

APN

Asia-Pacific Network for Global Change Research

PROCEEDINGS OF THE
9TH INTER-GOVERNMENTAL MEETING
AND
9TH SCIENTIFIC PLANNING GROUP MEETING

Canberra, Australia
22-24 March 2004

PREFACE

The 9th Inter-Governmental Meeting (IGM) / Scientific Planning Group Meeting (SPG) that convened in Canberra, Australia, from 22-24 March, 2004 concluded successfully. Without any doubt, it will be noted as a milestone meeting in APN history. In addition to the fact that it was the first APN IGM in the Southern Hemisphere, the new three-day system of the IGM/SPG was a great success and will become a model for years to come. Moreover, we believe that strengthening interactions between scientists and policy-makers can be facilitated by having national Focal Points and Scientific Planning Group members together in joint sessions.

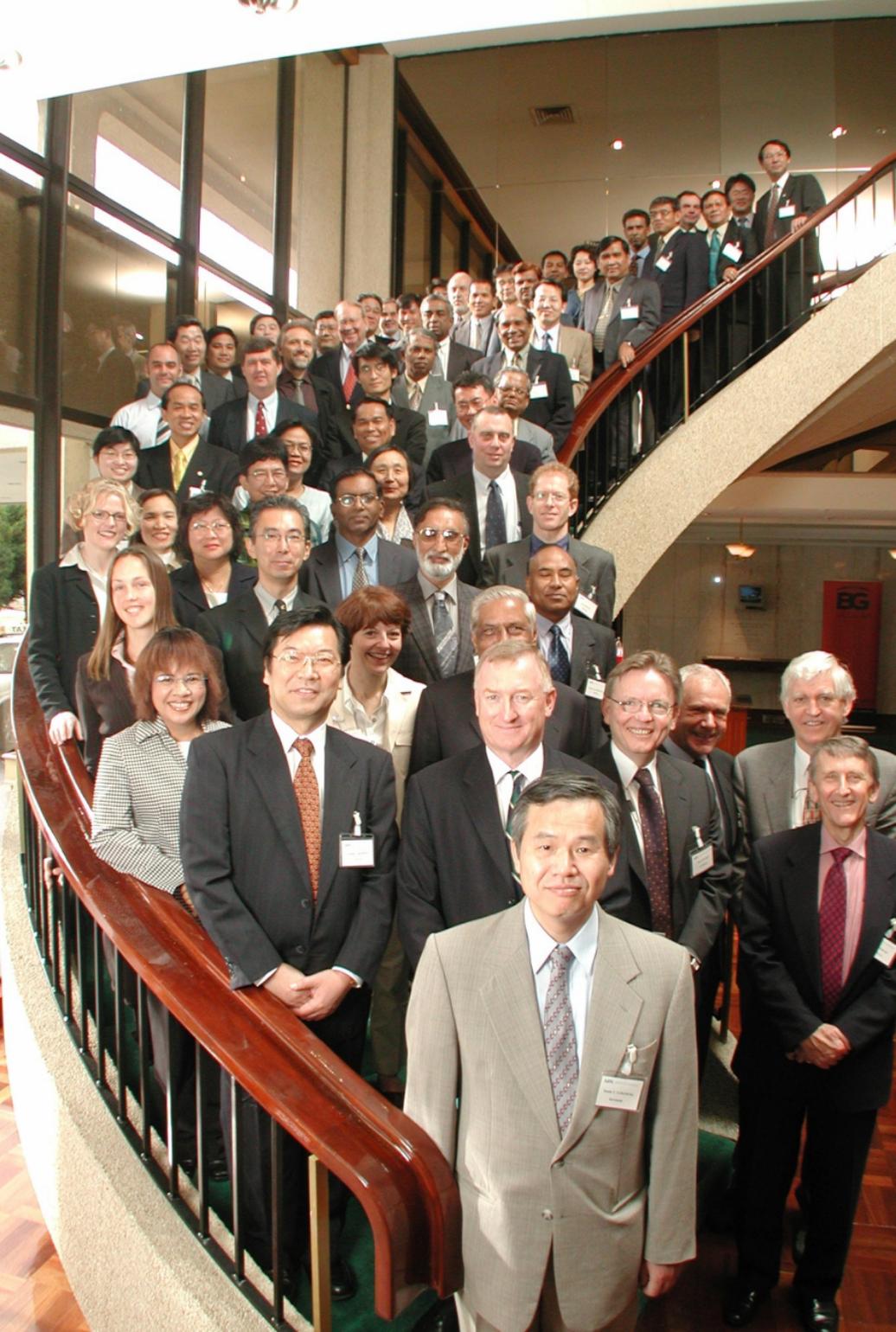
It should also be noted that the 9th IGM/SPG meeting kicked off discussions toward the future of APN and preparation of the Second Strategic Plan that should be agreed upon at the 10th IGM/SPG, which will take place from 12-14 April, 2005 in Kobe, Japan. In particular, the Second Strategic Plan should give us an understanding of how far the APN has come, and a shared, clear vision for the future.

I am also pleased to inform you that the APN Secretariat functions were successfully transferred from AIRIES to the Institute for Global Environmental Strategies (IGES). Moreover, the Secretariat believes this change is a timely one and we hope that member countries will make full use of these new financial, legal and administrative arrangements in order to make APN more robust as we move towards our second phase.

The Secretariat will do its utmost to implement the agreed activities in a timely and effective manner as we work toward the APN's 10th anniversary and an exciting new phase. Lastly, special thanks to all the participants from member countries, APN liaison officers, and the global change programmes and networks, for making the SPG and IGM meetings so successful.



Sombo T. Yamamura
Director
APN Secretariat



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SECTION I

**9th APN Inter-Governmental Meeting
&
9th APN Scientific Planning Group Meeting**

**Canberra, Australia
22-24 March 2004**

Co-Chairs' Summary

Co-Chairs' Summary
9th APN Inter-Governmental Meeting and Scientific Planning Group Meeting
22-24 March 2004
Canberra, Australia

Representatives attended the meeting from Australia, Bangladesh, Cambodia, India, Indonesia, Japan, Lao P.D.R., Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, People's Republic of China, Republic of Korea, Russian Federation, Sri Lanka, Thailand, U.S.A. and Viet Nam. APN Liaison Officers, START and observers from Department of Primary Industries and Fisheries, Queensland Government, Australia; DIVERSITAS; GCOS; IAI; IGBP; IHDP; NIES; University of Adelaide, Australia also participated. The lists of participants are given as **Attachments I and II**.

DAY ONE

IGM and SPG Joint Session

1. Opening

Mr. Howard Bamsey, Chief Executive Officer of the Australian Greenhouse Office, Australia, introduced Honoured Guest Mr. David Borthwick, Secretary of the Department of the Environment and Heritage, Australia, and invited him to make an opening statement.

In his speech, Mr. Borthwick emphasised the sobering impacts of global change and that we are now dealing with extremely complex environmental issues. The need to get a better grasp of factors contributing to global change to respond effectively was also highlighted and the world's response to ozone depletion as reflected in the Montreal Protocol is an outstanding example in achieving long term stability of the ozone layer. Mr. Borthwick stated that a similar response to other global change issues such as climate change is needed. A number of important points were emphasised:

- Policy needs to be underpinned by sound science;
- All countries are responsible for global change with the developed countries taking the lead;
- There remain many uncertainties in climate change, given the complex interactions of natural variability and anthropogenic induced changes;
- A key strength of APN is the recognition for linking science and policy;
- Regional collaboration and sharing of knowledge is imperative; and
- Australia appreciates the activities of APN in dealing with global change.

The APN Secretariat Director, Mr. Sombo T. Yamamura, thanked Mr. Bamsey and Mr. Borthwick for their opening remarks and the Australian Greenhouse Office for hosting the 9th IGM/SPG Meetings. For their organisational contributions, Mr. Yamamura extended his appreciation to Ms. Melissa Tipping and Drs. Michael Stoddart and Graeme Pearman. The Director stated that this was the first APN Inter-Governmental

Meeting (IGM) in the Southern Hemisphere and emphasised the importance of the 9th APN IGM/SPG meetings, particularly with regard to issues such as:

- The support from the Japanese Government and its decision to transfer the functions of the APN Secretariat to the Institute for Global Environmental Strategies (IGES);
- The CAPaBLE Programme;
- The 10th Anniversary of APN and its evaluation and second strategic plan; and
- The streamlining of the meetings and having, for the first time, the national Focal Points and SPG members together in joint sessions.

The APN Director noted his sincere appreciation to all delegates and observers for attending the meetings, which promised to be very productive.

2. Election of Officers

Dr. Michael Stoddart, APN national Focal Point for Australia and Dr. Amir Muhammed, Co-Chair of the Scientific Planning Group (SPG) and SPG member for Pakistan, were elected as Co-Chairs’.

3. Adoption of Agenda

The agenda was adopted as proposed.

4. Review of 2003/2004 Activities

Mr. Martin Rice, APN Secretariat Programme Manager for Communications and Development, in reviewing the year’s accomplishments since the 8th IGM, noted especially:

- Launching of the CAPaBLE Programme;
- Initiation of APN’s evaluation/review and began preparations for the Second Strategic Plan;
- Publication of APN’s “Initial Synthesis on Land-use and Land-cover Change in Asia and the Pacific;”
- Initiation of a second APN synthesis on coastal zone management; and
- Successful participation at the Pacific Island Summit.

In addition to this, APN has continued to enhance its networking activities by disseminating information through the new APN Website; issuing quarterly APN Newsletters, which are also now available in electronic format; distributing the 2003 Activity, Project and Regional Reports publication; and disseminating APN brochures in various languages. Mr. Rice also mentioned that three new brochures were being prepared and would be available for dissemination at various international fora. It was pointed out that a more strategic approach had been taken, in consultation with the

Steering Committee, in planning and determining APN's participation in international meetings, workshops, etc. Furthermore, Mr. Rice expressed his appreciation to Dr. Andrew Matthews, SPG Co-Chair and the National Institute for Water and Atmospheric Research (NIWA) for designing and publishing two very professional APN posters: one on APN and its activities in the Pacific Island Countries, and another on APN's capacity building strategies and how they align with capacity building activities of the Earth Observation Summit. For programme development, Mr. Rice highlighted the CAPaBLE Programme, the APN Review/Evaluation and the Second Strategic Plan, and resources development.

The Co-Chair, Dr. Michael Stoddart, remarked that the Secretariat's activities over the year were very satisfying. The Secretariat is encouraged to continue undertaking its activities on behalf of APN in a strategic and professional manner. Mr. Kazuhiko Takemoto, APN national Focal Point for Japan; Mr. Phonechaleun Nonthaxy, APN national Focal Point for Lao P.D.R.; and Mr. Suho Seong, on behalf of the APN national Focal Point for Republic of Korea, spoke of the importance of capacity building activities of APN and the hope that they would continue, particularly through the CAPaBLE Programme.

ACTION SECRETARIAT

5. APN Liaison Officers' Annual Reports 2003/2004

The APN Liaison Officers provided overviews of their past year's activities in Oceania¹, South Asia, Southeast Asia and Temperate East Asia. Dr. Amir Muhammed, SPG Co-Chair and SPG member for Pakistan noted that very pleasant developments are taking place in the South Asia region and expects there to be even more regional collaboration in the future. While it was generally recognised that the work of the Liaison Officers is important for networking in the region, it was noted that a number of areas, particularly communication, need to be improved. The following concerns were noted by Dr. Anond Snidvongs, Liaison Officer for Southeast Asia:

- APN currently has no clear policy on data sharing and a policy needs to be developed;
- The role and mandate of APN as an Inter-Governmental regional network as well as contribution/commitment from member governments in APN are not clear and not visible in some countries;
- More interactions are needed between SPG members and national Focal Points; and
- Quantity and quality of young scientists in the region are alarmingly low. Proposed solutions might be an YSC-type conference at the regional level as well as increased numbers of graduate scholarships.

¹ Dr. Kanayathu Koshy, SPG Member, gave the Liaison Officer Report for Oceania.

A member of the Chinese delegation, Mr. Guoushun Sun, raised grave concern about the groupings of the sub-regions used by APN in its reports.²

The Co-Chair, Dr. Michael Stoddart, thanked the Liaison Officers for their informative reports and pointed out that interaction of science and policy in APN is at the heart of what APN is doing. Science must underpin policy and good science lies at the base of good policy. It was agreed that the effectiveness of activities undertaken by Liaison Officers in their respective regions could be improved and this is an item that needs further discussion at the informal IGM and SPG brainstorming session on day 3 of the Meeting. The Secretariat clarified that Liaison Officers are provided full funding from APN for Liaison Officer activities in their respective areas. New Zealand pointed out that the Secretariat plays the role to serve all APN member countries in the region.

Action: SPG and IGM

6. APN Global Change Coastal Zone Management Synthesis

Professor Nick Harvey, project leader for APN's global change coastal zone management synthesis, gave a detailed presentation on the activities carried out to date and those planned for the coming year. He outlined the rationale and scope of the synthesis, global change in a coastal context, integrated coastal management and global change, the scope of APN-funded coastal research and progress on the synthesis. He emphasized that the products from this activity would include the publication of a book that synthesizes not only APN activities in the region, but all other related activities as well.

He further mentioned that coastal zone activities being carried out in 18 APN member Countries, 5 non-member Countries and 18 Pacific Island Countries were being included in the synthesis. Professor Harvey concluded that the synthesis will foster global change research in the Asia-Pacific region, by identifying research gaps and new directions, and will strengthen links between the science community and policy-makers, through outputs such as a science book and management document.

7. Financial Reports and 2004/2005 Budget

Mr. Yukihiro Imanari, Executive Manager, APN Secretariat, presented the Final 2002/2003 Financial Report for the fiscal year ending March 2003, the Draft 2003/2004 Financial Report and the Budget Plan for 2004/2005.

The IGM approved the reallocation of a small amount of unspent networking funds (US\$ 24,000) to cover some unanticipated costs of the budgeted IGM and SPG meetings in the Draft 2003/2004 Financial Report.

² To date APN has been using the sub-groupings of START. APN makes no further subdivisions of the Asia-Pacific region.

The IGM welcomed projected savings on bank charges and reduced overheads that are expected to result from the future Secretariat switch to IGES, thus freeing more funds for APN scientific activities in the region.

All financial items were accepted and adopted.

