail groups
 - Inform international programs e.g. MAIRS of APN
 - Give eye-catching specific name for a project
ARCP2006-06NMY-Mimura
→ Save coasts (ARCP2006-06NMY-Mimura)
 - Use HTML file rather than pdf in APN web site so that Google can detect.

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Item 18-3

2. Remove barriers

- Easy procedures for application.
- Reduce the number of criteria. 11 is too many.
- Reduce paper works when contract is made.
This is also good for Secretariat.
- Make quick contracts.
- Strengthen consultative function
- List nFP and SPG so that scientists can access.

Roles of SC, SPG and Secretariat.

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Criteria for Evaluation

1. Extent and quality of regional collaboration
2. Technical soundness
3. Building regional and national capacity for global change research
4. Policy-relevancy and developing/strengthening links with government policy and programmes
5. **Administrative support**
6. **Consideration of funding options**
7. **Increasing synthesis and analysis work at national and regional levels**
8. **Developing and strengthening relations with regional and international global change programmes and inter-governmental bodies and mechanisms**
9. Raising awareness of global change issues with the general public
10. **Meeting standardised data collection and user needs, and open access to research sites**
11. **Improving communications**


12th APN IGM/SPG Meeting
21-23 March 2007, Honolulu, USA



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3. Make more attractive

- Just ideas not proposals
- Increase success opportunities.
 - E.g. more seeds money projects
- Possibility of co-funding in some countries
- APN Award of Best Projects
 - Winner will be invited to IGM to give presentation
 - Winner will be invited to Kobe to meet the governor.
- Special arrangement for new or young applicants.

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Framework Document

3.1.1 THE APN SCIENCE AGENDA

"The Asia-Pacific Network for Global Change Research (APN) enables activities that generate and transfer knowledge on the physical and human dimensions of change in the Earth system with a focus on:


1. Climate,
2. Ecosystems, biodiversity, and land use,
3. Changes in the atmospheric, terrestrial and marine domains, and
4. Use of resources (food/water/energy/materials) and pathways for sustainable development.

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Discussed and Emerging Themes

- Climate: change and variability, observation, GEOSS, adaptation
Capacity for forecast and predication
- Water: flood and drought
water cycle - AWCI
- Agriculture and food security
- Biodiversity
need to check Science Agenda
- Air quality
- Health
- Education
Decade of education for SD

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- Integrated approach to the problems
- Focuses vary with sub-regions

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Discussed Activities

- Side event of COP/MOP meeting in Bali
- Booklet of APN achievement of climate- related activities
 - CRP on climate modeling and integrated model
 - Studies on impacts, adaptation, information dissemination
- Synthesis activity
- Sub-regional activities
 - strengthen the communication of science communities and policy-makers
 - find new and/or common areas of interests

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- User-oriented approach
- More involvement of social science

Some of these issues may be incorporated into the Guides for Call for Proposals 2007.

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Operating Plan

Tracking changes indicate revisions from the first column.

APN's Second Strategic Phase 2005-2010 Operating Plan/ Operating Plan 2006/2007	Secretariat's Review of the Current Status of Implementation of the Operating Plan	APN's Operating Plan 2007/2008 (draft)
<p>Introduction</p> <p>It is highlighted in the Second Strategic Plan that the APN should devise an operating plan to address the strategies outlined in the APN's Second Strategic Plan under its Science, Policy and Institutional agendas.</p> <p>With this in mind, and following discussions with the Steering Committee on potential internal advisors, Subramanian Moten, SPG Member for Malaysia, visited the Secretariat from 24-26 January, to begin devising the plan. A plan covering three timescales spanning the second strategic phase from 2005-2010 was formulated during the meeting:</p> <ul style="list-style-type: none"> • Short-term (April 2005 to March 2007), • Medium-term (April 2007 to March 2009) and • Long-term (April (2009) and beyond into 3rd Strategic Phase). 		<p>Introduction</p> <p><u>It is highlighted in the Second Strategic Plan that the Secretariat and the Steering Committee will prepare an annual operating plan for approval by the IGM.</u></p> <p><u>At the end of each year, the Steering Committee will evaluate APN's achievements related to the annual operating plan.</u></p> <p><u>Based on the draft prepared by the Secretariat with the advise of Subramanian Moten, SPG Member for Malaysia, the 3rd SC (March 2006, Bangkok) developed the APN's Second Strategic Phase 2005-2010 Operating Plan. The 11th IGM endorsed it.</u></p> <p><u>In the year 2006/2007, the Operating Plan was in effect equivalent to an annual Operating Plan for the year. At the end of 2006/2007, the Secretariat and the SC reviewed APN's achievements related to the Operating Plan based on the annual report of activities and the Secretariat's review note on the implementation of the Operating Plan together with the audited financial report, and prepared the Operating Plan for 2007/2008 with two timescales:</u></p> <ul style="list-style-type: none"> • <u>Short-term (April 2007 to March 2008) and</u> • <u>Medium and Long-term (April 2008 to March 2010 and beyond into 3rd Strategic Phase).</u>
<p>Science Agenda Short-term – Year One: 2005/06 and</p>		<p>Science Agenda Short-term – Year 2007/08</p>

<p>Year Two: 2006/07</p> <ul style="list-style-type: none"> • Establish, revise, update scientific priorities annually, based on input from nFP, SPG Members and others. • Launch two calls for proposals simultaneously for ARCP and CAPaBLE, clearly identifying the differences between both, before the call is launched. • Identify global change events – meetings, conferences, etc, appropriate to the APN. Create a calendar of events and plan attendance and/or discuss opportunities to co-organise, co-host. • Produce an Annual Science Bulletin for all ongoing projects under the ARCP and CAPaBLE processes. • Annual Report – detail projects that were completed during each particular year and cite any publications, regardless of whether WIP (Work In Progress), in press, or already published. • Follow-up on completed projects from the first strategic phase (1999-2004) and identify peer-reviewed publications. • CAPaBLE publication for Phase I activities. • Continue to be pro-active in devising science (and policy) calendars of events. 	<ul style="list-style-type: none"> - Priorities in the 2nd SP were confirmed at IGM 11. To be discussed at IGM/SPG 12 with the outcomes of the questionnaire done in 2006/2007. SPG/IGM is expected to come with relevant priorities for 2007/2008 and 2008/2009. - Done for 2007/2008 call for proposals for the first time. Similar number of proposals were submitted. - Done as shown in the APN Newsletter. Further cooperation from members and GC communities is expected. - Done for 2005/2006 projects as already distributed. The one for 2006/2007 is in the making. (Expected to be submitted to IGM/SPG 12) - Done for 2004/2005 projects as already distributed. The one for 2005/2006 is in the making. (Expected to be submitted to IGM/SPG 12) - Done as in the Project Bulletin and in the Annual Report. Some publications are known to be in preparation. - CDC in Hawaii supported the idea and gave guidance on outline of the work. - Done as shown in the Newsletter. Further cooperation from members and GC communities is expected. 	<ul style="list-style-type: none"> • Establish, revise, update scientific priorities annually, based on input from nFP, SPG Members and others. • Launch two calls for proposals simultaneously for ARCP and CAPaBLE, clearly identifying the differences between both, before the call is launched <u>and encourage submission of proposals.</u> • Identify global change events – meetings, conferences, etc, appropriate to the APN. Create a calendar of events and plan attendance and/or discuss opportunities to co-organise, co-host. • Produce an Annual Science Bulletin for all ongoing projects under the ARCP and CAPaBLE processes. • Annual Report – detail projects that were completed during each particular year and cite any publications, regardless of whether WIP (Work In Progress), in press, or already published. • Follow-up on completed projects from the first strategic phase (1999-2004) and identify peer-reviewed publications. • CAPaBLE publication for Phase I activities. • Continue to be pro-active in devising science (and policy) calendars of events.
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<ul style="list-style-type: none"> • Identify relevant “International Years” (example, 2008 is International Polar Year (IPY)) and consider medium to long-term plans around these. • Capacity Development Committee (CDC) addresses the CAPaBLE strategies outlined in the Second Strategic Plan and devise an appropriate plan. • Identify the need for continuation of comprehensive research projects under CAPaBLE in developing countries. If there is continued interest, identify priority topics and timelines. • Identify a topic(s) and outline a draft plan for syntheses of APN work. 	<ul style="list-style-type: none"> - Widely known Int’l Years include, <ul style="list-style-type: none"> - 2007-2008: Int’l Polar Y - 2008: UN Int’l Y of Planet Earth, UN Int’l Y of The Potato, UN Int’l Y of Sanitation, Int’l Coral Reef Y - 2005-14: UN Decade of ESD - SPG 12 felt such identification be carefully done from global change research perspective and be suspended until specific proposal is made by SPG Members. - Being done. Every year, CDC and SPG are reviewing the CAPaBLE processes and implementing the programme in the improved manor. - SPG 12 confirmed the need for continuation of CRP and started discussion on the priority topics for the years in and after 2009/10. - SPG 12 concluded, capacity building and research projects on climate change, such as in the CPRs in the CAPaBLE first phase Climate should be the materials for the synthesis work. 	<ul style="list-style-type: none"> • Identify relevant “International Years” (example, 2008 is International Polar Year, IPY, and consider medium to long-term plans around these. • Capacity Development Committee (CDC) addresses the CAPaBLE strategies outlined in the Second Strategic Plan and devise an appropriate plan. • Identify the need for continuation of comprehensive research projects under CAPaBLE in developing countries. If there is continued interest, identify priority topics and timelines for the CAPaBLE in and after 2009/10. • Identify a topic (s) and outline a draft plan for syntheses of APN work.
<p>Medium-term – Year Three: 2007/08 and Year Four: 2008/09</p> <ul style="list-style-type: none"> • Devise a plan for APN-supported projects to produce publications that will feed into governmental policy-processes such as the 5th AR (probably due in March 2013). Identify other international processes. 	<ul style="list-style-type: none"> - Visited at 12th SPG. Suggestions by IGM/SC/SPG Members for identifying such processes, international/ regional/ sub-regional other than the below, are appreciated. ➢ Assessment panels of the Montreal Protocol ➢ MEA (Millennium Ecosystem Assessment) and CBD, CCD and Ramsar Convention ➢ IPSUNR (Int’l P on the Sust 	<p><u>Medium and Long-term – Year 2008/09 and beyond</u></p> <ul style="list-style-type: none"> • Devise a plan for <u>Encourage</u> APN-supported projects to produce publications that will feed into governmental policy-processes such as the <u>IPCC</u> 5th AR (probably due in March 2013). Identify other international processes, <u>Panels of the Montreal Protocol, Millennium Ecosystem Assessment, and International Panel on the Sustainable Use of Natural Resources.</u>