8. APN Review and Strategic Plan

Mr. Sombo Yamamura provided background information and introduced Mr. Randal Helten, the Consultant charged with conducting the evaluation of APN activities during the first phase (1995-2005) and with preparation of a draft of APN's strategic plan for 2005-2010. Mr. Helten outlined a draft timeline and tasks to be completed in time for the review and for preparation of a draft Second Strategic Plan to be considered and approved at the 10th IGM/SPG Meetings. He emphasized that a 30-page document will be produced, giving a clear understanding of how far the APN has come, and a shared, clear vision for the future. This document will be drafted in consultation with a "blue ribbon panel," APN members (past and present) and other stakeholders. The IGM/SPG delegates agreed to fully cooperate in this endeavour.

Action: IGM, SPG, Secretariat and Mr. Randal Helten

9. Proposals and Project Management

Dr. Linda Stevenson, APN Secretariat Programme Manager for Scientific Affairs, gave an overview of the proposals process and project management in the past year. Dr. Stevenson presented only on the action points from the 8th IGM/SPG Meetings and asked the delegates to read the meeting documents for more detailed information. The following was highlighted:

- Amendments to the initial award letters and contracts to successful proponents' stating that the award will be submitted in two instalments (80:20) and that both final activity, financial reports and review questionnaire must be submitted to APN before the final 20% of the award is remitted;
- Distribution of pre-proposal questionnaire, compilation and dissemination of the results³;
- Success rate of proposals and average award of US\$ 45,000 posted on the APN website;
- Updated External Reviewer Database;
- External reviews submitted by the Directors of DIVERSITAS, IGBP, IHDP and WCRP;
- "No-Cost Extension Guidelines" were compiled in consultation with the Steering Committee.

³ The results indicate that the pre-proposals stage is effective, particularly in strengthening proposals.

Dr. Stevenson pointed out that all action points had not been completed due to the implementation of the CAPaBLE programme. However, the Steering Committee has agreed to cover these action points with the Secretariat. This will include refining the guidelines for proponents and the guidelines for reviewers. An interactive CDROM will be created to guide both internal and external reviewers in reviewing proposals submitted under the annual Call for Proposals.

The IGM/SPG and the International START Secretariat Director agreed that the APN Secretariat Director should co-sign contracts for APN projects where APN funds are administered by the International START Secretariat according to donor conditions. The suggested revisions to the per diem rates were accepted by the IGM/SPG.

Action: Steering Committee, APN and START Secretariats

IGM Session

10. Membership Development

The Secretariat reported the tragic death of former APN national Focal Point for the Republic of Korea, Dr. Keum-Hee Jung, former Director, Global Environment Office, Ministry of Environment, and expressed condolences to family members and colleagues. The Secretariat will seek assistance of APN members in finding APN national Focal Points for Nepal and Russia, and SPG members for Bangladesh and Viet Nam. The Secretariat explained that a range of potential organs exist that could represent Pacific Island Countries. The IGM agreed that discussions to find appropriate representation should continue. APN members are to sensitize these organs (such as ASEAN, etc.) to APN and consider potential opportunities for collaboration. Brunei and Singapore are also to be contacted and sensitized to APN activities. Membership development should be considered in the Second Strategic Plan.

Action: national Focal Points, Secretariat and Mr. Randal Helten

11. Resources Development

The Chair of the Ad Hoc Resources Development Committee, Dr. Michael Stoddart, outlined progress on development of APN's resources and concluded that:

- It is necessary to analyse, carefully and precisely, APN's role in facilitating research and capacity building in the field of global change;
- APN is not a body designed to initiate research proposals and to seek external funds to resource them; and
- There are a number of agencies that fund research in the areas of APN's interest. APN must consider carefully what special "value-adding" the APN would give to an application to one of these bodies that would not be given by another body.

Dr. Stoddart also stated that Secretariat investigations indicate that it was unlikely that the Asian Development Bank (ADB) could be a major funding source for APN. He also emphasised that member country contributions could be “earmarked” for specific activities. The APN also needs to consider leveraging training opportunities, perhaps with organisations such as the Third World Academy of Sciences (TWAS).

The IGM recommended that the Steering Committee continue efforts to find new or additional contributions from member countries, and new funds from external sources such as funding agencies and private corporations.

Action: Steering Committee

SPG Session

12. Science Presentations

Science presentations were made on:

- ***The Pacific Islands Regional GCOS Program***
Mr. Howard Diamond, GCOS Program Manager, NOAA, U.S.A.
- ***APN and NIES Collaboration***
Mr. Takashi Iijima, Executive Director, NIES, Japan

13. 2004/2005 APN Funded Projects

It was announced that the total budget available for APN funded projects would be approximately US\$ 760,000, but US\$ 22,000 would be set aside as a contingency fund to buffer any substantial fluctuation between Japan and U.S.A. currency exchange rates. Dr. Andrew Matthews, as SPG Co-Chair, presented to the SPG for their approval, the Small Group recommendations for continuing Multi-Year Projects. He emphasised that the recommendations were based on the progress reports, which were compared against the original aims and objectives stated in the project proposals, as well as other supporting evidence from project leaders. He further emphasised that the funding recommended reflected the decrease in budget available for scientific activities under the proposals process.

Dr. Matthews then explained the rationale behind the Small Group recommendations for funding proposals short-listed at Stage 2 of the Proposals Process. The SPG members’ ratings for scientific excellence and average score were used as the main basis for the funding recommendations. Other major factors included written reviews by the global change programmes of DIVERSITAS, IGBP, IHDP, START and WCRP, budgetary aspects and regional balance. Dr. Matthews acknowledged APN’s appreciation to the four global change programmes and the START International Secretariat for reviewing the proposals.

After some detailed discussion on the proposals being recommended, the SPG agreed on the funding recommendations made by the Small Group as follows:

- 7 continuing multi-year projects;
- 10 new projects;
- 1 project to receive a seed grant⁴; and
- 1 project to be funded under CAPaBLE.

In addition, 2 proposals were recommended as reserves that would be funded, should additional funding become available. The SPG agreed that these funding recommendations be presented to the IGM for endorsement.

DAY TWO

IGM Session

14. Informal Meeting with APN Liaison Officers

Discussions focussed on:

- Redefining the functions of Liaison Officers so that they can work with APN members in identifying regional priorities and emerging issues;
- APN considering fellowships to allow young scientists to become more involved in regional research activities;
- The need for APN projects and data to be integrated into other global change activities;
- APN Secretariat is to improve overall communications with APN Members; and
- A hyperlink is to be established in the APN website version of 9th IGM/SPG Co-Chairs' Summary to the Liaison Officer presentations made at the 9th IGM/SPG Meetings.

Action: Secretariat

DAY THREE

SPG Session

15. Election of Officers

Mr. Sombo Yamamura asked that, as the APN is in an important phase with the approach of its 10th Anniversary, the SPG approve the re-election of Dr. Andrew Matthews as SPG Co-Chair. The SPG accepted this proposal and Dr. Matthews was re-elected as Co-Chair.

⁴ The recipient of this seed grant will submit a new proposal to be reviewed together with all other proposals received in the 2004 Call for Proposals.

16. Other business

In this session:

- Dr. Andrew Matthews suggested that all seed grant proposals go through the regular proposals process of review. This was accepted.
- It was proposed that any future symposia should have a human dimensions aspect and IHDP should present on a salient issue. This was accepted.
- It was suggested that some funds should be reserved for young scientists, should more funding become available. No action was taken.

Action: Secretariat (first 2 bullet points)

IGM Session

17. Amendments to APN Framework

The Japanese delegate, Mr. Yasuo Takahashi, explained the change in umbrella of the Secretariat from Association of International Research Initiatives for Environmental Studies (AIRIES) to the Institute for Global Environmental Studies (IGES), as of 1 April, 2004. He outlined the mandate and role of IGES, as an independent non-profit organisation. He also outlined that APN decision-making will be independent from IGES and that APN will maintain and separately manage a special account within the IGES administration. The purpose of this account is to provide flexibility, for example, APN funds can now be carried over from one fiscal year to another.

Furthermore, the APN financial report will be submitted for external audit by an independent body with an international reputation. As a result, APN's status will become more robust with the aforementioned financial, legal and administrative arrangements. Dr. Michael Stoddart, national Focal Point for Australia, explained that the Steering Committee considered the proposed amendments at great length and concluded they are in the best interests of the APN. After discussions with the delegates, the following recommendations to amend the current APN Framework were endorsed by the members:

C. 2 Membership

III. The SC may invite observers to participate in SC activities.

D. 1 Mandate

I. The Secretariat is the principal administrative organ of the APN and is located at the APN Centre, 5F, 1-5-1 IHD Centre Building, 1-5-1 Wakinohama Kaigan Dori, Chuo-ku, Kobe 651-0073, Japan. The Secretariat consists of a Director, appointed by the Ministry of the Environment of Japan, and an appropriate number of staff, and:

- a. carries out the day-to-day operations of the network;
- b. provides secretariat support to the organs of the APN; and
- c. implements IGM decisions.

II. For financial and administrative purposes, the Secretariat operates under administrative arrangements reached between the Secretariat and the Institute for Global Environmental Strategies (hereinafter referred to as IGES).

D. 2 Financial Provisions

The Secretariat will first submit a financial report to IGES*. IGES will incorporate APN's financial report into its Financial Statement and submit it for external audit to an independent body. The Secretariat will then submit an audited APN financial report to the IGM for approval.

**(Footnote)*

The APN maintains 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.

Date and Effects of Amendments to the APN Framework

Amendments to the APN Framework must be proposed by a member country or the SC and approved by the IGM. Proposed amendments and supporting documentation must be distributed to member countries no later than two months prior to the IGM at which the proposed amendments are to be considered. All amendments so approved will take effect on the day following the IGM at which these amendments are approved, unless the IGM decides on another date.

Action: Secretariat

IGM and SPG Joint Session

18. CAPaBLE Programme

Dr. Linda Stevenson presented a summary of the CAPaBLE Programme and its activities since the official launch of the Programme in April, 2003 following endorsement by the 8th IGM, and agreement that CAPaBLE should become an integral part of APN's activities. Dr. Stevenson highlighted some of the action points from the 8th IGM and noted the following developments:

- Formally launched the CAPaBLE Programme, 16 April, 2003;
- Launched "Call for Proposals" for Comprehensive Research Project (CRP) proposals, established criteria, guidelines and review process;

- Organised a Programme Development Workshop, May 2003;
- Selected two 30-month CRPs from twelve proposals; and
- Selected eight capacity building projects.

A number of delegates raised important questions on the process under CAPaBLE to submit proposals. Dr. Stevenson explained that there would be no further call for proposals for CRPs, but that capacity building activities, in which US\$ 80,000 is available for new activities, was an area where national Focal Points and SPG members could suggest activities and submit proposals. It was also emphasised that CAPaBLE is a Programme to build the scientific capacity of developing countries in the region. The CAPaBLE Standing Committee (CSC), which is expected to be fully implemented by end of May, will consider any new proposals that are submitted for funding. The CSC will consist of three SPG members, two mentors to monitor the progress of the CRP projects, and a donor representative from the Ministry of the Environment, Japan. The smaller Capacity Building Committee (CBC), led by Dr. Graeme Pearman, SPG member for Australia, will also consider Capacity Building projects.

Following some discussions on the CAPaBLE process and informing the members of new developments in the programme, the Secretariat emphasised the importance of keeping communications as transparent as possible and asked that all members let the Secretariat know immediately when any national Focal Point or SPG member details are changed. The Secretariat will ensure that all information regarding new developments under CAPaBLE will be informed to national Focal Points and SPG members in a timely manner, particularly on the activities taking place in individual member countries. In addition, all information on the CAPaBLE Programme will continue to be uploaded on the APN website.

For clarification, it was pointed out that the participants who attended the planning workshop attended as experts, and were not officially representing their countries. It was further suggested that members use the networking opportunity back in their respective countries to raise awareness of opportunities available under the programme. It is also important to consider how to disseminate results of CAPaBLE projects to policy-makers. Dr. Andrew Matthews emphasised that the idea of the CRPs was not to create policy papers that circumvent the rights of government, rather it is about fostering research on climate change issues that will be relevant to the Asia-Pacific region, hopefully be of a high standard, and be considered in literature that can be useful in the IPCC and other international processes. CAPaBLE is a different initiative and has quite a different purpose and agenda than the regular call for proposals.

A member of the Thai delegation, Dr. Asdaporn Krairapanond, raised concern that while one of the CRPs being funded under CAPaBLE is quoted as having Thailand involved, this was not the case. The Secretariat is to follow up on this.

It was suggested that if CAPaBLE is indeed an integral part of APN activities as endorsed at the 8th IGM there should, perhaps, be some mention of the composition and functions of CAPaBLE in the APN Framework Document.

It was later explained by the Secretariat Director, Mr. Sombo Yamamura, that when the launch of the CAPaBLE Programme was approved at the 8th IGM in Hanoi, the Secretariat, together with the Steering Committee, was mandated to organise the Programme Development Workshop, select appropriate participants (with capacity building expertise) and discuss the implementation plan of the CAPaBLE programme in its first year. While the Secretariat made every effort to disseminate information on the CAPaBLE programme to APN members, improvements would be made. Mr. Yamamura also noted financial constraints in that FY 2003 funds could not be carried over to FY 2004. He noted that the concerns raised by the delegates in the morning session addressed mainly:

- The decision-making process in the CAPaBLE programme; and
- Information sharing.

Mr. Yamamura noted that these comments would be reflected in the Co-Chairs' Summary and that the Secretariat, together with the CSC, would make every effort to communicate all CAPaBLE activities to the APN members and that the CAPaBLE Programme, particularly the selection of new capacity building activities, would be implemented in a more transparent manner.

Action: Secretariat and APN Members

Four presentations on projects currently being funded under CAPaBLE were given:

2003-CB-01: Presented by Dr. A. Snidvongs

Building Capacity of Mekong River Countries to Assess Impacts from Climate Change - Case Study Approach on Assessment of Community Vulnerability and Adaptation to Impact of Climate Change on Water Resources and Food Production

2003-CB-02: Presented by Dr. K. Koshy

Training Institute on Climate and Extreme Events in the Pacific

2003-CB-04: Presented by Dr. H. Meinke

Creating Climate Knowledge Networks through Strategic, Global Linkages

2003-CB-07: Presented by Dr. A. Muhammed

National Capacity Building Workshop in Pakistan on Global Change Research

19. APN Capacity Building Strategies

Dr. Graeme Pearman, SPG member for Australia, opened this session by stating that a lot of the discussions in the past few days had focussed on science and policy interfacing in APN. Dr. Pearman also pointed out that APN needs to focus on what kind of capacity building activities it can support.