<ul style="list-style-type: none"> • Produce an APN publication that cites peer-reviewed papers published as a result of APN-supported research projects (publish in March 2009, in time for 2nd Phase evaluation period). This could also feed into the IPCC 5th Assessment Report. • Consider options for co-hosting an event with IAI and/or other GC partners. Identify suitable topic(s) and initiate discussions at the 12th IGM. • Plan and conduct one or more syntheses of APN activities on a topic (or topics) that are identified. 	<p>Use of Nat Res) and Marrakech Process, MEA</p> <ul style="list-style-type: none"> - To be reconsidered in the SPG/IGM. Identification of peer-reviewed articles in the Annual Report, etc. may be enough. - Informally consulted with IAI. Needs to be revisited, in conjunction with, <i>e.g.</i> the COP13-COP/MOP3 in Dec. 2007, Bali - SPG 12 feels such has been well realised by publishing the Annual Reports, Project Bulletins. So will be the "Synthesis/CAPaBLE phase I" booklet. Such booklet should be periodically created responding to the needs of the society. 	<p>• Produce an APN Publication that cites peer-reviewed papers published as a result of APN supported research projects (publish in march 2009, in time for 2nd Phase evaluation period). This could also feed into the IPCC 5th Assessment Report.</p> <ul style="list-style-type: none"> • Consider options for co-hosting an event with IAI and/or other GC partners. Identify suitable topic (s) and initiate discussions at the 12th IGM. • Plan and conduct one or more syntheses of APN activities on a topic (or topics) that are identified.
<p>Long-term - Year Five 2009/10 and beyond</p> <ul style="list-style-type: none"> • Publish a synthesis of APN activities from identified topic(s). • Perform an evaluation of Phase 2 • Devise a draft Strategic plan for Phase 3 • Endorse a new strategic plan for 3rd Strategic Phase 	<ul style="list-style-type: none"> - To be undertaken as will be decided. - Preparation for the evaluation should be started from the next SC meeting in mid/late 2007. - Discussion on the preparation for the next Strategic Plan should be started from the next SC meeting in mid/late 2007. 	<p>Long-term Year Five 2009/10 and beyond</p> <ul style="list-style-type: none"> • Publish a synthesis of APN activities from identified topic(s). • Perform an evaluation of Phase 2 • Devise a draft Strategic plan for Phase 3 • Endorse a new strategic plan for 3rd Strategic Phase
<p>Policy Agenda</p> <p>Short-term – Year One: 2005/06 and Year Two: 2006/07</p>		<p>Policy Agenda</p> <p><u>Short-term – Year 2007/08</u></p>

<ul style="list-style-type: none"> • Identify Calendar of Policy Events appropriate to the APN and plan attendance, as needed (annually). • Produce one-page science briefings targeting the policy audience that can be disseminated at science/political fora and on the APN website: Aim to publish two per year based on scientific priorities established for any one year. • Expand on science-policy question of how do we bridge science/policy? Engage members by discussing the issue at the 11th IGM and beyond. • Personal contact/visits to national Focal Points/SPG Members. • Look at the ARCP process and the CAPaBLE process and determine, "Are we asking the right questions? How is your project effective? How will it feed into policy processes? What concrete initiatives do you have in place for policy-relevance?" Review these with the SPG. • Raise the issue of science-policy interactions. Ask national Focal Points and Scientific Planning Group Members to provide examples of successful science-policy interactions in their countries? For example at meetings, etc. Collate information for discussion at 12th IGM. • Identify regional and international governmental 	<ul style="list-style-type: none"> - Done as shown in the APN Newsletter. Further cooperation from members and GC communities is expected. - Leaflets "Best Practices of APN Supported Activities" on 4 scientific areas were published in 2005. One for general introduction purpose was prepared in 2006. Annual Reports, Project Bulletins are also published. SPG 12 thinks "Synthesis/CAPaBLE phase I" will be the work for 2007/08. - To be discussed at the IGM/SPG 12 using the new questionnaires to the member countries. - Done in various occasions, such as Kunming, Montreal, Beijing, Chiang-Mai, and needs to be continued by all APN members. - Done in the call for proposal for 2006/2007 and 2007/2008. Review is being done at SPG 12. - To be discussed at the IGM 12 using the new questionnaires to the member countries - Such as ➤ Assessment Panels of the 	<ul style="list-style-type: none"> • Identify Calendar of Policy Events appropriate to the APN and plan attendance, as needed (annually). • Produce <u>a one-page booklet based on capacity building and research projects on climate change, such as in the CPRs</u> briefings targeting the policy audience that can be disseminated at science/political fora and on the APN website. Aim to publish two per year based on scientific priorities established for any one year. • Expand on science-policy question of how do we bridge science/policy? Engage members by discussing the issue at the 12th IGM and beyond. • Personal contact/visits to national Focal Points/SPG Members. • Look at the ARCP process and the CAPaBLE process and determine, "Are we asking the right questions? How is your project effective? How will it feed into policy processes? What concrete initiatives do you have in place for policy-relevance?" Review these with the SPG. <u>Ask project proponents to elaborate these points in their proposals.</u> • Raise the issue of science-policy interactions. Ask national Focal Points and Scientific Planning Group Members to provide examples of successful science-policy interactions in their countries? (for example at meetings, etc.) Collate information for discussion at 12th IGM <u>and onward.</u> • Identify regional and international governmental
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<p>processes other than IPCC and UNFCCC processes where scientific results of APN projects can be considered and/or presented.</p>	<p>Montreal Protocol ➤ MEA (Millennium Ecosystem Assessment) and CBD, CCD and Ramsar Convention ➤ IPSUNR (Int'l P on the Sust Use of Nat Res) and Marrakech Process, MEA - To be raised at IGM/SPG in Hawaii to further identify international/regional processes.</p>	<p>processes other than IPCC and UNFCCC processes where scientific results of APN projects can be considered and/or presented. <u>In the call for proposals, etc. encourage contribution to these processes.</u></p> <p><u>• Participate in international/regional conferences to highlight APN's scientific activities to promote science/policy interactions and to promote APN. The UNFCCC COP13-COP/MOP3 may be a good occasion.</u></p>
<p>Medium-term – Year Three: 2007/08 and Year Four: 2008/09</p> <ul style="list-style-type: none"> Investigate the possibility of encouraging (by funding and/or supporting) seminars (local, national initially) where GC scientific results are presented to government officials. Pursue initially by following-up on the Australia example that was highlighted at the 10th IGM. Highlight publications from APN-funded projects that might feed into regional and international governmental processes such as the IPCC (5thAR) and UNFCCC processes, and others processes identified. Identify calendar of policy-related activities and events. 	<p>- To be revisited in SC/IGM in Hawaii.</p> <p>- To be followed up for the processes identified by, e.g., sending questionnaires to the project leaders.</p> <p>- Done as shown in the APN Newsletter. Further cooperation from members and GC communities is expected.</p>	<p><u>Medium and Long-term – Year 2008/09 and beyond</u></p> <ul style="list-style-type: none"> Investigate the possibility of encouraging (by funding and/or supporting) seminars (local, national initially) where GC scientific results are presented to government officials. Pursue initially by following up on the Australia example that was highlighted at the 10th IGM. Highlight publications from APN-funded projects that might feed into regional and international governmental processes such as the IPCC (5thAR) and UNFCCC processes, and others processes identified. Identify calendar of policy-related activities and events.
<p>Long-term - Year Five 2009/10 and beyond</p> <ul style="list-style-type: none"> Perform an evaluation of Phase 2 	<p>- Preparation for the evaluation should be started from the next SC meeting in mid/late 2007.</p>	<p>Long-term – Year Five 2009/10 and beyond</p> <ul style="list-style-type: none"> Perform an evaluation of Phase 2