Professor Roland Fuchs, Director of the International START Secretariat, was asked to comment on capacity building for APN and made the following comments:

- START's approach to capacity building has included fellowships; research training workshops; travel grants for conferences; AIACC (Assessments of Impacts and Adaptations to Climate Change) activities; series of Packard Foundation summer institutes on (a) climate variability and food security, (b) urbanization, emissions and the global carbon cycle, (c) vulnerability to global environmental change and other research.
- Capacity needs are different from country to country, and one size does not fit all needs.
- Emphasis is placed on research-driven capacity building, enhancing the skills that are needed to contribute to the global change research programmes.
- START is not adequately addressing the needs of all regions. It employs a competitive application and review process and is aware, for example, that Southeast Asia has not been doing well in that process although the reasons are not entirely clear [e.g. is it science background, language skills, etc.] START needs to better address the needs of some countries that it is not currently serving.
- APN might want to consider getting input from member countries on what is needed in their countries at the national level.
- APN might also find it useful to have a compilation of opportunities that are available in the region [e.g. the opportunities available under the JSPS, the Indian Government fellowships, etc.] This information is currently scattered in many countries.
- Convening a special workshop on how we can better deal with the science-policy interface is a good idea.
- The new IGBP publication "Global Change and the Earth System: A Planet under Pressure," could be an excellent resource for capacity building activities.

Dr. Andrew Matthews was then asked to comment on capacity building for APN and made the following comments:

- Capacity building needs to be driven from a bottom-up approach.
- We are attempting to attract other donors; therefore we cannot really compete in fellowship programmes that build the capacity of individuals.
- We should start small and look at programmes that we can afford.
- Practitioners that need to make the decisions should be trained and thus link more closely to the science-policy linkaging.
- Requested that all members present complete the questionnaire for the Consultant, Mr. Randal Helten.
- Emphasised the need to establish the dialogue of where we are going and why.
- APN is not just about climate change.
- There are a range of other programmes and initiatives that exist (for example, The Japan Society for the Promotion of Science) that support programmes.

Main points of further discussion among delegates included:

- Few opportunities are available in the region in global change research;
- There is a lack of financial resources to promote capacity building further in the region;

- There is a need for member country contributions to further promote capacity building activities in the region;
- There is a need to build capacity at the local level as well as the regional level in languages that can be understood at the levels required by the countries concerned;
- A student programme may be worth considering should additional resources become available;
- If APN were to contribute to the cost of students in each country that has identified its needs, and if those funds could be matched with funds from those countries, we could achieve what was envisioned at Johannesburg.
- The Secretariat should, perhaps, look into what sorts of funds or kinds of schemes could be launched. Perhaps, then, in 12 months we could launch an initiative under CAPaBLE with a large number of countries involved.
- The need for a layered approach to capacity building, i.e. bottom-up and bottom-down;
- The duration of a capacity building programme should be driven by the needs of the individual country;
- A capacity building strategy is needed for policy-makers to understand the science;
- The need to avoid “brain-drain” should be promoted, perhaps, by encouraging students to serve a minimum number of years in their respective countries, particularly if they are recipients of scholarship funds from APN.
- APN members need to be kept informed about all APN capacity building activities in their respective countries.

20. Proposed APN Activities

Mr. Sombo Yamamura presented on proposed activities. These were approved by the members present and are listed as follows:

- *World Conference on Disaster Reduction*
Joint APN and WHO Session: “Climate Calamities and Human Health”
Climate change is already increasing the frequency and intensity of natural disasters, and to tackle such disasters, a wide variety of knowledge, wisdom and resources needs to be mobilized and effectively integrated. With this in mind, institutions and centres in Kobe formed a Disaster Reduction Alliance (DRA) in 2003 with a goal to synergize international cooperation towards disaster reduction. From 18-22 January 2005 the World Conference on Disaster Reduction (WCDR) will convene in Kobe, and as part of a DRA initiative, APN and WHO Centre for Health Development are seeking IGM approval for a joint session at the WCDR.
- *APN’s Poster Presentation at GEO-4 in Tokyo*
The 8th Steering Committee meeting highlighted recent movements regarding GEO, as APN was highlighted at the GEO-2, held in November 2003, as an organisation who could be involved with GEO in terms of its capacity building component. GEO stands for the inter-governmental *ad hoc* Group on Earth Observations and it was established

as a result of the First Earth Observation Summit, held in Washington DC in July 2003. They have had intensive discussions to develop a conceptual framework and a 10-year Implementation Plan for building a comprehensive, coordinated, and sustained Earth observation system of systems aiming at its completion in late 2004. The APN Steering Committee recommended that APN can also be aligned with the GEO programme in terms of the training and capacity building component of the GEO programme (e.g. CAPaBLE exactly fits into the GEO agenda). The APN Secretariat in collaboration with NIWA, New Zealand, is preparing a poster that focuses on some APN activities that specifically fit the GEO agenda. Dr. Andrew Matthews, SPG Co-Chair, and the APN Secretariat will participate in the side event in Tokyo, as they had done similarly at the Pacific Island Summit in May 2003. This was acknowledged by the IGM/SPG as a positive role for APN in the GEO process.

Action: Secretariat

21. Other Business

Mr. Sombo Yamamura presented information on an internship opportunity at the APN Secretariat. Mr. Yamamura explained that as part of APN's Capacity Building efforts, the APN is posting an Internship vacancy announcement for a highly motivated young professional, with an interest in global environmental issues, willing to work in an international environment. The objective is to provide an opportunity for a young professional to gain invaluable work experience with an inter-governmental global change research network over a 9-month period. This will also assist the Secretariat in coping with its increased workload. This was welcomed and approved.

Action: Secretariat

22. Informal IGM and SPG Brain Storming Session

This discussion that took place was very fruitful and the main points discussed are to be collated and disseminated to members. The members were fully encouraged to contact the Secretariat or Consultant, Randal Helten, with any additional information.

Action: national Focal Points and SPG Members

IGM Session

23. Scientific Planning Group Report and 2004/2005 APN Funded Activities

On behalf of the SPG, Dr. Andrew Matthews explained that the total budget available for APN funded projects would be approximately US\$ 760,000, but that US\$ 22,000 would be set aside as a contingency fund to buffer any substantial fluctuation between

Japan and U.S.A. currency exchange rates. Dr. Matthews presented to the IGM for their approval of the SPG recommendations for continuing Multi-Year Projects. He emphasised that the recommendations were based on the progress reports, which were compared against the original aims and objectives stated in the project proposals, as well as other supporting evidence from project leaders. He further emphasised that the funding recommended reflected the decrease in budget available for scientific activities under the proposals process.

Dr. Matthews then explained the rationale behind the recommendations for funding proposals short-listed at Stage 2 of the Proposals Process. The SPG members' ratings for scientific excellence and average score were used as the main basis for the funding recommendations. Other major factors included written reviews by the global change programmes of DIVERSITAS, IGBP, IHDP, START and WCRP, budgetary aspects and regional balance. Dr. Matthews acknowledged APN's appreciation to the four global change programmes and the START International Secretariat for reviewing the proposals.

After some detailed discussion on the proposals being recommended, as well as the system used for scoring and ranking the proposals, the IGM agreed on the funding recommendations made by the SPG as follows:

- 7 continuing multi-year projects;
- 10 new projects;
- 1 project to receive a seed grant⁵;
- 1 project to be funded under CAPaBLE.

The list of projects is available as **Attachment III**.

Mr. Louis Brown, APN national Focal Point for the U.S.A., noted that five out of seven continuing multi-year projects and seven out of the twelve new projects that have been approved for funding have significant focus on the human dimensions of global change. The Secretariat is to assure that the IHDP be informed on this point.

It was further pointed out that:

- All funding levels will be negotiated with the Principal Investigators and in the negotiations, a number of conditions for travel grant projects in particular will apply, such as:
 1. The selection process for awarding recipients of APN travel funds must be open and transparent;
 2. Selected candidates must meet and interact with each other at the meeting; and
 3. Selected candidates must have a pro-active role, i.e., not simply be observing in the meetings but actively be engaged in poster and/or presentation sessions.

⁵ The recipient of this seed grant will submit a new proposal to be reviewed together with all other proposals received in the 2004 Call for Proposals.

Action: Secretariat

IGM and SPG Joint Session

24. Date and Venue of Next IGM/SPG

As APN will celebrate its 10th Anniversary at the next IGM/SPG meetings, the Japanese delegation offered to host the meeting in Kobe, Japan on 12-14 April, 2005. Mr. Kazuhiko Takemoto, national Focal Point for Japan, expressed his desire that all members come to Japan to celebrate the 10th Anniversary of APN. The Co-Chair, Dr. Michael Stoddart thanked Japan for their kind invitation, which was accepted by acclamation. Mr. Yamamura then discussed some of the logistical details about the meeting, including the dates of the meetings and the venue location. The APN members expressed their full appreciation of the generous offer to invite all delegates to Japan next year to celebrate the 10th Anniversary of the APN at the 10th IGM/SPG Meetings.

25. IGM/SPG Co-Chairs' Summary

The Co-Chair, Dr. Michael Stoddart, invited the Secretariat Director to make his closing remarks. The Director, Mr. Sombo Yamamura, thanked all participants, Co-Chairs, Drs. Amir Muhammed and Michael Stoddart, and informed the IGM that a Steering Committee will be held following the IGM to discuss the most effective implementation of the decisions taken. Mr. Yamamura also highlighted that this year's joint IGM/SPG meeting will strengthen interactions among scientists and policy-makers. He also stressed that we also need to fully utilise the human network of APN members and project scientists (past and present) as a tool to keep abreast of global change research developments. The IGM/SPG expressed its sincere appreciation to the Australia Greenhouse Office for the excellent arrangements for this 9th Inter-Governmental Meeting and Scientific Planning Group Meeting. The Secretariat was also thanked for its efforts during the past year.



9th Inter-Governmental Meeting

22-24 March 2004, Canberra, Australia

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9th Scientific Planning Group (SPG) Meeting

22-24 March 2004, Canberra, Australia

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Prop #	Title	Theme	Main Activity	Keywords	Regional Focus	Countries involved	PI, Institution, & country	Email	Proposal History	Requested Funds			Recommended		
										Year 1 Funds	Project Length	Total Funds	Year 1 Funds	Project Length	Total Funds
Projects outlined below are recommended by the IGM for Funding															
5	SOLAS Science 2004: Travel fund for (15) young scientists	changes in atmospheric composition, changes in coastal zones & inland waters, climate change & variability, cross-cutting issue	(conference) travel support	SOLAS Conference	Pan AP	All countries	M. Uematsu, University of Tokyo, JAPAN	uematsu@ori.u-tokyo.ac.jp	New	47,850	1	47,850	20,000	1	20,000
11	Biodiversity measures in different biomes: the challenge for the next decade	changes in coastal zones & inland waters, changes in terrestrial ecosystem and biodiversity, human dimensions of global change	research, capacity building	biodiversity, sustainable management	SEA	Cambodia, LaoPDR, New Zealand, Vietnam	K. Muth, Ministry of Environment, CAMBODIA	moe@online.com.kh	Pre-proposal submitted	34,800	2	34,800	15,000	1	15,000
12	Climate Interactions and Marine Ecosystems: Effects of Climate on the Structure and Function of Marine Food-Webs and Implications for Marine Fish Production in the North Pacific Ocean Marginal Seas	changes in coastal zones & inland waters, climate change & variability	research, capacity building	fisheries modelling	TEA (NP)	China, Japan, ROK, Russia, USA	F.E. Werner; B. A. Megrey, University of North Carolina, USA	cisco@unc.edu	Pre-proposal submitted	71,525	1	71,525	45,000	1	45,000
15	Institutional capacity in natural disasters risk reduction: A comparative analysis of institutions, national policies, and cooperative responses to floods in Asia	human dimensions of global change	research	disaster risk reduction to flooding	SEA, TEA	Japan, Russia, Thailand, Viet Nam	E. Nikitina, Russian Academy of Sciences, RUSSIA	enikitina@mtu-net.ru	New	50,000	2	100,000	35,000	2	70,000
17	Role of institutions in global environmental change	human dimensions of global change	research, capacity building	global change	SA	India, Nepal, Sri Lanka	S. Sonak, TERI, INDIA	ssonak@teri.res.in	Pre-proposal submitted	57,500	1	57,500	40,000	2	40,000
20	Synergy between ecosystem change and biodiversity studies in the Western Pacific and Asia: Establishing case studies for carbon management and biodiversity conservation	changes in terrestrial ecosystems & biodiversity	research	DIWPA, carbon management, biodiversity	SEA, SA, TEA	China, Indonesia, Japan, Philippines, Russia, Sri Lanka	K. Kitayama, Kyoto University, JAPAN	kitayama@ecology.kyoto-u.ac.jp	Pre-proposal submitted	47,430	2	94,860	40,000	2	80,000
22	Integrated regional studies of global change in monsoon asia: Phase 1: APN/SCOPE/START rapid assessment project of global change in Monsoon Asia	cross-cutting issue	assessment	global change assessment	Pan Asia	All countries in Asia	A. Snidvongs, SEA START RC, THAILAND	anond@start.or.th	New	78,850	2	157,700	45,000	2	90,000
28	Fourth international human dimensions workshop - globalisation and food systems: A global environmental change perspective	human dimensions of global change	capacity building workshop (travel support)	human dimensions, IHDP	Pan AP	All countries	J.Xu, Kunming Institute of Botany, CHINA	CBIK@public.km.cn	New	27,041	1	27,041	15,000	1	15,000
34	Groundwater discharge as an important land-sea pathway in Southeast Asia	changes in coastal zones & inland waters	research	land-sea interactions, groundwater discharge	SEA	Japan, Philippines, Russia, Thailand, USA	M. Taniguchi, Research Institute for Humanity and Nature, JAPAN	makoto@chikyu.ac.jp	Pre-proposal submitted	50,660	1	50,660	45,000	1	45,000
48	Climate prediction and agriculture: An assessment and perspective	climate change & variability, human dimensions of global change	travel support (international meeting)	CLIMAG, climate change, agriculture	Pan AP	All countries	S. Gadgil, Indian Inst. Of Science, INDIA	sula@cas.iisc.ernet.in ; ihansen@iri.colu.mbia.edu	New	34,500	1	34,500	15,000	1	15,000

Prop #	Title	Theme	Main Activity	Keywords	Regional Focus	Countries involved	PI, Institution, & country	Email	Proposal History	Requested Funds			Recommended		
										Year 1 Funds	Project Length	Total Funds	Year 1 Funds	Project Length	Total Funds
2003-17SG	Climate variability and human activities in relation to Notheast Asia and their land-ocean interactions and their implications for coastal zone management	Changes in Terrestrial Ecosystems and Biodiversity, Climate Change & Variability, Cross-Cutting Issue, Human Dimensions of Global Change	research	CC, Land-Ocean & CZM	TEA	Russia, ROK, P.R. China	V. Kasyanov, Russian Academy of Scientists, RUSSIA	vlkasyanov@free-mail.ru	Seed Grant in 2003	80,000	2	160,000	60,000	2	120,000
												Total Funds	375,000		
												Additional Contingency	21,000		
												2005/2006 "mortgage" for MY projects	180,000 (reduced by 63% on 2003/2004)		

Project Number	Abbreviated	Title	Theme	Reg. Focus	Project Leader	Countries Involved	Funding Awarded	Original Proposal	Progress Report	Multi-Year	IGM
							2003/2004	2004/2005 Requested	2004/2005 Requested	2005/2006 Projection	2004/2005 Recommendations
2003-02	CLIMAG	Applying Climate Information to Enhance the Resilience of Farming System Exposed to Climatic Risk in South and Southeast Asia	Climate Change & Variability & Human Dimensions of Global Change	SA & SEA	Holger Meinke	Australia, India, Indonesia, Pakistan, USA	85,000	100,000	100,000	0	85,000
2003-04	Climate Assessment in SA: H2O	Water Resources in South Asia: An Assessment of Climate Change-associated Vulnerabilities and Coping Mechanisms	Climate Change & Variability Human Dimensions of Global Change Cross-Cutting Issue	SA	Amir Muhammed	Bangladesh, India, Nepal, Pakistan, USA	60,000	84,500	84,500	0	60,000
2003-05	GLOFS	Inventory of Glaciers and Glacial Lakes and the Identification of Potential Glacial Lake Outburst Floods (GLOFs) Affected by Global Warming in the Mountains of India, Pakistan and China/Tibet Autonomous Region	Changes in Terr. Ecosystems & Biodiversity Climate Change & Variability Human Dimensions of Global Change	SA	Gabriel Campbell	India, Nepal, Pakistan, China	75,000	93,150	75,000	0	67,000
2003-08	SEARRIN-LUCC	Regional, multi-scaled, multi-temporal land-use and land cover data to support global change research, and policy making: a SEARRIN LUCC Project	Changes in terrestrial Ecosystems & Biodiversity	SEA	David Skole	Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Thailand, USA, Vietnam	75,000	56,940	51,553	0	46,000
2003-10	MA	Building local capacity for global change research: the Millennium Ecosystem Assessment sub-global activities in the Asia-pacific region	Changes in Coastal Zones & Inland waters, Changes in Terrestrial Ecosystems & Biodiversity, Cross-cutting Issue, Human Dimensions of Global Change	A-P	Walter Reid	Australia, China, India, Indonesia, Malaysia, PICs, Vietnam	25,600	28,200	28,200	0	25,000
2003-12	Asia Mega-Deltas	The Mega-Deltas of Asia: A conceptual model and its application to future delta vulnerability	Changes in Coastal Zones & Inland Waters, Climate Change & Variability, Human Dimensions of Global Change	A-P	Chen	Australia, Bangladesh, Cambodia, China, Fiji, Japan, Pakistan, Thailand, USA, Vietnam	35,000	42,000	42,000	0	35,000
2003-16	Carbon & Urbansiation	Integrating carbon management into development strategies of cities - establishing a network of case studies of urbanisation in the Asia-Pacific	Changes in Atmospheric Composition, Changes in Terrestrial Ecosystems and Biodiversity, Climate Change & Variability, Cross-Cutting Issue, Human Dimensions of Global Change	SA, SEA	Rodel Lasco	Australia, China, India, Indonesia, Japan, Malaysia, Philippines, ROK, Thailand, USA, Vietnam	35,000	27,000	27,000	0	24,000
							390,600	431,790	408,253	0	342,000

SECTION II

**Papers of the 9th APN Inter-Governmental Meeting
and
9th Scientific Planning Group Meeting**

Asia-Pacific Network for Global Change Research
Opening address – 22 March 2004
Mr David Borthwick, Secretary, DEH

Introduction and welcome

Welcome to the 9th annual meeting of the Asia-Pacific Network for Global Change Research. Welcome also to Canberra, our national capital.

It is heartening to see scientists and policymakers progressing collaborative, practical work to help better understand and address global change issues.

Without international and regional cooperation, we will not be able to effectively address these shared challenges.

Our environment is a global system. It comprises many interacting and constantly changing components.

Meteorologist, Edward Lorenz, in his 1972 address on the butterfly effect, illustrated the essential idea of chaos theory, through the question:

“Does the Flap of a Butterfly's Wings in Brazil set off a Tornado in Texas?”

The example of a butterfly being responsible for a tornado in Texas, while far fetched, serves as a powerful reminder of the difficulty of making predictions for complex systems.

Global change issues

Ill managed economic and population growth has contributed to a range of pressing global change issues, including:

- climate change
- ozone depletion
- salination of soils and waterways
- loss of biodiversity; and
- changes to coastal and inland waters and ocean systems.

The impacts of these factors are quite sobering:

- In India last year the pre-monsoon heat wave brought peak temperatures of 45 degrees, leading to the deaths of at least 1400 people;
- The US experienced record numbers of tornadoes - 562 - in May last year;
- More than 50 per cent of the world's wetlands have been drained, and populations of inland water and wetland species have declined by 50 per cent between 1970 and 1999.
- Roughly one-third of the world's coral reef systems have been destroyed or highly degraded.
- About 24 per cent of mammals and 12 per cent of bird species are currently considered to be globally threatened.

Examples such as these are confronting. However, it is important to acknowledge that we are dealing with extremely complex environmental issues. How best to tackle them is often hotly contested. We need to get a better grasp of the factors contributing to global change if we are to develop effective responses.

What are the preconditions for an effective response?

The world's response to the depletion of the ozone layer has been a shining example of a successful approach to a global issue.

Over the last 10 years the world has implemented a range of practical measures to assist in implementation of the Montreal Protocol. Now the prospects for the long-term recovery of the ozone layer are good.

The developed world ceased non-essential consumption of the most aggressive ozone depleting substances in 1996. If the international community continues to comply with the Montreal Protocol the ozone layer should fully recover about 2050.

What brought the world together to address this global problem? Can we apply those lessons to other global change issues, such as climate change?

Let me share some thoughts on this question.

Firstly, there is a relatively high level of scientific certainty about the depletion of the ozone layer and how it occurs.

Secondly, technical and economic feasibility is considered paramount to the design and adoption of the control measures.

- The first measures to phase out ozone depleting substances were agreed following the development of CFC alternatives.
- All control measures are underpinned by sound science.
 - There is an institutionalised process under the Montreal Protocol for technical review of control measures every three years to evaluate their effectiveness and to recommend improvements.
- In short, technical and economic feasibility of control measures provides greater certainty that we will achieve long-term sustainability of environmental objectives.

Thirdly, all countries are required to play a role in global action, with developed countries taking the lead, and others following after a 10-year grace period.

- A Multilateral Fund was specifically established to provide financial and technical assistance to enable developing countries' to comply with their obligations under the Montreal Protocol.

Climate change is clearly a more complex and, for the moment, a more contested issue than ozone depletion.

- Firstly, there are still many uncertainties in climate science, which deals with a complex, highly interactive, naturally variable and human-influenced system.

- There is a significant challenge ahead to extend our detailed knowledge of the workings of the climate system and to improve the accuracy and relevance of future projections.
- Secondly, not all countries have made commitments to take action to reduce greenhouse gas emissions – posing a risk to the competitiveness of countries that are taking action.
- Thirdly, compared with ozone depleting substances, greenhouse gases are generated by a wide range of economic sectors, and a wider range of stakeholders are affected.
 - Furthermore, the costs of action are currently uncertain and may be unevenly distributed.

However, there are some key lessons that we should be able to agree on.

Sound science is important

Sound science must underpin good policy. Sound science is needed to build political commitment to take action.

A key strength of the APN is the recognition of the need for linking policy and science.

While meeting the needs of policy makers cannot, and should not, always be the driving force of scientific work, there is value in remaining mindful of the questions:

“Are we developing useful knowledge for decision makers?”

and

“How can we facilitate effective communication between the science and policy communities?”

Well-targeted, policy-relevant science can have a powerful influence on international action.

This was demonstrated by the actions that followed the release of the Intergovernmental Panel on Climate Change’s First Assessment Report in 1990, which prompted the start of negotiations leading to the United Nations Framework Convention on Climate Change.

Sound economics is important

Sound science must be followed by sound economic solutions.

This is necessary at the global level, where there is a fundamental governance issue limiting effective action. Namely, whether we like it or not, we have not yet found a pathway that we can all agree on and adhere to. There is an incentive for countries to

hang back when it comes to achieving emission reductions. In Australia's case we are determined to meet our Kyoto target, although we are not going to ratify the Kyoto Protocol.

At the national level too, countries committed to achieving emission reductions need to find cost effective pathways.

- There are too many interests pedalling high cost and ineffective solutions. They expect tax-payers, or consumers, to step into the breach and to pay unreasonable costs to abate Greenhouse Emissions. I say beware of snake oil salesmen pursuing their own interests.

Regional and international cooperation is key to success

As we have seen on ozone depletion, regional and international cooperation is key to success.

Cooperation on common problems can enable us to fast track the development of solutions by sharing information, knowledge and expertise; pooling financial and human resources; and taking complementary action.

Many countries in the region are affected by similar drivers of regional and global climate.

For example, the behaviour of the El Nino-Southern Oscillation (ENSO) has major environmental and economic impacts on both sides of the Pacific.

ENSO events can cause severe drought or floods over Australia and some other parts of the world, such as flooding in Peru and the Central Pacific.

It is in our mutual interests to understand more about ENSO events – and I hope that Australia, working with scientists from your countries, can make a significant contribution to this understanding.

Finding a solution

I'd like to return directly to the question of how we approach climate change.

The scientific consensus is that a long-term effective global response will require us to go well beyond the emission reduction targets of the Kyoto Protocol.

While we search for a global solution to achieve greenhouse emission reductions, we need to also focus on measures that will enable us to adapt. Initiatives that minimise climate change impacts on species, communities and ecosystems must complement global action to mitigate climate change. In Australia we are already seeing the effects of climate change on species and ecosystems. For example, coral bleaching associated with increased surface temperature is emerging as one of the most significant threats to the Great Barrier Reef.

There are clearly many uncertainties about future levels of greenhouse gas in the atmosphere, how the earth's climate will respond and to how individual species and ecosystems will respond to the combined impacts of climate change and other pressures on biodiversity.

There are great challenges in front of us. Australia appreciates the efforts of the APN and its participants in building the scientific basis for future action and increasing the capacity of the region to respond to these challenges.

I hope that you start this meeting with a sense of enthusiasm for what has been achieved, as well as what can be achieved in the future. I look forward to hearing the outcomes of the meeting's proceedings.

(DRAFT) AGENDA
Annual Meeting of the Asia-Pacific Network for Global Change Research (APN)
9th Inter-Governmental Meeting and Scientific Planning Group Meeting
 Canberra, Australia, March 22-24, 2004

Time	Day 1		Time	Day 2		Time	Day 3	
	IGM	SPG		IGM	SPG		IGM	SPG
0900-0915	Opening Mr. David Borthwick, Secretary Department of the Environment and Heritage, Australia		0845-0930	Informal Regional Meetings with APN Liaison Officers	2004/2005 APN Funded Projects (2) Continuation of Item 10, if needed.	0845-0930	(Issues from SPG)	SPG meeting Election of Co-Chair Other business Members may raise issues of concern that have not already been discussed
0915-0925	Welcome Director, APN Secretariat Mr. Sombo T. Yamamura charge to the SPG and IGM		0930-1000	Move to Symposium Venue Australian Greenhouse Office		0930-0955	Amendments of APN Framework (Item 11) A Japanese representative, and Dr. Michael Stoddart, national Focal Point for Australia, will introduce the proposed amendments	(Issues from IGM)
0925-0940	Group Photograph							
0940-1010	Morning Tea							
1010-1015	Election of Officers The delegates will elect one co-chair from the host country and one co-chair from the SPG (Separate SPG sessions will be chaired by the SPG Co-Chairs)		1000-1015	<u>Global Change Symposium</u> 1. Australia's approach to climate change Mr. Howard Bamsey, CEO Australian Greenhouse Office		0955-1040	CAPABLE Programme (Item 12) Report of implementation, progress of Comprehensive Research Projects and Capacity Building Activities Drs. Linda Stevenson, Kanayathu Koshy, Holger Meinke, Amir Muhammed and Anond Snidvongs	
1015-1020	Adoption of Agenda (Item 1)		1015-1100	2. Science of Australia's greenhouse accounting system Dr. Gary Richards, Australian Greenhouse Office		1040-1100	Morning Tea	
1020-1100	Review of 2003/2004 Activities (Item 2) APN Secretariat, Mr. Martin Rice							
1100-1220	APN Liaison Officer Annual Reports (Item 3) <ul style="list-style-type: none"> Oceania Dr. Kanayathu Koshy South Asia Dr. Chhemendra Sharma Southeast Asia Dr. Anond Snidvongs Temperate East Asia Ms. Ying Yang 		1100-1130	Morning Tea		1200-1300	Lunch	
	1130-1215	3. Cape Grim: a 25-year record of the atmosphere Dr. Graeme Pearman, CSIRO Corporate						
1220-1240	APN Global Change Coastal Zone Management Synthesis (Item 4) Prof. Nick Harvey, Synthesis Project Leader		1215-1300	4. Coral reefs and global change: emerging knowledge and management responses Dr. Paul Marshall, Great Barrier Reef Marine Park Authority		1320-1350	Proposed APN Activities (Item 14) Mr. Sombo Yamamura Other business Members may raise issues of concern that have not already been discussed	
1240-1340	Lunch							

Key: ■ Joint Session ■ IGM Session ■ SPG Session ■ Symposium

Time	Day 1		Time	Day 2		Time	Day 3	
	IGM	SPG		IGM	SPG		IGM	SPG
1340-1415	Financial Reports and 2004/2005 budget (Item 5) APN Secretariat Mr. Yukihiro Imanari	(Financial issues from IGM)	1300-1400	Lunch		1350-1520	Informal IGM and SPG Brain Storming Session "Future of APN"	
1415-1455	APN Review and Strategic Plan (Item 6) Mr. Sombo Yamamura and Mr. Randal Helten		1400-1445	5. Changing landscapes - emerging issues Dr. Graham Harris, CSIRO Corporate		1520-1535	Afternoon Tea	
1455-1525	Proposals and Project Management (Item 7) APN Secretariat Dr. Linda Stevenson		1445-1530	6. Climate modelling in Australia Dr. Mike Manton, Bureau of Meteorology Research Centre			Afternoon Tea	
1525-1555	Afternoon Tea	1525-1540 Afternoon Tea						
1555-1610	Membership Development (Item 8) Mr. Sombo Yamamura	1540-1600 GCOS Presentation The Pacific Islands Regional GCOS program by Mr. Howard Diamond	1530-1600	Afternoon Tea		1535-1635	Scientific Planning Group Report and 2004/2005 APN Funded Activities (Item 15) SPG Co-Chair, Dr. Andrew Matthews, will present the SPG report and the Secretariat will seek IGM approval of SPG recommendations for funded activities in 2004/2005	Informal Regional Meetings with APN Liaison Officers
1610-1650	Resources Development (Item 9) Dr. Michael Stoddart Chair, Resources Development Committee	1600-1620 APN-NIES Collaboration Mr. Takashi Iijima NIES	1600-1645	7. Global Change and the carbon cycle Dr. Michael Raupach, IGBP Project Office		1635-1640	Date and Venue of Next IGM/SPG (Item 16)	
		1620-1700 2004/2005 APN Funded Projects (1) (Item 10) Discussion of the ranking of proposals SPG Co-Chair Dr. Andrew Matthews	1645-1730	8. Adaptation, vulnerability and integrated risk assessment Dr. Roger Jones, CSIRO Atmospheric Research		1640-1720	SPG Co-Chair's Summary (Item 17) Delegates will discuss a draft SPG Co-Chair's summary	
		1700-1800					IGM Co-Chair's Summary (Item 18) Delegates will discuss a draft IGM Co-Chair's summary	
1650	Adjourn	1700	Adjourn					
1900-	Reception Dinner hosted by APN		1900-2230	Meeting Dinner hosted by Australian Greenhouse Office		1800	IGM and SPG Joint Closing Co-Chair (host country) and Mr. Sombo Yamamura	

Key: Joint Session IGM Session SPG Session Symposium

Review of 2003-2004 Activities

This paper is a summary of work undertaken by the Secretariat since the 8th IGM in Hanoi, Viet Nam.