<ul style="list-style-type: none"> • Devise a draft Strategic plan for Phase 3 • Endorse a new strategic plan for 3rd Strategic Phase 	<ul style="list-style-type: none"> - Discussion on the preparation for the next Strategic Plan should be started from the next SC meeting in mid/late 2007. 	<ul style="list-style-type: none"> • Devise a draft Strategic plan for Phase 3 • Endorse a new strategic plan for 3rd Strategic Phase
<p>Institutional Agenda</p> <p>Short-term – Year One: 2005/06 and Year Two: 2006/07</p> <ul style="list-style-type: none"> • Pursue new country membership of interested countries. • Devise and implement a Communications Plan for the APN members and the wider GC community. • Review the Second Strategic Phase after the first two years. • Address process for active member-country participation in hosting APN meetings. • Identify and communicate to IGM and SPG Members' information on global change events relevant to the APN by compiling information received from international programmes and other sources. • Identify, up to 4 years in advance, main meetings being scheduled by the international GC programmes such as the global change programmes, WCRP, IGBP, ESSP, IHDP, DIVERSITAS. Identify an exhaustive list and a calendar of activities (for at least 2 years in advance). • Consider inviting scientific experts to the APN meetings on issues expected to be emphasised at their meetings. 	<ul style="list-style-type: none"> - Singapore is under contact. Bhutan informally showed interest in APN. - Revisited in SC/IGM in Hawaii - Being done. This review of annual Operating Plan constitutes such a review. - Successful for the 4th SC, 13th IGM/SPG. Continued participation is expected. - Further cooperation from members and GC communities is expected. - Heavily depends on of members and GC communities. Such cooperation is very much expected. - Being realised in national activities during the IGMs and the presentation/discussion on GEOSS in IGM 12 	<p>Institutional Agenda</p> <p><u>Short-term – Year 2007/08</u></p> <ul style="list-style-type: none"> • Pursue new country membership of interested countries. • Devise and implement a Communications Plan for the APN members and the wider GC community. • Review the Second Strategic Phase after the first two years <u>through the review of annual Operating Plan.</u> • Address process for active member-country participation in hosting APN meetings. • Identify and communicate to IGM and SPG Members' information on global change events relevant to the APN by compiling information received from international programmes and other sources. • Identify, up to 4 years in advance, main meetings being scheduled by the international GC programmes such as the global change programmes, WCRP, IGBP, ESSP, IHDP, DIVERSITAS. Identify an exhaustive list and a calendar of activities (for at least 2 years in advance). • Consider inviting scientific experts to the APN meetings on issues expected to be emphasised at their meetings.

<ul style="list-style-type: none"> • Have APN-initiated and APN-funded projects proactively seek collaboration with institutes and organisations that provide co-sponsorship and in-kind contributions. • Seek active involvement of host institutions in order to provide greater sustainability of projects. • Decide on means of communications and modality of discussions. • Address membership inactivity. • Work with those presently funding APN Programmes and activities to assure long-term stability of such funding. • Based on the review of discussions held in the past, formulate financial working plan with concrete and targeted action points (divided in two separate groups, one with actions to raise additional funds, and a second one with actions to reduce expenses). • Report in-kind contributions (in figures) in the financial reporting at IGM/SPG. • Encourage members from developing countries to consider sharing costs of travelling to IGM. 	<ul style="list-style-type: none"> - Done in the call for proposal for 2006/2007 - To be followed up by asking project proponents by explicitly including such in the conditions of funding - To be revisited in SC/IGM. - Raised at the Bangkok IGM. Further cooperation by the members is expected. Guidance document for the roles of nFPs, SPG Members will be helpful. - Being done - Being followed up by RDC. - Being prepared for the Hawaii IGM/SPG from US and the Secretariat from Hyogo. - Done in the invitation to 12 the IGM/SPG 	<ul style="list-style-type: none"> • Have APN-initiated and APN-funded projects proactively seek collaboration with institutes and organisations that provide co-sponsorship and in-kind contributions. • Seek active involvement of host institutions in order to provide greater sustainability of projects. • Decide on means of communications and modality of discussions. • Address membership inactivity. • Work with those presently funding APN Programmes and activities to assure long-term stability of such funding. • Based on the review of discussions held in the past, formulate financial working plan with concrete and targeted action points (divided in two separate groups, one with actions to raise additional funds, and a second one with actions to reduce expenses). • Report in-kind contributions (in figures) in the financial reporting at IGM/SPG. • Encourage members from developing countries to consider sharing costs of travelling to IGM. • <u>Conduct sub-regional liaison trials, starting with (but not limited to) the one in the South-East Asian sub-region.</u>
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<p>Medium-term – Year Three: 2007/08 and Year Four: 2008/09</p> <ul style="list-style-type: none"> • Address the legal status of APN. • Work with the IGM and Steering Committee to evaluate Terms of Reference for APN bodies and obtain approval for these. • Establish a Resources Development Plan. • Consider the possibility of looking to member countries to invest in the APN, with in-kind or financial contributions. • Continue to mobilise funds for scientific and CB activities from sources within and outside of the APN region. • Consider ways to improve annual meetings, for example, by holding biennial IGM/SPG meetings or by restructuring the meetings. • Co-organise activities with other agencies, for the purpose of cost efficiency. 	<ul style="list-style-type: none"> - To be followed up in the IGM as needed - Being prepared and to be submitted to the IGM for endorsement - To be followed up and be substantiated with further discussion at RDC - Started to contact private sector in Japan. - To be followed up and be substantiated with further discussion at RDC - Secretariat considers this negatively at least for the time being since the APN works on single year budget basis which reflects current contributions from donor countries. - Started talk with IAI. Further discussion is needed to overcome obstacles, such as distance between the two regions. 	<p><u>Medium and Long-term – Year 2008/09 and beyond</u></p> <ul style="list-style-type: none"> • Address the legal status of APN. • Work with the IGM and Steering Committee to evaluate Terms of Reference for APN bodies and obtain approval for these. • Establish a Resources Development Plan. • Consider the possibility of looking to member countries to invest in the APN, with in-kind or financial contributions. • Continue to mobilise funds for scientific and CB activities from sources within and outside of the APN region. • Consider ways to improve annual meetings, for example, by holding biennial IGM/SPG meetings or by restructuring the meetings. • Co-organise activities with other agencies, for the purpose of cost efficiency.
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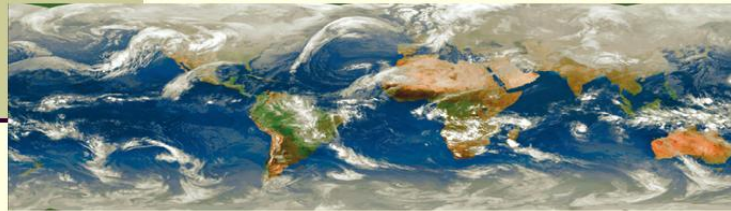
<p>Long-term - Year Five 2009/10 and beyond</p> <ul style="list-style-type: none"> • Perform an evaluation of Phase 2. • Devise a draft Strategic plan for Phase 3. • Endorse a new strategic plan for 3rd Strategic Phase. • Hold biennial IGM/SPG meetings (depending on the outcome of Medium-term considerations). 	<ul style="list-style-type: none"> - Preparation for the evaluation should be started from the next SC meeting in mid/late 2007. - Discussion on the preparation for the next Strategic Plan should be started from the next SC meeting in mid/late 2007 	<p>Long-term — Year Five 209/10 and beyond</p> <ul style="list-style-type: none"> • Perform an evaluation of Phase 2. • Devise a draft Strategic plan for Phase 3. • Endorse a new strategic plan for 3rd Strategic Phase. • Hold biennial IGM/SPG meetings (depending on the outcome of Medium-term considerations).
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SECTION III