Outstanding Activities since 8th IGM/SPG

- Launched CAPaBLE Programme
- Initiated APN evaluation/review and began preparations for new strategic plan
- Completed initial synthesis on land-use and land-cover change
- Initiated second synthesis on coastal zone management
- Successful participation at the Pacific Island Summit

Publicity/Communications

- Launched new APN website
- Quarterly newsletters issued
- APN activities featured on national and local newspapers, radio and TV
- APN sessions at the Pacific Island Summit, 13th A-P Climate Change Seminar and Environmental Management of Enclosed Coastal Seas
- Disseminated APN information at national and international fora
- Featured APN in World Climate News (Jan. 2004)
- APN general presentation (CDROM) distributed to APN members and posted on website
- Produced a CAPaBLE poster
- Published initial APN land-use and land-cover change synthesis report
- Published APN project, activity and regional reports 2003/2004
- Produced custom made posters for the Pacific Island Summit and the Global Earth Observation Summit (courtesy of NIWA)
- Preparing a CAPaBLE and APN poster (for use at G8 Summit and other international platforms)
- Preparing an APN brochure in Japanese for local outreach activities
- APN Secretariat/APN members have attended/made presentations at:
 - Pacific Leaders Meeting Between Japan and Members of the Pacific Island Forum (PALM 2003). Okinawa, Japan. 16-17 May 2003
 - Environment Congress for Asia and the Pacific (ECO ASIA 2003). Shonan Village, Japan. 7 June 2003
 - 3rd IGBP Congress. Banff, Canada. 19-24 June 2003
 - 13th Asia-Pacific Climate Change Seminar. Miyazaki, Japan. 2-5 September 2003
 - 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community. Montreal, Canada. 16-18 October 2003
 - Early Warning Systems: Do's and Don'ts. Shanghai, China. 20-23 October 2003
 - 15th IGFA Meeting. Cape Town, South Africa. 29-31 October, 2003
 - Environmental Management of Enclosed Coastal Seas (EMECS 2003). Bangkok, Thailand. 18-21 November 2003
 - 1st International Young Scientists' Global Change Conference. Trieste, Italy. 16-19 November 2003

- APN members and Secretariat staff also attended the following APN funded project meetings:
 - CAPaBLE Programme Development Workshop. Japan
 - APN Coastal Zone Management Synthesis: Initial Meeting. Japan
 - APN 2003-02. CLIMAG Workshop. Viet Nam
 - APN 2003-03 & APN 2003-04. Joint Workshop on Himalayan Mountains and Water Resources in South Asia. Nepal
 - APN 2003-05. Glacial Lake Outbreak Floods Training Workshop. Nepal

 - APN 2003-07. The 1st International Young Scientists' Global Change Conference. Italy
 - APN 2003-08. Land-use and Land-cover Change Training Workshop. Viet Nam
 - APN 2003-11. Workshop on Climate Variability and Trends in Oceania. New Zealand
 - APN 2003-13. Capacity Development Training for Monitoring Persistent Organic Pollutants (POPs) in the East Asian Hydrosphere. Japan
 - APN 2003-14 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community. Canada
 - APN 2003-17SG. Proposal Development Workshop for Integrating Climate Variability and Human Activities in Relation to Northeast Asian Land-ocean Interactions and their Implications for Coastal Management. Russian Federation
 - EMECS 2003. Asia-Pacific Forum. Thailand
 - APN Coastal Zone Management Synthesis: First Workshop. Thailand
 - APEIS Integrated Environmental Monitoring Capacity Building Workshop. Australia
 - APN 2003-CB. International Workshop on Global Change, Sustainable Development and Environmental Management in Central Asia. Uzbekistan.

Programme Development

- CAPaBLE Programme
- Review/evaluation
- Synthesis activities
- Resources development

APN Liaison Officer
Reports

2003/2004

APN Liaison Officer Report for Oceania

**Liaison Officer:
(Until August 2003)**

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**Acting Liaison Officer:
(August 2003 – Present)**

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APN Liaison Officer Report for Oceania

Overview of work carried out on behalf of APN:

1. Submitted quarterly inputs about global change activities carried out in Oceania for the APN Newsletter.

2. **10-14 March 2003. 8th APN Inter-Governmental Meeting (IGM) and Scientific Planning Group (SPG) Meeting. Hanoi, Viet Nam**

The APN held its 8th Scientific Planning Group and Inter-Governmental Meetings from 10-14 March, 2003, Hanoi, Viet Nam. Dr. Kanayathu Koshy and Ms. Leigh-Anne Buliruarua attended the meeting from Oceania and presented an overview of APN related activities in the region over the course of 2002/2003. *It was the first time this year that Liaison Officers were provided the opportunity to present their reports at the SPG and IGM meetings.*

3. **5-7 May 2003. 11th Pacific Regional Disaster Management Meeting and Community Risk Conference. Sigatoka, Fiji**

To assist capacity building efforts in the region, particularly those relating to community vulnerability, the South Pacific Applied Geoscience Commission (SOPAC), in partnership with the Fiji Ministry of Regional Development, hosted the 11th Pacific Regional Disaster Management Meeting in conjunction with the Communities at Risk International Conference. Ms. Leigh-Anne Buliruarua represented APN and START at this meeting.

The concept of combining the meeting with an international conference was introduced to discuss and address some of the critical issues and challenges facing communities at risk, particularly in the Small Island Developing States of the Pacific, as well as to expose regional disaster managers to a range of tools and strategies that they can apply to assist the process of enhancing community resilience in their own countries.

Two major initiatives came out of the meeting and conference: (1) a strategy to coordinate the Pacific's input to the 2005 review of the Yokohama Strategy and Plan of Action for a Safer World, and (2) the development of a Regional Policy Framework for Communities at Risk.

4. **12-13 May 2003. CAPaBLE Programme Development Workshop. Kobe, Japan**

Dr. Koshy was invited by the APN Secretariat to participate in the meeting to discuss an implementation plan for the first phase of the APN's CAPaBLE Programme (Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries). The outcome of this meeting was a report that provided an overview of the workshop as well as suggestions for the

implementation of all activities outlined in the IGM-endorsed CAPaBLE proposal submitted to the 8th Inter-Governmental Meeting, Hanoi, Viet Nam.

Dr. Koshy presented two proposals from Oceania for the CAPaBLE Programme:

- i) An Integrated Approach to Climate Change Capacity Building/ Enhancement for the Pacific Island Countries - Kanayathu Koshy; and
- ii) Training Institute on Climate and Extreme Events in the Pacific - Eileen Shea and Kanayathu Koshy.

The two proposals were discussed together since both were complementary to each other. The combined proposal would have a number of outcomes including a fully revised training course on vulnerability and assessment for the PICs and SIDs in general; a new training mechanism for disaster management, climate change and variability computer model that is SIDS friendly; a food and water security project (for Phase II of CAPaBLE, the timing of which might be brought forward); and publications for awareness and lasting capacity building.

The concept paper was endorsed by the meeting and Dr. Koshy was asked to resubmit a full paper.

Later, a detailed proposal titled "Training Institute on Climate and Extreme Events in the Pacific" was developed in collaboration with Jim Salinger of NIWA, New Zealand, and Eileen Shea of the East-West Center, USA. This was presented to APN in August and the Project has since been approved for funding.

For further details, contact: Prof. K. Koshy koshy_k@usp.ac.fj

5. 9 May 2003. 2nd High Level Adaptation Consultation. Fiji

High level leaders from 16 PICs met in Fiji to discuss the latest developments in adaptation financing, and to take stock of progress made in mainstreaming adaptation to climate change. One of the main objectives of the 2003 consultation was to evaluate the feasibility of establishing a Regional Adaptation Facility for the Pacific Island Region. One of the major impediments in the Pacific for 'no-regret' adaptation investment is the upfront financial cost. In order to address this issue, a regional adaptation financial facility was proposed during a high level ministerial meeting in Nadi in 2002. As a basis for this study, Dr. Koshy and Ms. Buliruarua prepared an extensive 'Climate Change Projects Matrix' including donor and financial details (www.usp.ac.fj/start). Sofia Bettencourt, senior natural resource economist, World Bank Office in Sydney, carried out an analysis of donor support for adaptation work in the Pacific. Dr. Koshy served as an adviser to the consultant who undertook this study.

6. 10 May 2003. Climate Change Roundtable Meeting. Sigatoka, Fiji

The third roundtable meeting, hosted by the South Pacific Geoscience Commission (SOPAC) enabled regional and international organisations and agencies involved in climate change research and funding activities to provide updates of activities in the region. Organisations represented included the Pacific Islands Forum Secretariat, South Pacific Regional Environment Programme

(SPREP), International Global Climate Institute (IGCI), World Meteorological Organisation (WMO), University of the South Pacific, APN and the START-Oceania Secretariat, United Nations Development Programme, World Bank, Asian Development Bank, AusAID, and WWF-Pacific. From the second climate roundtable meeting in Nadi, 2002, the APN and the START-Oceania Secretariat had been primarily responsible for compiling a matrix, comprising of ongoing and proposed projects in the region, aimed at avoiding duplication of projects, identifying research gaps and fostering collaboration among donors. This matrix was updated during the Sigatoka meeting and will be a useful source of latest project related information for climate related activities. The roundtable noted that the Climate Change Framework (CCF) should be reviewed by 2004 and that the CCF be updated at an appropriate future meeting or conference. SPREP offered to take the lead in developing a process of reviewing the CCF for consideration of the roundtable.

7. 2-4 June 2003. USP-UNESCAP Sub-Regional Workshop (“Virtual Conference”) on Integrating Environmental Considerations into Economic Policy-making Processes

The workshop, sponsored by UNESCAP and USP, was aimed at investigating and discussing ways of integrating environmental policy-making into economic development plans of Pacific Island Countries. The APN/START office played a key role in organising the meeting. Twenty participants from UNESCAP member countries in the region attended the workshop including key senior government economists in charge of economic and development policy planning and, environmentalists in charge of environmental and developmental policy making. A key feature of the workshop was the use of web-based training materials (hence 'virtual conference') prepared by UNESCAP. The daily activities involved plenary presentations, break-out group discussions, study of web-based training modules, and special sessions on 'best practice' examples. Participants were also presented with the training materials on CDROM for further in-country training and viewing without Internet connection.

8. 14 July - 25 October 2003. Climate Change Vulnerability and Adaptation Assessment: Regional Training Course

The START-Oceania Secretariat took the lead role with the Pacific Environment Centre once again this year in coordinating the 15-week, full-time training course as part of the Climate Change and Variability studies in the region. Dr. Koshy and Ms. Leigh-Anne Buliruarua were both involved in the teaching of the course. Twelve participants from ten Pacific Island Countries - Fiji, Federated States of Micronesia, Kiribati, Papua New Guinea, Palau, Solomon Islands, Tonga, Tuvalu, Samoa and Vanuatu - participated in this intensive training.

During the semester-long training, participants were exposed to a variety of techniques and tools for the assessment of climate-related impacts, vulnerability and adaptation. Field trips, coastal profiling, model-based assessments, oral

presentations and report writing formed an integral part of the training. The Vulnerability and Adaptation (V&A) Programme is designed to improve the understanding of stakeholders on the science and signs of climate variability and change, and to enhance regional capacity to carry out national assessments of climate change impacts, adaptation and vulnerability. It is also aimed at improving in-country capacity to fulfil UNFCCC and related convention obligations and commitments.

9. 11-12 September 2003. Water, Communication and the Community: Practical Strategies for Achieving Equitable and Sustainable Water Use in the Pacific. University of the South Pacific, Fiji

The Development Studies Network at the Australian National University in collaboration with the University of the South Pacific, TEAR Australia, WWF Pacific, Live & Learn Environmental Education and SOPAC organised a two-day workshop to develop practical strategies for improving community involvement and communication in water use and management. The workshop was a follow-up to recommendations from the Pacific Regional Consultation on Water in Small Island Countries, Sigatoka, Fiji, in July 2002 regarding community participation in water management and communication/advocacy for sustainable water use.

The papers, deliberations and decisions from the workshop will be included in a special issue of the journal, *Development Bulletin*, which will mark the International Year of Fresh Water. The journal will also include the papers and discussion from a high-level symposium held in Canberra on 19–20 August 2003. This will focus on *Water, governance and the political economy: Water security in poverty reduction and sustainable development in the Asia–Pacific*. The journal will have wide circulation in the Asia–Pacific Region. This special water issue of the journal is supported by AusAID.