Presentations

Earth Observation Activities in China

Dr. Jinlong FAN
(National satellite Meteorological Center
China Meteorological Administration)



March, 2007

1

Outline

- GEO and GEOSS
- GEO Activities in China
- GEOSS Progress in China

2

I. GEO and GEOSS

- **Earth Observation Summit (EOS) I**
 - July 31, 2003, Washington, DC
 - 34 Countries and 20 International Organizations



EOS I

- **EOS II**
 - April 25, 2004, Tokyo, Japan
 - 47 Countries and 26 International Organizations



EOS II

- **EOS III**
 - February 2005, Brussels
 - Nearly 60 Countries, EC and over 40 International Organizations



EOS III

3

I. GEO and GEOSS

- GEO formally established in 2005
- 10-Year Implementation Plan Endorsed
- GEO Secretariat established in Geneva, located at WMO



4

I. GEO and GEOSS

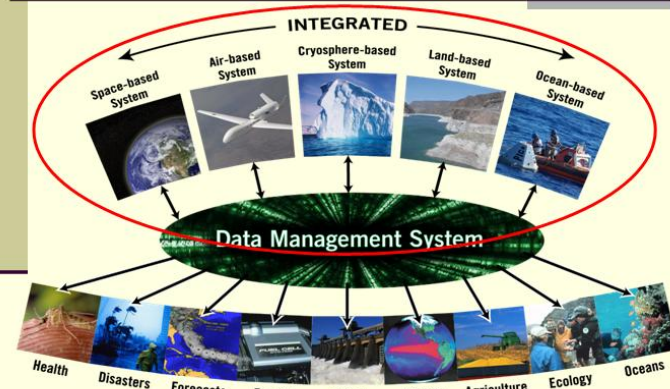
- GEO is an Intergovernmental Group
 - 70 Nations + European Commission
 - 46 Participating Organizations
 - 3 Observers
- With a Single Objective: GEOSS
 - To establish a global, coordinated, comprehensive and sustained System of Earth observing Systems



5

I. GEO and GEOSS

Global Earth Observation System of Systems



6

I. GEO and GEOSS

GEOSS Benefits Focus

7

2. GEO Activities in China

National Activities

- Set up National Committee of GEO
- An National High-tech R&D Program –Earth Observation formed
- Publish GEOSS Ten-Year Implementation Plan in Chinese version
- National GEOSS Ten-Year Implementation Plan under development
- Set up FENGYUNCast, one important component of GEONETCast

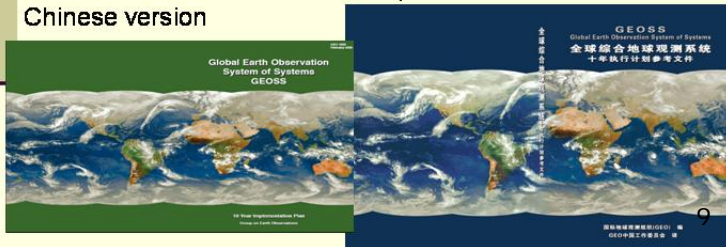
International Activities

- Participate in international activities of GEO and GEOSS including GEO Tasks, Working Group, Workshop,.....
- Data Sharing
- Cooperation between GEO members

8

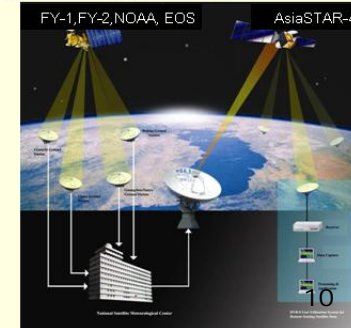
2. GEO Activities in China

- Set up National Committee of GEO in China members from CMA, MOST, CNSA, CAS, and others
- Create an National Key High-tech R&D Program Earth Observations and Navigation in order to promote Earth Observations System in China and scientific research related to the GEOSS.
- Publish the GEOSS Ten-Year Implementation Plan in Chinese version



2. GEO Activities in China

- Draft GEOSS Ten-Year Implementation Plan in China
- Set up FENGYUNCast, one important component of GEONETCast, which is a data dissemination system based on communication satellite and DVB technology, and allows users in AP to get the Earth observations data at low cost or free and in time.



2. GEO Activities in China

- Participate in GEO and GEOSS, including GEO Tasks, Working Group, Workshop,.....
- One of Co-Chairs of GEO, involving GEO ExCom Meetings, Plenary Sessions, Working Group Meeting
- Hosted GEO and IEEE Workshops in Beijing, the 38th COSPAR etc.



2. GEO Activities in China



GeoNetcast – GEOSS Task

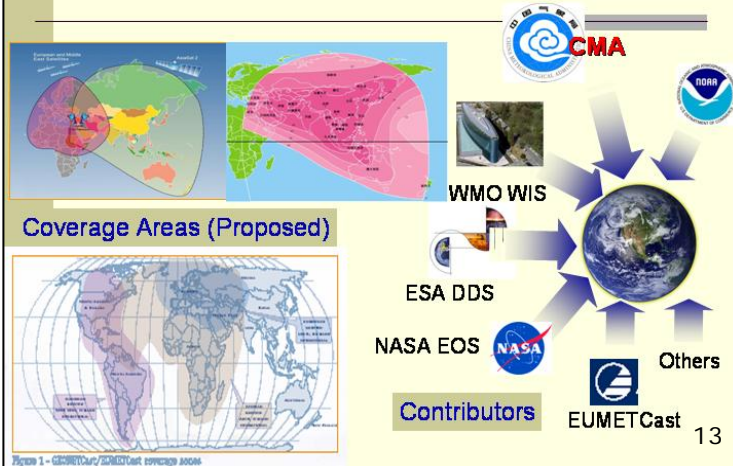


Figure 1 - GEONETCast/GEONETCast coverage areas

FENGYUNCast

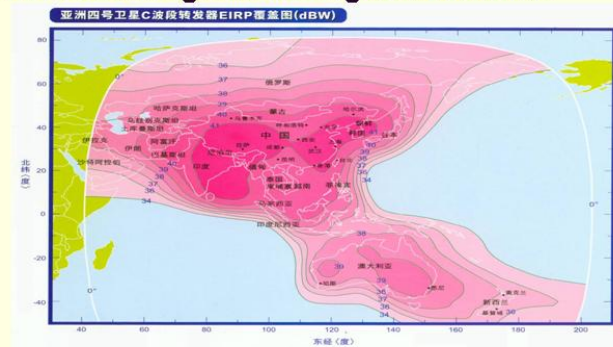
– important member of GEONETCast

- China, NOAA, EUMETSAT and WMO are working together for the development of GEONETCast.
- China has expanded FENGYUNCast data dissemination to cover as far west as Pakistan and as far east as New Zealand in 2006.
- FENGYUNCast would meet a major regional need and move GEONETCast much closer to global coverage.