10. PABITRA Network for Collaborative Research on the Ecology of Global Change in Island Landscapes of the Tropical Pacific (PI: Dieter Mueller-Dombois, APN 2003-06)

Following the establishment of the “gateway” site in Fiji in 2002, and through continued APN funding for 2003, the project continued its work in Samoa. An Initial Synthesis Meeting was held in Apia in June followed by a Joint workshop and training in November, 2003. Biodiversity study sites were established along each transect from sea to summit and follow-up research cooperation was planned with island resident scientists and students. They were given the lead authority and help was offered to them for writing proposals for scholarships.

Overview of Regional Activities:

1. Assessment of Impacts and Adaptation to Climate Change (AIACC)

This AIACC project focuses on case studies on a low atoll island (Aitutaki, Cook Islands) and a high volcanic island (Viti Levu, Fiji); focusing on coasts, infrastructure, water resources and agriculture. This is a joint initiative involving

USP, IGCI and SPREP. In the first half of 2003, the project made substantial progress in the next generation model development, data collection for case study sites, discussions relating to capacity building activities, and planning meetings at USP, IGCI and SPREP.

Dr Richard Warrick (IGCI) represented the project in a capacity building workshop of the CIDA/SPREP CBDAMPIC (Capacity Building for the Development of Adaptation Measures in Pacific Island Countries) in Apia. All institutional leaders attended the AIACC Regional Workshop in Bangkok in March, 2003.

Discussions have also been ongoing on the real possibilities that are emerging for awareness and capacity building through the enhancement of synergies between the CIDA/SPREP and AIACC projects. The possibility of organising joint seminars/training activities both in Fiji and in the Cook Islands to promote awareness and understanding of climate variability, extreme events and climate change is currently being worked on. It is hoped that through this initiative, increased buy-in from countries will be solicited so that they are able to use the tools developed as part of the two projects.

The possibility of getting WWF Pacific involved in the AIACC project work in light of their current emphasis on climate change is currently being explored. The recent MOU signed by USP and WWF will hopefully make this effort a lot easier. A Stakeholders' meeting is planned for 5-7th April to review the progress and plan future activities.

2. 1-4 September, 2003. Second Scoping Meeting for the IPCC's Fourth Assessment Report (AR4). Potsdam, Germany

In preparation for its Fourth Assessment Report, the IPCC at its 20th Session (Paris 19-21 Feb 2003) decided to hold two scoping meetings. The first of these two meetings was held in Marrakech, Morocco from 14-16 April 2003. The main objective of the second scoping meeting at Potsdam was to consider and refine the draft discussion materials produced at Marrakech. Apart from the IPCC Bureau members and a core group of IPCC assessment veterans, the rest of the participants varied for the two scoping meetings to fully accommodate different sectoral and regional interests and expertise. IPCC is organised into three working groups (WG) and a task force on national greenhouse gas inventories. WG-I assesses the scientific aspects of the climate system and of climate change. WG-II addresses the vulnerability of human and natural systems to climate change, the negative and positive consequences of climate change, and options for adapting to them. WG-III assesses options for limiting greenhouse gas emissions and otherwise mitigating climate change, and economic issues. Dr. Koshy was invited to be part of WG-II discussions on the basis of his background in Small Island Developing States.

3. 8-12 September 2003. 14th SPREP Meeting of Officials (14SM) and 4th Environment Ministers Forum (4EMF). Apia, Samoa

Dr. Koshy attended the meeting representing USP and START-Oceania. (Dr. Andrew Matthews, APN Scientific Planning Group co-chair, represented APN at this meeting). The Meeting of Officials agenda included:

- Action taken on matters arising from the 13th SPREP Meeting;
- Presentation of Annual Report for 2002 and Directors Overview of Progress since the 13th the SPREP Meeting;
- Performance Review: Review of 2001-2004 Action Plan and discussion on the 2005-2009 Action Plan, Work Programme Evaluation and Financial reports;
- Strategic Programmes: SPREP's strategic programme for 2004-2013, work programmes and budget; and
- Institutional matters: staff regulations and name change for the organisation.

4. Pacific Islands Renewable Energy Project (PIREP)

The Pacific Islands Renewable Energy Project (PIREP), a US\$ 841,000 Global Environment Facility (GEF) and United Nations Development Programme (UNDP) funded regional climate change project was launched on 5 May 2003. The PIREP will facilitate the promotion, within the Pacific Islands, of the widespread implementation and ultimately the commercialisation of renewable energy technologies through the establishment of a suitable enabling environment. Participating in the PIREP are the 14 Pacific Islands Countries that have ratified the Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC) and Tokelau.

5. 4-8 August 2003. Barbados +10 (BPOA+10) Preparatory Meeting. Apia, Samoa. The regional meeting was coordinated by SPREP in preparation for the BPOA+10 meeting in 2004.

In the lead-up to the BPOA+10, participation by this region aims to:

- Ensure Pacific Island Countries priorities are not marginalised in the global debate;
- Reinvigorate political support for existing agreements and programmes that are essential to the sustainable development of people in the region, their environment and resources;
- Promote new and existing partnerships beneficial to the sustainable development of the region including the outcomes of the WSSD; and
- Secure new and additional resources to build capacity for sustainable development.

Outcomes and Products:

- Matrix of climate-related activities in the region;
- Pacific Type II Initiatives/Partnerships;
- Pending article from the Secretariat on Integrated Coastal Management in the Pacific region;

- Quarterly reports for APN Secretariat newsletter; and
- Publication of 4 Oceanic Waves bulletin, promoting global change activities in the region.

Future Activities:

- APN CAPaBLE Programme: Pacific Island Training Institute on Climate and Extreme Events 15-28 June, 2004;
- Promote Pacific Type II Initiatives/partnerships in the region;
- Promote START Fellowships/ Awards in the region;
- Promote APN and START activities in the region;
- Facilitate promotion of short-term internships to regional organisations involved in global change research;
- Work towards Professional Certificate in Integrated Coastal Management (with Institute of Applied Sciences, USP); and
- Promote education for sustainable development by promoting Small Island Developing States (SIDS) university collaboration.

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APN Liaison Officer Report for South Asia

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APN Liaison Officer Report for South Asia

Overview of work carried out on behalf of APN:

Contribution to APN Newsletter

1. Submitted quarterly inputs about global change activities carried out in South Asia for the APN Newsletter.
2. Discussed and encouraged Principal Investigators of APN funded projects in South Asia to submit articles for the APN Newsletter.

Information Exchange

1. Disseminated the APN call for proposals amongst researchers and scientists in the South Asian region.
2. Helped South Asian scientists find potential partners from the region for collaborative research.
3. Helped South Asian global change scientists in the development of their proposals for submission to APN.
4. Disseminated the APN's role and activities among South Asian researchers.
5. Distributed the APN Newsletter in the region.
6. Distributed reports of workshops and information of other global change events to the South Asian global change community.
7. Distributed information about activities of START in the region.
8. Interacted closely with the regional START office in developing a directory of South Asian global change scientists.

Workshops Attended

1. Indo-US Workshop on Modelling of Transport of Air Pollutants, November 11-13, 2003, Nagpur, India.
2. Ad-hoc SASCOM Meeting, December 15, 2003, Kathmandu, Nepal.
3. APN Project (APN 2003-04) Meeting of Water Resources in South Asia: An Assessment of Climate Change Associated Vulnerabilities and Coping Mechanisms, December 16-20, 2003, Kathmandu, Nepal.
4. APN Project (APN 2003-03) Meeting of Global Change Impact Assessment for Himalayan Mountain Regions, December 18-20, 2003, Kathmandu, Nepal.
5. Indo-US Workshop on Economic and Environmental Modelling, January 19-20, 2004, New Delhi, India.
6. ABC Science Team Meeting and South Asian Workshop on Air Pollutants, Aerosols and Regional Impacts, February 2-4, 2004 New Delhi, India.

Overview of Regional Activities:

A. Workshops/ Meetings

1. 12-16 May 2003. Workshop on Seasonal Climate and Crop Forecasting Methods for South Indian Rain fed Agriculture. Pune, India

A workshop on “Seasonal Climate and Crop Forecasting Methods for South Indian Rain fed Agriculture” was jointly organized by the Indian Institute of Tropical Meteorology (IITM), Pune, India and International Research Institute for Climate Prediction (IRI), New York, USA during 12-16 May 2003 at the IITM for the project personnel of four START-funded and IRI-coordinated projects in India. These projects primarily focus on demonstrating the utility of seasonal climate forecast inputs for farm-level agricultural decision making. The workshop was followed by a Strategic Planning Meeting from 19-20 May 2003 for a multi-partner initiative to develop seasonal rainfall prediction to enhance small-holder farmer livelihoods.

2. 15-18 May 2003. Meeting of APN and HIWP collaborative project on Water Resources in South Asia. San Diego, USA

A meeting of APN and the Hansen Institute for World Peace (HIWP) collaborative project on Water Resources in South Asia was held in San Diego, USA from 15-18 May 2003 to discuss the launch of the second year activities of the project. The Principal Investigators and country team leaders for survey teams of the project participated in this meeting, which was funded by HIWP. During the meeting, participants discussed the strategies to inter-link APN and HIWP activities with on-going agricultural extension programs in participating countries.

3. 19-20 May 2003. International Conference on Bio-fuels – Progress, Policies and Prospects. New Delhi, India

An International Conference on Biofuels – Progress, Policies and Prospects was organized by Winrock International India in New Delhi from 19-20 May 2003. During the conference, several issues related to bio-fuels, such as their potential as a substitute for fossil fuel in the transport sector to reduce emissions of greenhouse gases and other pollutants, technologies, economic and policy aspects were discussed by the participants.

4. 26-27 May 2003. National Workshop on Spatial Information Analysis for Sustainable Management of the Indus Basin in Pakistan. Islamabad, Pakistan

A national workshop on Spatial Information Analysis for the Sustainable Management of the Indus Basin in Pakistan was held at the World Bank in Islamabad, Pakistan from 26-27 May, 2003, to explore existing and potential utilization of modern spatial information technologies in improving the sustainable planning and management of water resources in Pakistan, with a special emphasis on the Indus Basin system. Environmental and social issues, such as salinity, water pollution, water logging, poverty, and water security, have long been identified as the principal threats to the sustainability of Pakistan's vital Indus Basin irrigation system. The workshop brought together key agencies, researchers, NGOs, modern information system providers, and experts to discuss the issues, constraints, and opportunities in developing a collaborative and comprehensive spatial knowledge base relating to environmental and social issues in the Indus Basin, as well as strengthening other information management and analytical decision support tools for basin

management. Further information of this workshop is available at: <<http://www.worldbank.org.pk>>

5. 27-30 August 2003. International Workshop on Impacts of Climate Change on Agriculture: Challenges and Opportunities. Rawalpindi, Pakistan

The workshop deliberated on prevalent and projected climate change in the region and their impacts on agriculture. During the workshop, Dr Amir Muhammed, Chairman SASCOM, presented the keynote address, which dealt with current and emerging scenarios of the agriculture sector in Pakistan, global climate change and projected climate change in Pakistan and its impact on the agriculture sector. Further details of this workshop can be obtained from Prof. Mushtaq Ahmad Khan <mushtaq56@hotmail.com>.

6. 6-9 October 2003. Training Workshop on Preparation of Dhaka City State of Environment (SoE) Report and Launching of the SoE Report of Bangladesh (Bangla Version). Dhaka, Bangladesh

A four-day training workshop was jointly organized by Bangladesh Centre for Advanced Studies (BCAS), Department of Environment (DoE) and the United Nations Environment Program (UNEP) to assess the national capacity of Bangladesh to make an accurate environmental decision on sustainable development, enhance the availability of information on all aspects of the environment and socio-economic development, as well as to establish a strong information network with a uniform data format. Details of this workshop are available at <<http://bcas.net>>.

7. 11-13 November 2003. Indo-US Workshop on Modelling of Transport of Air Pollutants. Nagpur, India

An Indo-US Workshop on Modelling of Transport of Air Pollutants was organized by the National Environmental Engineering Research Institute (NEERI), Nagpur and Ohio Supercomputer Centre, USA at Nagpur, India from 11-13 November 2003, which was sponsored by the Indo-US S&T Forum of Department of Science and Technology and the Council of Scientific & Industrial Research. During the workshop, a number of available modelling tools, which could help in estimating the distribution of atmospheric pollutants, were discussed. Furthermore, studies related to the impacts of atmospheric pollutants on human health and the agriculture sector were also discussed. Details of this workshop are available at <www.osc.edu/research/pcrm/indo-us-workshop/>.

8. 8-10 December 2003. International Conference on Integrated Coastal Zone Management and Training. Chennai, India

During this conference, a number of research papers were presented by Indian and overseas participants on issues related to coastal ecosystems, their vulnerabilities and feasible coping mechanisms. Issues related to erosion and infrastructural damage, sand deposition, inundation, etc., were also discussed at length during the conference

9. 15 December 2003. Ad-hoc SASCOM Meeting. Kathmandu, Nepal

The Ad-hoc meeting of the South Asian START Committee (SASCOM) was held on 15th December 2003 in Kathmandu, Nepal. During the SASCOM meeting, global change

research activities in South Asia were reviewed and strategies to further develop regional collaboration in these activities were discussed. Minutes of the meeting are available at <www.npl-cgc.ernet.in>.

10. 16-20 December 2003. APN Project Meeting of Water Resources in South Asia: An Assessment of Climate Change Associated Vulnerabilities and Coping Mechanisms. Kathmandu, Nepal

The second year-end meeting of the APN project on Water Resources in South Asia (APN 2003-04) convened with members of the four country teams from Bangladesh, India, Nepal and Pakistan, along with select invited guests. Dr Amir Muhammed, Principal Investigator of the project, informed that the main activity during the second year of this APN-funded project has been the collection of field data through interviews of selected residents in the Selected Hydrological Units (SHUs) in the participating countries of South Asia. These interviews were conducted based on an agreed and pre-tested questionnaire with the primary objective of getting respondents' perception of the occurrence of extreme events, measures taken in the past to meet the crisis situation and their suggestions for future measures. During the meeting detailed discussions took place on the outcomes of the second year activities and also on the formulation of proper strategies for year three activities of the project.

11. 18-20 December 2003. APN Project Meeting of Global Change Impact Assessment for Himalayan Mountain Regions. Kathmandu, Nepal

In conjunction with the South Asian Water Project (APN 2003-04) meeting, the year-end meeting of the APN project on Global Change Impact Assessment for Himalayan Mountain Regions (APN 2003-03) also took place in Kathmandu, Nepal. During the meeting, Dr. K.L. Shrestha, Principal Investigator of the project, informed that although considerable work has been accomplished under the project so far, a no-cost six months extension (with extra input in terms of fellowships, etc.) will be required to develop scenario based future simulations. During the technical sessions, country team members presented detailed work on country specific field surveys which were conducted during the second year of this project. Presentations were also made on climate variability, hydrology, food security and socio-economic changes in selected areas.