14

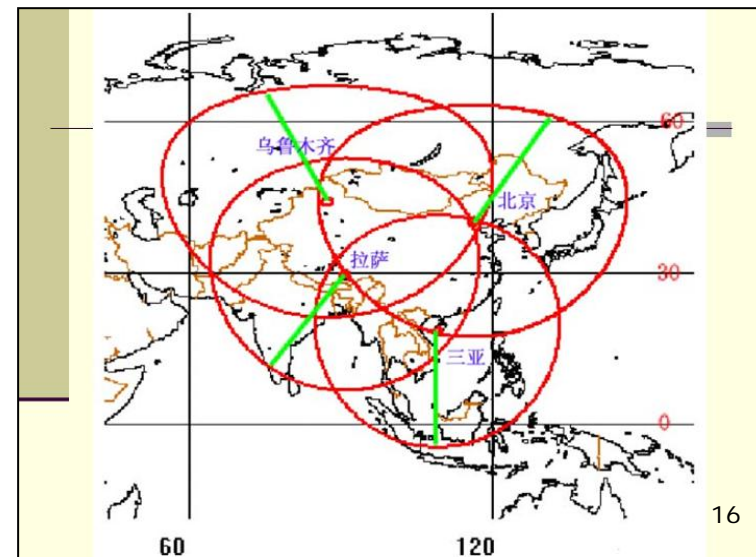
FENGYUNCast

Wider Coverage for AP region Countries.



Asiastar-4 C-band EIRP Coverage

15

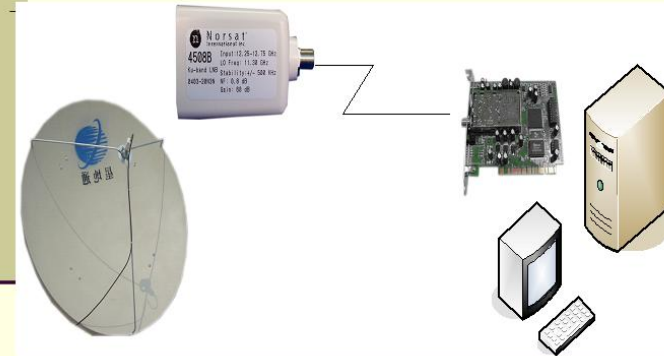


16

Uplink Station



User Reception



18

FENGYUNCast Interface for data reception

时间	类型	事件	接收站	设置位	关于站	关闭站
04:51:03	接收	AQUA_2004_12_05_19_20_AU_PDS_start				
04:57:52	接收	AQUA_2004_12_05_19_20_AU_PDS_end				
04:59:54	接收	没有接收: /norsat/gbad				
05:45:14	接收	接收正常接收: /norsat6/3				
05:49:14	接收	NOAA16_2004_12_05_21_41_JUL11A_start				
05:49:57	接收	NOAA16_2004_12_05_21_41_JUL11A_end				
06:00:30	接收	AQUA_2004_12_05_21_37_AU_PDS_start				
06:11:32	接收	AQUA_2004_12_05_21_37_AU_PDS_end				
06:18:22	接收	AQUA_2004_12_05_21_37_AU_PDS_start				
07:25:56	接收	PYTD_2004_12_05_21_JUL11B_start				
07:25:27	接收	PYTD_2004_12_05_21_JUL11B_end				
08:04:07	接收	接收正常				
09:24:39	接收	PYTD_2004_12_05_01_20_AU_L1B_start				
09:28:09	接收	PYTD_2004_12_05_01_20_AU_L1B_end				

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Data

- FY-2C
- FY-1D
- NOAA/AVHRR
- MODIS (TERRA, AQUA)

20

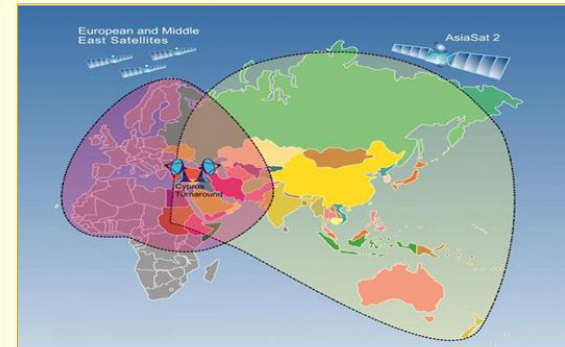
users



Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Thailand, Peru are already users this year.

21

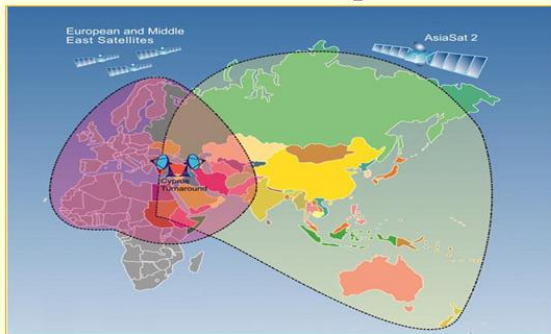
Data exchange with EUMETCast



22

FENGYUNCast

AP Countries are now able to get global Earth observation data through FENGYUNCast.



23

FENGYUNCast

- In June 2006, CMA set up a user reception of EUMETCast in Kashi, Xinjiang.
- In Nov. 2006, a FENGYUNCast demo took place successfully at 34th CGMS Meeting in Shanghai, and at GEO-III in Bonn, Germany.



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FENGYUNCast

- In March 2006, China government donated seven user reception systems of FENGYUNCast to seven countries (**Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Thailand, Peru**).
- In July 2006, a FENGYUNCast user training workshop was held in CMA.



3. GEOSS Progress in China

I. Earth Observations Satellite Series

- Meteorological Satellite**, Polar Orbiting satellites FY-1 A,B,C,D and Geostationary satellites FY-2A,B,C,D
- Oceanic Satellite**: HY-1A, HY-1B
- Earth Resource Satellites**: CBERS-1, CBERS-2
- Environment and Disaster Reduction Satellite** (2 Optic and 1 SAS)
- Small Satellites**: Beijing No.1 Satellite (Launched in Oct. 2005)

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Meteorological Satellite Program

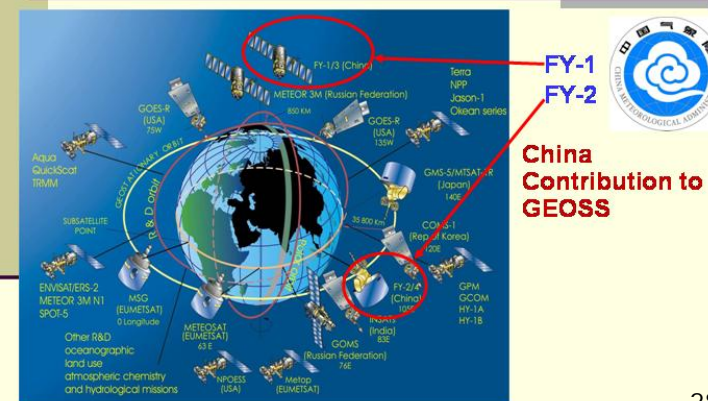
- On 8 Dec. 2006, a geostationary meteorological satellite **FY-2D** was launched successfully.
- In late of 2007, a new generation polar-orbiting meteorological satellite **FY-3A** will be launched.

2006年12月8日8时53分 风云二号D星在西昌卫星发射中心发射升空



27

World Weather Watch - Global Observing System (Space Component)



28

Future of Polar-Orbiting Meteor. Sat.

- **FY-3, second generation of polar satellite**
 - With both Imaging and Sounding Missions (microwave sensor)
 - Enhanced global observation capability
 - Will be launched in 2007

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Future of Geostationary. Meteor. Sat.

- **Development of FY-4 (Second generation of Geostationary Meteorological Satellite Series)**
 - More powerful imagers
 - Sounding capability
 - Data Collection Platforms

30

Oceanic Satellites in China

- **HY-1A satellite** was used for the detection of ocean color and temperature scanner with 10 bands and CCD imaging apparatus.
- **HY-1B satellite** will be launched in 2007.
- **HY-2 satellite** onboard microwave sensors is in the stage of development.
- **HY-3 satellite** will carry both optical and microwave sensors.
- **HY-1, HY-2 and HY-3** will form space-based China ocean observations system.