12. 19-20 January 2004. Indo-US Workshop on Economic and Environmental Modeling. New Delhi, India

During the workshop, presentations and discussions were centered on modelling techniques and economic assessment of environmental policies with particular attention to India and global environmental concerns. Different models, for example, Second Generation Model (SGM), Asia-Pacific Integrated Model (AIM), Market Allocation Model (MARKAL), Integrated Assessment Model (IAM), crop models, forestry sector models, etc., were discussed in detail during the workshop.

13. 2-4 February 2004. ABC Science Team Meeting and South Asian Workshop on Air Pollutants, Aerosols and Regional Impacts. New Delhi, India

During this South Asian Workshop, presentations were made by regional and other international experts on various aspects of atmospheric processes like emissions of

different trace gases including particulate matter and black carbon, meteorology, chemistry and physics. The impacts of air pollutants on the Earth's radiation budget, agriculture and human health were also discussed during the workshop.

B. Capacity Building Activities

1. Dr. Neil Fernando, Coconut Research Institute, Sri Lanka underwent a three week training program at the School of Forestry and Environmental Studies, Yale University, USA from 12 October to 8 November 2003 to develop an economic impact model to analyze socio-economic impacts on the coconut sector due to climate change.
2. Dr. Sarath Peiris of the Coconut Research Institute, Sri Lanka underwent a three-week training program on short-term climate prediction at the International Research Institute (IRI) for Climate Prediction, University of Columbia, from 1-23 November 2003.
3. Institute of Ocean Management of Anna University, Chennai, India from 3-7 December 2003, organized an Integrated Coastal Zone Management and Training program in which several researchers from various South Asian countries participated.
4. Five members of Sri Lanka's AIACC project entitled Assessment of the Impacts of and Adaptation to Climate Change in the Plantation Sector, with particular reference to coconut and tea in Sri Lanka, participated in a training program being organized by the Indian Agriculture Research Institute (IARI) in February 2004.

Outcomes and Products:

1. The proceedings of the first year-end meeting of the APN South Asia Water Project held in Kathmandu, Nepal in January 2003 have been published. The proceedings are entitled Climate Change and Water Resources in South Asia edited by Dr. Amir Muhammed and published by Asianics Agro-Development International, Islamabad, Pakistan.
2. The APN project on Global Change Impact Assessment for Himalayan Mountain Regions has established a website: <<http://www.idi.org.np>>
3. Climate Change and India: Vulnerability Assessment and Adaptation edited by P.R. Shukla, Subodh K. Sharma, N.H. Ravindranath, Amit Garg and Sumana Bhattacharya, Published by Universities Press (India) Private Limited, 3-5-819 Hyderguda, Hyderabad-500 029 India.
4. Under the Environmental Information System (ENVIS) program of Government of India, a new ENVIS node <URL: <http://envis.tropmet.res.in>> on Acid Rain and Atmospheric Pollutant Modelling has been established at the Indian Institute of Tropical Meteorology (IITM), Pune.

Future Activities:

1. Strengthening of networking efforts among scientists, researchers and other stakeholders in the South Asian region for faster exchange of information.
2. Updating of regional global change scientists directory.

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APN Liaison Officer Report for Southeast Asia

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APN Liaison Officer Report for Southeast Asia

Overview of work carried out on behalf of APN:

1. In 2003 there was one article published in the APN Newsletter by an author from the Southeast Asia Region, Chris Cocklin (Monash University, Australia) entitled “Water and Human Security” (Vol. 9, No.4, October 2003). In addition, the Liaison Officer also submitted a total of 21 regional news items in all 4 issues of Volume 9 of the APN Newsletter.
2. The Liaison Officer attended 6 workshops and meetings in the region on behalf of APN. These workshops and meetings are marked with an asterix (*) in the list of regional activities in the next Section of this report. In addition, the Liaison Officer also made 2 travel missions in the region to promote APN as well as to establish and strengthen the regional network on global change. These travel missions were to Vientiane, Lao P.D.R. (12-14 June 2003) to discuss the formulation of a regional dialogue on water and climate which was proposed by IUCN, while another mission was to Aspendale NSW, Australia as a side trip of the APN Canberra Meeting to discuss issues regarding regional climate scenarios and modelling with CSIRO Atmospheric Research staff.
3. The Liaison Officer was also invited by the Faculty of Natural Resources and Environment, Mahidol University on 3rd May 2003 to interview applicants from Lao P.D.R. who applied for the M.Sc. Program of the Faculty. Two candidates were awarded APN fellowships (US\$ 7,000 each), namely Mrs. Somkhit Boulidam from the National University of Lao P.D.R., and Mr. Somvang Bouttavong from the Science, Technology and Environment Agency.

Overview of Regional Activities and their Outcomes and Products:

The activities in the region and their outcomes and products are detailed in the following table:

Date	Activities	Outcomes/Products
21-24 May 2003	Technical Preparation Workshop for ASEAN Marine Water Quality Criteria, Chumporn, Thailand.*	Meeting Report issued by Pollution Control Department, Thailand, June 2003.

Date	Activities	Outcomes/Products
3-5 and 23-24 July 2003	Aquatic Chemistry and Global Change Research: An Intra-regional Capacity Enhancement Cooperation between the National University of Laos (NUL) and Chulalongkorn University (CU). Vientiane, Lao P.D.R.	15 lectures and senior students from NUL were trained on various techniques in aquatic chemistry analysis.
21-26 July 2003	Application of Remote Sensing, Geographic Information System and Hydrodynamic Modelling for Flood Management Training. Hanoi, Viet Nam.	About 12 participants from Viet Nam, Lao P. D. R., Cambodia, Nepal, Bangladesh, Pakistan and Burma were trained.
20 August 2003	International Seminar on Innovation Model for Sustainable Water Resources Management "GAME-T Crystallization." Bangkok, Thailand.	Meeting Report on website < http://hydro.iis.u-tokyo.ac.jp/GAME-T/doc/seminar2003/Record_CDR/OM/index.html > published by the University of Tokyo.
28-31 August 2003	APN Project 2003-08: Regional, Multi-Scaled, Multi-Temporal Land-Use and Land Cover Data to Support Global Change Research, and Policy Making: A SEARRIN LUCC Project Training Workshop. Hanoi, Viet Nam.*	
15-19 September 2003	The Second Workshop on South China Sea Storm Surges, Waves and Ocean Circulation Forecasting – A Hands-on Ocean Forecast Training Laboratory for the South China Sea Region. Kuantan, Malaysia.	Meeting Report on CDROM and website < http://www.wmo.int/web/www/TCP/Reports/Kuantan2003.pdf > published by the World Meteorological Organization.
15 September - 31 October 2003	Electronic Conference on Sustainable Consumption.	< http://www.sea-user.org/e_background.php?conf_id=2 >

Date	Activities	Outcomes/Products
21-22 October 2003	High Level Consultation Meeting for SEAGOOS. Kuala Lumpur, Malaysia.	A meeting statement to establish Southeast Asia Global Ocean Observing System. Meeting report to be published by the Intergovernmental Oceanographic Commission.
21-22 October 2003	International Conference on Tropical Forests and Climate Change. Manila, Philippines.	Proceedings to be published by ENFOR-CFNR, University of the Philippines, Los Banos.
4 November 2003	Application of Climate Prediction in Rice Production in the Mekong River. Ho Chi Minh City, Viet Nam.*	Proceedings published by the Sub-Institute of Hydrometeorology of South Viet Nam (edited by Nguyen Thi Hien Tuan), 55 pp.
11-13 November 2003	2003 International Symposium on the Climate System of Asian Monsoon and its Interaction with Society. Khon Kaen, Thailand.	Proceedings to be published by the Institute of Industrial Science, University of Tokyo.
16-29 November 2003	Advanced Training Workshop on South China Sea Regional Carbon Issues Chung-Li and Kaohsiung. Chinese-Taipei.	26 participants from 11 countries were trained.
17-20 November 2003	The 1 st Southeast Asia Water Forum: Conflict Resolution and River Basin Organizations. Chiang Mai, Thailand.	Report published on Internet < http://www.adb.org/Documents/Events/2003/SEA_Water_Forum/default.asp > by the Asian Development Bank.
18-21 November 2003	EMECS 2003 the 6 th International Conference on the Management of Enclosed Coastal Seas. Bangkok, Thailand (APN global change coastal zone management synthesis meeting was held back-to-back with EMECS 2003 in Bangkok).	Proceedings are under preparation.

Date	Activities	Outcomes/Products
1-11 December 2003	International Training Workshop on DSSAT Version 4: Assessing Crop Production, Nutrient Management, Climatic Risk and Environmental Sustainability with Simulation Models & GIS Tools. Chiang Mai, Thailand.	
8-11 December 2003	APN Project 2003-02: Applying Climate Information to Enhance the Resilience of Farming Systems Exposed to Climatic Risk in South and Southeast Asia: APN Project Meeting and Capacity Building Workshop, Hanoi, Viet Nam.	Proceedings under preparation.
8-12 December 2003	East Asian Seas Congress, Kuala Lumpur, Malaysia.	Outcomes of the Congress were reported on website: http://pemsea.org/info%20center/big%20events/EAScongress2003_1.htm by the GEF/UNDP/IMO Regional Programme on Partnerships in Environmental Management for the Seas of East Asia.
12-29 January 2004	APN/CAPaBLE (2003-CB01-Chinvanno) Training Course on Future Climate Scenarios and Impacts of Climate Change on Hydrological Regimes. Chonburi, Thailand.*	12 participants from Lao P. D. R. and Thailand were trained.
14-16 January 2004	Fifth International Conference on Asian Marine Geology. Bangkok, Thailand.*	Book of Abstract published by Chulalongkorn University, 291 pp.
19-20 January 2004	Joint International Conference and First Annual Meeting of IGCP-475 <i>DeltaMAP</i> and APN Project on the Mega-Deltas of Asia (APN 2003-12). Bangkok and Ayutthaya, Thailand.*	Report under preparation.

Date	Activities	Outcomes/Products
9–20 February 2004	Convention on Biological Diversity (CBD): 7 th Meeting of the Conference of the Parties (COP 7). Kuala Lumpur, Malaysia.	
11-13 February 2004	UNEP/GEF South China Sea Regional Science Conference. Bangkok, Thailand.	
12-14 February 2004	DGMV-GSJ International workshop on “Stratigraphy and Deltas of Quaternary Systems in Viet Nam”. Hanoi, Viet Nam.	
23-27 February 2004	Convention on Biological Diversity (CBD): 1 st Meeting of the Parties to the Cartagena Protocol on Biosafety (MoP-1). Kuala Lumpur, Malaysia.	

Future Activities

23 February-1 March 2004	APN/CAPaBLE (2003-CB01-Chinvanno) Training Course on Impacts of Climate Change on Rain-Fed Rice Production. Ubon Ratchathani, Thailand.*
22-24 March 2004	9 th APN Inter-Governmental Meeting and Scientific Planning Group Meeting. Canberra, Australia.*
23-25 March 2004	APN Workshop on Indices and Indicators for Monitoring Trends in Climate Extremes. Melbourne, Australia.*
5-9 April 2004	3 rd SARCS Regional Scientific Committee Meeting. Chinese-Taipei.
1-12 April 2004	International Conference on "Shallow Geology and Geophysics 2004". Hanoi, Viet Nam.
1-31 May 2004	Electronic Conference on Integrating Carbon Management into the Development Strategies of Cities.

11-14 May 2004	Global H ₂ O: Hilltops-2-Oceans Partnership Conference. Cairns, Australia.
17-19 May 2004	Southeast Asia Burnt Area Mapping Workshop. UKM Bangi, Malaysia.
20-25 June 2004	Estuarine and Coastal Sciences Association (ECSA) and Estuarine Research Federation (ERF) International Conference. Ballina RSL, NSW, Australia.
21-24 June 2004	6th International Conference on Hydroinformatics. Singapore.
1-3 July 2004	Second Regional Technical Conference on Tropical Cyclones, Storm Surges and Floods. Brisbane, Australia.
5-9 July 2004	International Conference on Storms. Brisbane, Australia.
5-8 July 2004	The 2nd Asia Pacific Association of Hydrology and Water Resources (APHW) Conference. Singapore.
5-9 July 2004	First Asia-Oceania Geosciences Society Annual Meeting and Exhibition. Singapore.
5-9 September 2004	Coastal Zone Asia Pacific Conference 2004. Brisbane, Australia.
17-25 November 2004	3 rd IUCN World Conservation Congress. Bangkok, Thailand.
10-17 January 2005	2 nd Annual Meeting of the IGCP-475 "Deltas in the Monsoon Asia-Pacific region: DeltaMAP". Ho Chi Minh City, Viet Nam.

Biogenic and Anthropogenic Emissions from Southeast Asia

SARCS has invited research proposals from Southeast Asian scientists seeking funding support for regional research projects beginning Spring 2004. Funding has been secured from the National Science Council, Chinese-Taipei.

Please refer to <http://www.sarcs.org/Airquality/Airquality_CFP.htm> for more details.

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APN Liaison Officer Report for Temperate East Asia

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APN Liaison Officer Report for Temperate East Asia

Overview of work carried out on behalf of APN:

Contribution to APN Newsletter

- Submitted quarterly regional reports for APN Newsletters.

Information exchange

- Distributed the announcement of APN Call for Proposals 2003 to individual scientists, corresponding institutes and TEACOM members.
- Distributed APN Newsletters, leaflets and other related information to individual scientists, corresponding institutes and TEACOM members.

Workshops Attended

- 20th Pacific Science Congress, March 17-21, Bangkok, Thailand.
- Third Workshop of Regional Climate Model Studies (APN 2002-02), August 27-29, Shanghai, China.

Overview of Regional Activities:

A. Workshops/Meetings

1. 17-21 March 2003. Symposium of Adaptation of Asia-Pacific to Global Change in 20th Pacific Science Congress. Bangkok, Thailand

The symposium was supported by APN, Chinese Academy of Science (CAS), Chinese Association for Science and Technology (CAST) and the Ministry of Science and Technology of the People's Republic of China (MOST).

About 40 scientists from China, Fiji, India, Indonesia, Japan, Russia, Sweden, Sri Lanka, Thailand and USA took part in this event, which made it be one of the largest symposiums in this 20th Pacific Science Congress. The symposium discussed adaptation of the APN region to global change. In particular, the following areas were identified as potential projects of further study: "regional aspects of global change in the Asia-Pacific region, impact assessment of global change on socio-economic development and strategic adaptation to global change," this symposium received 39 oral presentations and 5 poster presentations. Proceedings of this Symposium 2.1 were published in August 2003.