31

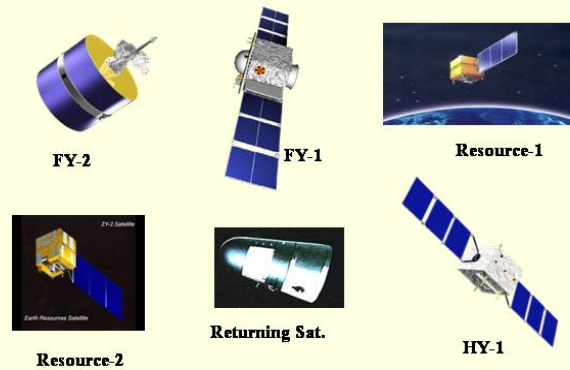
Earth Resources Satellites in China

- **China-Brazil Earth Resource Satellite (CBERS)** was jointly developed by China and Brazil, which initiated the first space high-tech cooperation between two developing countries.
- **CBERS 01** was successfully launched in Oct. 1999.
- **CBERS 02** was successfully launched in Oct. 2003.
- **CBERS 02B, 03 and 04** are developed.



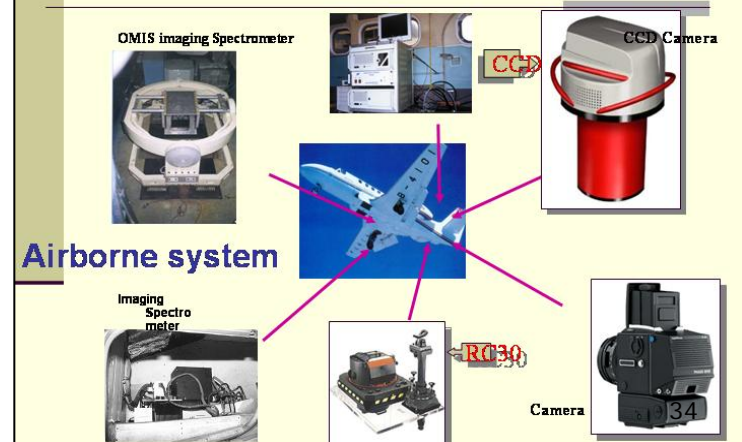
2

Space-based observations system



33

GEOSS Progress in China (2)



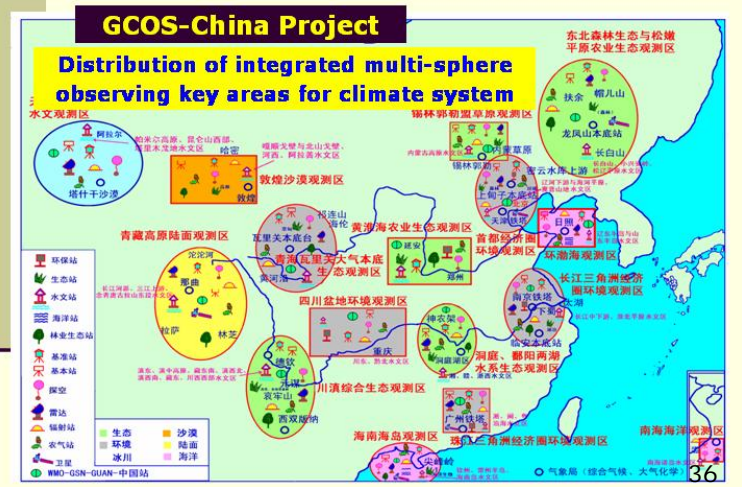
GEOSS Progress in China (3)

II. Network for in-situ Observations

- National Meteorological Observation Network
- Digital Seismic Observations Network
- National Ocean Observations Network
- CERN (China Ecology Research Network)
- CFERN (China Forest Ecology Research Network)
-

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In-situ Observation Network in China



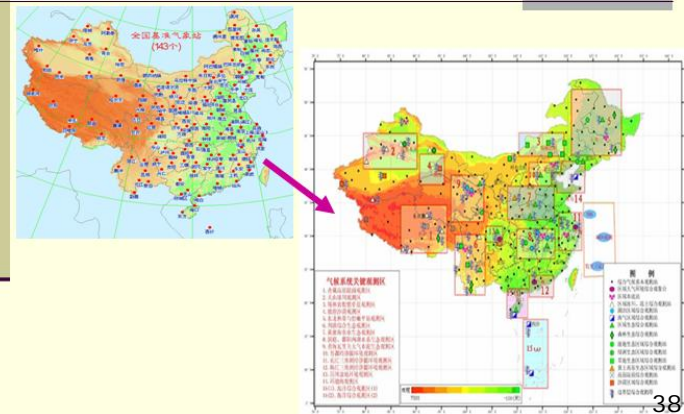
36

Meteorological Observation system

- National Climate Monitoring Network
- National Synoptic Observation Network
- National Specialized Meteorological Observation Network
- Regional Meteorological Observation Network

37

National Climatological Observatories: 260

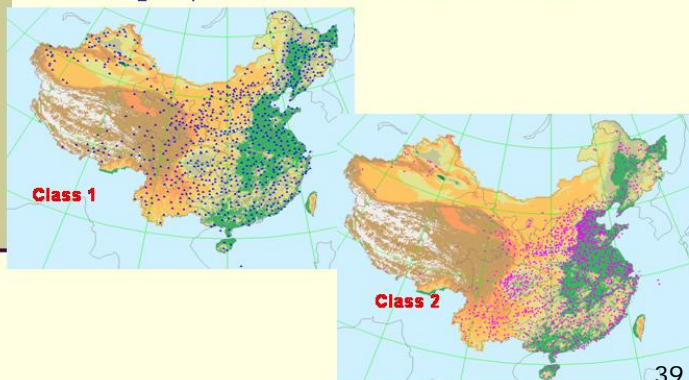


38

National Meteorological Observation Stations: 2400

2400

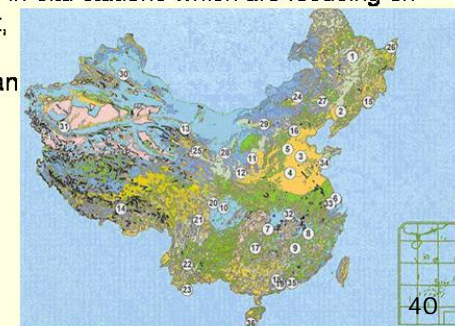
Average space resolutions is about 60 km.



39

CERN (China Ecology Research Network)

- CERN has been operating by Chinese Academy of Sciences since 1988.
- CERN included 36 in-situ stations which are focusing on the agriculture, forest, grassland, wetland, desert, lake and ocean observations.



40

CFERN (China Forest Ecological Research Network)

- CFERN has been operating by the Ministry of Forest since 1992.
- CFERN included 14 in-situ stations which are focusing on the forest eco-system structure and function observations.



41

Integrated Observation Systems over several sectors

- China Climate Observations System
- China Atmospherical Chemistry Observations System
- China Oceanic Observations System
- China Water Cycle Observations System
- China Carbon Cycle Observations System

42

Radiometric calibration site for satellite sensors in China (land and water body)



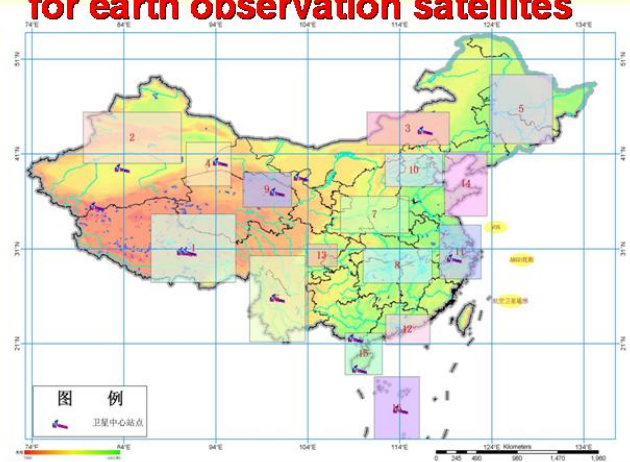
Dunhuang Gobi Desert

Lake Qinghai



43

Future of ground calibration sites for earth observation satellites

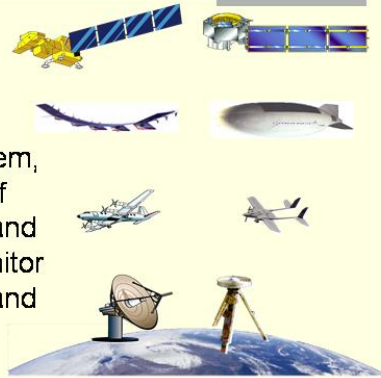


44

Future GEOSS in China

Objective

By 2020, China will build up an advanced earth observation system, which are composed of space-base, airborne and in-situ platform, to monitor the land, atmosphere and ocean with global coverage.



45

Meets the needs of the economic and social development of China



International Cooperations for GEOSS Construction

• China has made a great efforts to promote the cooperation with the international communities in Earth observation and signed 13 cooperation agreements and memoranda with a lot of nations, space agencies and international organizations.

• Two earth resource satellites have been successfully launched with the collaboration of China and Brazil.



Pseudo-color Image of Yellow River Delta from CCD of CBERS-1



47



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GEOSS Update (Mr. Howard Diamond)

Taking Advantage of GEOSS for the Communication of Hydro-Meteorological and Climate Information for Development

*Community Communication and Partnerships to Improve Observations:
Lessons from the Pacific*

Annual Meeting of the Asia Pacific Network for Global Change Research (APN)
12th Inter-Governmental Meeting and Scientific Planning Group Meetings

Honolulu, Hawaii
21-23 March 2007

Howard Diamond, Director World Data Center for Meteorology, Asheville; and U.S. GCOS Program Manager
NOAA/National Climatic Data Center




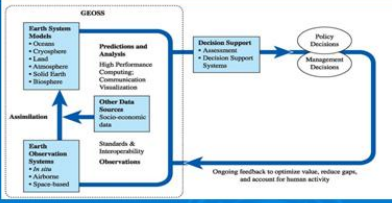

Agenda

- Brief Overview of GEO and GEOSS
- GEONETCast
 - Progress and Present Status
- Radio and InterNET (RANET) Communications
 - Bringing GEO Data Down to the Last Kilometer for Use by Communities

2

GEO and GEOSS


- GEO is an intergovernmental group with a single Vision: GEOSS
- GEOSS will deliver the benefits of EO to both data and information providers and consumers world wide.
- For more information: www.earthobservations.org

3

GEO and GEOSS

- GEOSS, a global, comprehensive, coordinated and sustained distributed system of systems, has several functional components:
 - * To address identified common user requirements;
 - * To acquire observational data;
 - * To process data into useful products;
 - * To exchange, disseminate, and archive shared data;
 - * To monitor performance against the defined requirements and intended benefits.



4

GEONETCast

GEONETCast

- GEONETCast is designed to disseminate space-based, air-borne and in situ data, metadata and products to diverse communities.



5

Progress and Present Status

EUMETSAT, NOAA and WMO further defined their understanding of how the GEONETCast concept could be developed.

Coverage (Version 1: EUMETSAT+ NOAA)

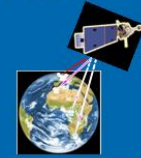
- Europe and Africa (existing)
- North, Central and South America (readily available)

Services (Version 1: EUMETSAT+ NOAA)

- Mainly meteorological data and derived products
- Mainly Environmental satellite data

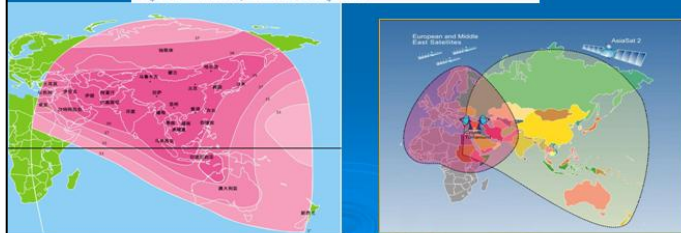
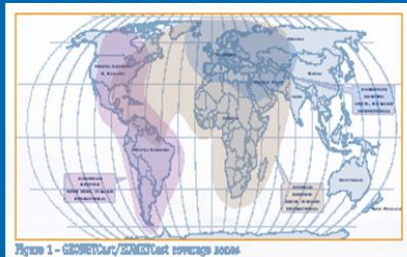
Technical Features

- User reception station is user friendly and cost effective



6

GeoNetCast Coverage



7

Other Issues

- The following products and services are being made available to the GEONETCast user community:

- Meteosat image data
- GOES East and West image data
- Land and Ocean Sea Ice Satellite Application Facility (SAF) products
- EUMETSAT meteorological products
- NOAA-NESDIS meteorological products
- NOAA-NESDIS Ocean color and sea surface temperature products
- VEGETATION products from VITO
- MODIS Ocean color products
- CMA FY2C satellite images
- CMA FY2C meteorological products



8

RANET:

'RANET 101'

- is an international collaboration of meteorological and similar services working to improve rural and remote community access to weather, climate, and related information;
- works in parts of Africa and the Pacific, with several Asia countries beginning activities in 2006. LAC possibilities in 2007;
- receives support to maintain and develop core systems and country activities. Funding is currently provided by the USAID Office of US Foreign Disaster Assistance, NOAA, the Australia Bureau of Met. and AusAID, the New Zealand Met. Service and NZAID, the UK Met. Service, UNESCO IOC, and others. However, significant in-kind support, in-country and local resources, and donation of commercial services makes RANET possible;
- stresses local ownership within the program and through equipment deployment;
- works with partners to develop a holistic response to community information needs (a.k.a.: RANET's 1% rule);
- is a technology implementation, not a platform, based program

9

RANET: Expected Outcome Summary



"RANET has focused on a specific informational need and has trained farmers how to apply the information. When the system is in place, farmers notice tangible benefits to themselves within one season. They are better able to plan for and cope with climatic conditions, resulting in more plentiful harvests. But an additional, higher-level benefit is that they have learned how to obtain, value and apply practical information delivered via ICTs. This is a skill, a behavioral change, that can help them improve many other aspects of their livelihoods."

10

Communications in the Pacific

- AFTN for many years – then it became a charged service in many countries
- Countries switched to email – now a problem in most places
 - Over subscribed for the available capacity
 - Technical problems within ISPs and connections
 - Not timely enough for meteorological communications
 - Huge bills when staff forget to disconnect from dial-up systems
 - Internet surfing means exposure to viruses
 - Anti-virus software not kept up to date
 - Messages dropped
- We are now moving to RANET
 - HF radio digital email
 - Satellite digital email
 - Base station established at Melbourne, Australia



Woleai, Yap RANET

11

The RANET Story: Africa to the Pacific and Back

- NOAA and USAID funded a visit to Niger, Africa by Garry Clarke and Colin Schultz to attend a RANET meeting.
- RANET in Africa is used to disseminate information to small communities via WorldSpace satellite and Community FM radio but no reverse communications back.
- Garry suggested adding HF radio digital email to fix this.
- Immediately applicable as a Pacific solution for communications both ways complemented by existing US EMWIN systems.
- NOAA, UK, Australia, NZ funding has supported systems so far.
- We have hooked our mSTAR AWS into HF digital email at Tuvalu.
- Program and technology advances from Pacific influencing efforts in Africa.
- Implementation as funding permits.



RANET in the sub-Sahara

12

RANET is an “Originator to End User” System

- Designed to provide information to remote communities
- Information received via WorldSpace, HF or commercial satellite receivers
- Uses small Community FM Radio Stations to rebroadcast (not strictly RANET but included in the concept)
- Projects include a number of FM solar/hand cranked radios for community

Information re-broadcast by local Community FM Radio Station...Liku Village, Niue. Tasting at MetService



13

RANET: The Benefit of Community-Centred Networks

- Community-Based Approaches Foster Local Stewardship which:
 - Improves network sustainability by distributing management and oversight of equipment and ‘nodes’;
 - Provides a sense of ownership that increases interest in and use of climate, weather, and water services – and gets information to largest user group and those who need it most;
 - Through partnership, helps address other information and communication needs that might take precedence over climate, weather, and water issues;
 - Over time improves local understanding of and participation in observing efforts.

Community FM Radio Station Audience at Siviri Village in Vanuatu



14

The RANET Story – Well Suited for Hazard Warning

- NMHS in some countries can and do manage hazard warnings other than meteorological; e.g. Tsunami
- Communications systems in this presentation already do that or have the capacity to provide an expanded warning service
- Systems should provide a **seamless** and **rapid** throughput of critical safety warnings to end users in communities
- MetService has already completed such projects and some are in progress
- Let’s look at the technology

Tropical cyclone damage



15

WorldSpace Satellite Broadcast

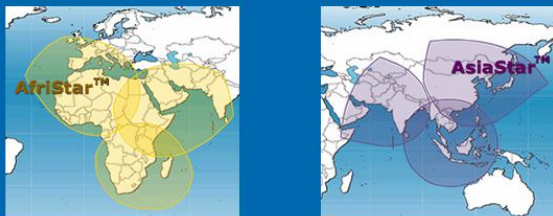
- WorldSpace satellite broadcast (**receive only**)
 - Latest Satellite Digital Audio Broadcast Technology
 - Uses low-cost radio receivers and antennas
 - Data Interface available for PC or Laptop
 - Able to send HTML and images at 128 Kps
 - Data easily viewed using Internet Browser eg. IE6
 - Will carry the Pacific component of the EMWIN broadcast in the Asia-Pacific region on AsiaStar satellite
- Issues
 - AsiaStar broadcast not received east of about 180 degree meridian

Typical WorldSpace outdoors antenna and receiver



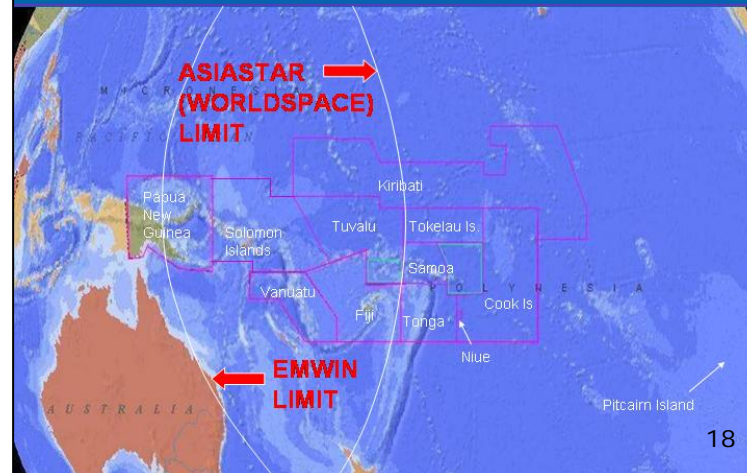
16

WorldSpace Coverage



17

Satellites – Signal Reception Limits



18

Internet Communications to and from Pacific Country ISPs

- Often no Backup System Available
 - In the event of ISP equipment failure
 - In the event of Satellite failure eg Intelsat 804
 - In the event that main satellite has to be “parked” in strong winds; eg tropical cyclones
- There are cost-effective solutions...

Typical ISP
satellite coms
equipment.



19

HF Radio Email

- What is HF Email? (*two way communications*)
 - Email received and sent via a HF Radio Transceiver
 - Requires a special radio modem
 - Modem interfaces to PC or laptop
 - Software can interface with many applications, e.g. Outlook Express, our mSTAR automatic weather station

Niue HF email
system, quickly
installed after TC
Heta

Funded by Met
Office, UK



20

HF Radio Email

- Why HF Radio Email?
 - Cost effective two-way remote communications system
 - Easy to install and operate
 - Some Pacific NMS already have suitable HF Radios
 - Many staff already have HF radio experience



Typical HF radio Email system set-up

21

Wantok Community FM Radio Station

- Applications for the Wantok SBS-1
 - Low cost, low power community radio station
 - Education and training
 - A tool for Socio-Economic Development
 - Ideal for **Disaster Alerting and Response**
 - Gets important information to the **end user**

Owned by the Community - for the Community

Liku Village RANET FM Community Radio Station



22

Commercial Satellite - Iridium

- A Reliable Portable Internet Backup Solution
 - Rugged external marine antenna
 - All weather capability
 - Simple Gateway program (Xgate compression software)
 - Can use any Internet Email or Browser Client

Niue Iridium Backup Coms System – installed April 2005

Funded by Met Office, UK



23

Wantok Community FM Radio Station

- A Professional Quality FM Radio Station
 - A complete broadcast station in a suitcase
 - Ideal for a Community FM Radio Station
 - Readily accepts any audio source
 - Can be solar/wind powered for remote communities
 - <http://www.wantokent.com/>

The Wantok Suitcase FM Radio Broadcast System.

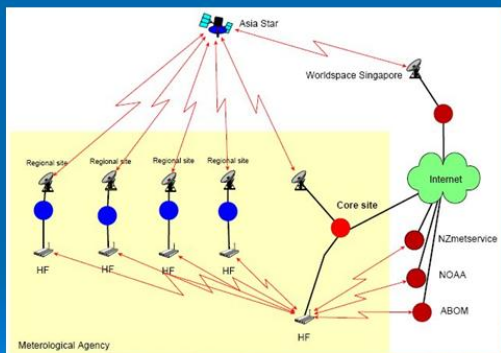
Hakupu Village, Niue FM station on the air...

Funded by NOAA / USAID, and NZAID



24

Pacific RANET Network Design



Pacific RANET Network Design

25

Pacific communications projects (Completed or in progress)

- Vanuatu – Siviri Village RANET project
Funded By: NOAA / USAID
- Vanuatu - HF/VHF radio systems (three locations)
Funded By: Met Office, UK



HF/VHF radio system for Vanuatu (under test in NZ)

26

Pacific Communications Projects (Completed or in Progress)

- Niue restoration of observing systems and communications following TC Heta

Funded By: Met Office, UK; VCP (France); MetService; Bureau of Meteorology, Australia

- Niue – RANET projects at Liku and Hakupu Villages, one to come

Funded By: NOAA / USAID, NZAID

Premier of Niue and Ed Young, NOAA PRH open Liku Village Community Radio Station



27

Pacific Communications Projects (Completed or in Progress)

- Tarawa, Kiribati and Funafuti, Tuvalu – HF radio / satellite email, systems and backup solar power for upper air programme
- Funafuti – RANET (four atolls) and an mSTAR automatic weather station project

Funded By: Met Office, UK



Director, NMS, Tuvalu with RANET and mSTAR AWS systems

28

Funding

- Pacific RANET projects to date have been completed with funding support from
 - NOAA
 - Met Office, United Kingdom
 - NZAID
 - AusAID
 - MetService
 - Australian BoM

Need to continue to promote RANET solutions and seek additional funding support

Liku Village, Niue
Station assembly



Where to from here...

- The Pacific RANET Steering Committee has made a start but there is more to do...
- Set up projects to...
 - Repair unserviceable EMWIN systems in the Pacific Region
 - Upgrade EMWIN systems when required for new digital satellite
 - Establish RANET systems
 - Assist NMS to establish, or refine, local procedures to adequately handle emergency information that is received
 - Identify locations / communities as primary sites (ie EMWIN / RANET and back up coms) and secondary sites (FM stations) in countries
 - Establish coms links between the two site types
 - Establish aural alerting devices in communities, eg siren
 - Coordinate with Disaster Management Units where these are established
 - We welcome working with our colleagues from the Indian Ocean community and hope that we can have some talks about cross-training with persons from the Pacific involving
 - Indian Ocean in-Country training
 - Collaboration with key RANET focal points in Australia, New Zealand, and the US

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In Summary

With the target to provide easy access to as much data and as many people as possible, GEONETCast is crucial to achieving GEO value, a system of systems, and highlighting the GEOSS concept in a concrete way at the very beginning stage. Coupled with RANET to bring the data down to the village level, GEOSS and RANET will aid the communication of key environmental data to everyone who needs it.



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Thank You!

Some GEOSS and RANET Web Links:

- <http://www.ranetproject.net/>
- <http://metart.fao.org/Eaboutranet.htm>
- <http://www.firstvoiceint.org/How/RANET.htm>
- <http://www.earthobservations.org/progress/GEONETCast.html>
- http://www.research.noaa.gov/spotlite/archive/spot_ranet.html

Key RANET Contacts:

- Garry Clarke: Garry.Clarke@metservice.com
- Colin Schulz: cschulz@squirrel.com.au
- Kelly Sponberg: Kelly.Sponberg@noaa.gov
- Ed Young: Edward.Young@noaa.gov

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Contact Information

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Program Manager, U.S. GCOS & NOAA IPRC
NOAA's National Climatic Data Center
1335 East-West Hwy, Rm 7214
Silver Spring, MD 20910-3283
ph: +1-301-713-1283
fax: +1-301-713-0819
cell: +1-301-801-4855
Howard.Diamond@noaa.gov

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Asia-Pacific Network for Global Change Research (APN)

The APN Secretariat

5th Floor, IHD Centre Building, 1-5-1 Wakinohama Kaigan Dori

Chuo-ku, Kobe 651-073 JAPAN

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

Email: info@apn-gcr.org

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