2. 31 March - 3 April 2003. International Symposium on Climate Change (ISCC). Beijing, China

The International Symposium on Climate Change (ISCC) Organized by the China Meteorological Administration (CMA) convened in Beijing to present and exchange state of the art advances in climate change studies within the global community. Over 460 participants from 61 countries attended this symposium.

The following topics were covered by the symposium: extreme climate events and climate change; observed climate variability and change; detection and attribution of climate change; processes and interactions within the climate system; predictive studies of climate change; impacts of and adaptation to climate change; past, present and future climate change in polar and high altitude regions; aerosol and regional climate change; climate change and sustainable development; and the uncertainty of climate change science.

3. June 30 - July 11 2003. IUGG2003, XXIII General Assembly of the IUGG. Sapporo, Japan

The 2003 IUGG General Assembly provided an extraordinary opportunity for earth and space scientists from around the world to gather and exchange expertise, research data and results. Along with a full scientific program arranged by the IUGG Associations, there was a series of six, half-day symposia with the theme: "State of the Planet: Frontiers and Challenges." Invited speakers explored topics ranging from chaos to predictability and geophysical measurements to geophysical risk. Four Union lectures by leading research scientists were presented as part of this special focus. These lectures and symposia demonstrated the cutting edge and relevance of geophysical sciences, and identified key challenges for the future.

4. 27-29 August 2003. 3rd Workshop of Regional Climate Model Studies. Shanghai, China

In the course of the APN Project 2002-02, the Third Workshop of Regional Climate Model Studies which was scheduled for April 2003 finally convened in Shanghai from 27-29 August 2003.

This workshop was a crucial part of the activities of the APN supported project 2002-02 "A Continuation to Regional Climate Model Inter-Comparison for Asia (RMIP)." The Program of the workshop comprised of 2 main parts:

Part I: Scientific presentations of participating scientists on the analysis of model performance of phase II simulation, mainly on individual models. Reanalysis of phase I results and other studies in relation to RCM studies in general were also presented in addition to the main body of phase II.

Part II: Presentations and discussions on the inter-comparison of Phase II results among participating models and the preliminary results, and the plan for further analysis and publications.

In Phase II, 10-year simulation and inter-comparison, research members from six participating groups from Australia, China, Japan, Korea and USA, as well as some other scientists involved in regional models attended this workshop.

5. 1-2 September 2003. Monitoring of POPs in the East Asian Hydrosphere (APN 2003-13). Tokyo, Japan

Funding for this workshop was provided by APN and the United Nations University (UNU). During this two-day workshop at the UNU in Tokyo, expert presentations and discussions focused on the interpretation of environmental monitoring data and the development of guidelines for environmental quality standards for pollution in coastal and inland waters. Discussions included consideration of existing health standards as presented by WHO and those adopted by countries in other regions.

Guidelines on environmental quality were agreed by the participants, and distributed by the organizers in order to provide the basis for planning, prioritizing and comparing future monitoring activities amongst centres. The discussion sessions were attended by the National Project Coordinators of the UNU project on environmental monitoring, and one junior laboratory staff member from each of the appointed laboratories in China, Indonesia, Japan, the Republic of Korea, Malaysia, Philippines, Singapore, Thailand and Viet Nam. Expert speakers were also invited to make presentations and join the discussions.

6. 6-10 September 2003. NEESPI Science Plan Review Meeting. Yalta, Crimea/Ukraine

The main objectives of this NEESPI Science Review Summit meeting was to review the scope of the Science Plan of NEESPI, including the program's international organizational structure, and to gather suggestions to fine-tune the SP and improve its relevance to and synergy with Chinese, European and Japanese research and operational programs in Earth Sciences, as well as to gather support for prospective institutional participants and contributors to the NEESPI program. This meeting was attended by 30-40 invited participants. Program managers and agency representatives who have the institutional and program knowledge and authority to properly represent the research interests, priorities and mandates of research sponsoring organizations, such as NASA, RAS, EC, ESA, EUMETSAT, NASDA and IGBP, as well as scientists not directly involved in the NEESPI Science Plan draft development attended this review meeting.

7. 9 September - 3 October 2003. World Climate Change Conference. Moscow, Russian Federation

The World Conference on Climate Change, supported by Russian President Vladimir Putin, UN and G8 leaders, convened in Moscow with the main goal of providing a comprehensive discussion of the scientific aspects of both the natural and human impacts on climate change. The major topics for discussion were science of climate change; ecological, social and economic impacts of climate change; mitigation of and adaptation to climate change and the role of technology; and stakeholders' dialogue (governments, NGO's, business, scientific community and civil society), the UNFCCC, and the Kyoto Protocol and their evolution.

The conference was attended by 1,200 people representing governments, scientific communities and business circles from over 52 countries. The committee invited 50 scientists, who are well-known in the field of climate change, to

present papers at the plenary sessions.

8. 7-10 October 2003. APEC Climate Network (APCN) Symposium on the Multi-Model Ensemble for Climate Prediction. Jeju, Republic of Korea

The APCN Symposium on the Multi-Model Ensemble for Climate Prediction was held jointly with the second APCN Steering Committee meeting and the third APCN Working Group meeting.

The objective of the symposium was to derive suggestions for the future direction of research and development for better SI forecasts, underscoring the limitations of the current state-of-the-art climate dynamic prediction system. Symposium topics included: multi-model ensemble climate prediction activities, multi-model ensemble techniques, climate and ocean modelling, sensitivity and predictability of the climate dynamic prediction system.

9. 14-19 October 2003. TWAS 9th General Conference and 20th Anniversary Celebration. Beijing, China

The Third World Academy of Sciences' (TWAS) 9th General Conference and 20th anniversary celebrations, organised by TWAS and the Third World Network of Scientific Organisations (TWNSO) in collaboration with the Chinese Academy of Sciences (CAS) and other scientific organizations and governmental agencies of China convened in Beijing. More than 3000 delegates from 77 countries attended the event, including 13 Government Ministers. Highlights of the conference included an address by H. E. Hu Jintao, President of the People's Republic of China, given during the Opening Ceremony, and presentations by two Nobel Laureates.

The Opening Ceremony of the Conference took place at the Great Hall of the People on 16 October 2003, with the presence of H. E. Hu Jintao, President of the People's Republic of China. New members and prize winners were announced at this TWAS Conference. Forty-nine scientists from 20 countries were elected new members of the Academy, bringing TWAS's total membership to more than 700. For the first time, scientists from Tajikistan and Uzbekistan were also elected, raising the number of countries represented in the Academy to 81.

TWAS publications issued at the conference included: the TWAS Yearbook 2003; the TWNSO Yearbook 2003; a 20th anniversary celebration book containing congratulatory messages from over 100 heads of state, ministers of science, heads of national and international organizations and distinguished scientists. Drafts of the 20-year history of TWAS and the Academy's Third Strategic Plan were also circulated to members. Full proceedings of the conference will be published and distributed by TWAS as soon as possible. CAS also published a 494-page hardback book to commemorate the conference: 'Science Progress in China,' edited by CAS President Lu Yongxiang.

B. Project Highlights

1. Monsoon Asia Integrated Regional Studies (MAIRS)

Together with DIVERSITAS, IGBP, IHDP and WCRP, START and its regional networks in East Asia, South Asia and Southeast Asia is undertaking integrated regional studies of global change (IRS) in Monsoon Asia. Moreover, it is believed that the integrated regional study may contribute directly to science for sustainability, and a regional approach to research is also important from an Earth System Science Partnership (ESSP) perspective.

Preliminary Activities for Monsoon Asia Integrated Regional Studies (MAIRS):

- October 2002, Hanoi workshop on the preliminary concept of IRS.
- Consultative Workshop of Integrated Regional Studies of Monsoon Asia, 11-12 Feb. 2003, Beijing, China.
- March 2003, the Initial Planning workshop on Monsoon Asia Integrated Regional Study in Bangkok (Dr. Linda Stevenson, APN Secretariat, was also involved in this meeting).
- The official letter from Dr. Anne Larigauderie, Executive Director of DIVERSITAS, on behalf of the ESSP Chairs and Directors, accepting the offer of the Chinese Government to host the International Project Office for the ESSP Integrated Regional Study of Monsoon Asia at the Chinese Academy of Sciences.
- The International Project Office for MAIRS is in the process of being established at the START TEA Regional Centre. Job announcements of the IPO Executive Director and other staff have also been made public.

2. Regional Climate Model Inter-comparison Project (APN 2002-02)

Under the joint support of APN, START, the Chinese Academy of Sciences (CAS) and several projects of participating nations, a Regional Climate Model Inter-comparison Project (RMIP) for Asia has achieved its 4-year designed research tasks (2000-2003). The project is a joint effort of ten (10) research groups in Phase I and six (6) in Phase II from Australia, China, Japan, Republic of Korea and USA, and also involves scientists from D.P.R. Korea, India, Italy, Mongolia and Russia.

In 2002-2003, the RMIP Project achieved its Phase II tasks. Five (5) Regional Climate Models and one (1) Global Climate Model finished 10-year simulations from January 1989 to December 1998. The preliminary six (6) models output were analysed and inter-compared in the RMIP Shanghai Workshop. The Joint paper of RMIP Phase I has been accepted by the *Bulletin of the American Meteorological Society (BAMS)* and will soon be published.

3. The Mega-deltas of Asia: conceptual model and its application to future delta vulnerability (APN 2003-12)

This two-year APN project focuses on developing a conceptual model for the geological process and response behaviour of Asia mega-deltas, affected by strong monsoons, high river flow and sediment load and frequent geo-hazard occurrences. Two workshops will be held to 1) develop the Asia delta model,

and 2) as a forum for Asia scientists and policy-makers to improve coastal management strategies.

Outcomes and Products:

I. Publications

THE TEACOM PUBLICATION No. 8 (Reports of the workshop on the global change studies in the Far East, Vladivostok, Sept. 11-15, 2000).

Proceedings of Workshop of APN Project (APN 2002-11): The Proceedings of the Symposium 2.1 in the 20th Pacific Science Congress, Adaptation of Asia Pacific to Global Change, August, 2003.

Asia Monsoon Environment System and Global Change, Global and Planetary Change 37 (2003), Volume 37, NOS. 3-4, 20 June 2003, ISSN 0921-8181, edited by Sierd Cloetingh, Ann Henderson-Sellers, Lisa Cirbus Sloan and Paolo Pirazzoli, guest-edited by: Congbin Fu and Xiaodong Yan.

Regional Climate Model Inter-comparison Project for Asia (RMIP), C. B. Fu, S. Y. Wang, Z. Xiong, W. J. Gutowski, D. K. Lee, J. L. McGregor, Y. Sato, H. Kato, J.W. Kim, M.S. Suh, accepted by the Bulletin of the American Meteorological Society (BAMS).

Timing of Atmospheric CO₂ and Antarctic Temperature Changes Across Termination III, Nicolas Caillon, Jeffrey P. Severinghaus, Jean Jouzel, Jean-Marc Barnola, Jiancheng Kang 4 Volodya Y. Lipenko5, Science 2003 March 14; 299(5613): p. 1728-1731.

II. CDROMs and Websites

The Atlas of Population, Environment and Sustainable Development of China, ISBN7-900122-51-6/P-1, Science Press, China, 2003.4.

The website of APN Project (2003-12): <www.megadelta.ecnu.edu.cn>

Future Activities:

I. Future project activities

1. Monsoon Asia Integrated Regional Studies (MAIRS)

MAIRS will be preceded by a first phase of rapid assessment, to be undertaken jointly by START and the Scientific Committee on Problems of the Environment (SCOPE). Three sub-regional Rapid Assessment Projects (RAP) for China/East Asia, South Asia and Southeast Asia will systematically review current knowledge regarding regional aspects of global change in Monsoon Asia,

in order to highlight gaps in knowledge and uncertainties, and define research priorities for the integrated regional studies.

2. The Regional Climate Model Inter-comparison Project

With the support from APN, Chinese Academy of Sciences (CAS) and START and some other national projects, and the joint effort of scientists from China, Japan, Republic of Korea, USA, Australia and India, the APN project, Regional Climate Model Inter-comparison Project for Asia – RMIP, will be successfully completed. RMIP consists of two phases. The RMIP participating groups have submitted a new proposal: Development of Asia Climate Change Scenarios in 21st Century by Ensembling a Group of Regional Climate Models Nested with GCM to APN this year. This project will focus on the development of regional climate change scenarios of Asia in 21st century by ensembling a group of RCMs nested with GCM in order to provide better information of regional climate change for the assessing its impacts on Asia.

3. The Mega-deltas of Asia: conceptual model and its application to future delta vulnerability (APN 2003-12)

2004/2005 will: 1) further complete the delta conceptual model, by incorporating field/laboratory results collected from fieldwork database; 2) circulate the model via the website to receive critiques from all colleagues and the public; 3) propose a set of criteria for assessment of costal hazards and vulnerability, and receive feedback from the science community and civil society. The second workshop (planned for January 2005) will have an open discussion with scientists, policy-makers and local government administrators to finalize the model. Outputs will be published as proceedings, peer-review papers and circulated on the website.

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(to be determined)

APN Global Change Coastal Zone Management Synthesis

This paper highlights activities conducted and future directions since the 8th APN Inter-Governmental Meeting approved the undertaking of a global change coastal zone management synthesis.

Outline of activities conducted:

In 2003 two meetings were convened, a planning meeting in Kobe, 13-14 May, and a workshop in Bangkok, 19-20 November. At the planning meeting it was acknowledged that this global change coastal zone management synthesis was not to be just a summary of APN coastal projects, but rather a synthesis that should identify research gaps and needs for future coastal zone research in the Asia-Pacific region. There is also a need to identify what is not known about coastal zones in relation to global change in the region, in addition to what is *already* known.

The synthesis will also have an APN focus and clearly identify future research directions of APN coastal zone activities. A final workshop in September 2004 will discuss the penultimate draft of the synthesis book (see below).

Outcomes and products:

There will be two printed outputs. The first a CZM synthesis report, and the second a substantial publication in book form emphasizing research gaps and a broad research agenda for the region. These two outputs are detailed below, as follows:

Output 1:

APN Global Change Coastal Zone Management Synthesis Report

This report, about 20 pages long, will be in a style suitable for policy-makers, executives, planners and managers and designed specifically for APN and immediate stakeholders.

Output 2:

New Directions in Global Change Coastal Zone Research for the Asia-Pacific Region

The second output will be in book form comprising around 10 chapters that will focus on the identified research gaps in the region. Each of the chapters will have lead authors and contributing authors with international scientific expertise. The book is planned to be around 350 pages long with approximately 100 illustrations. A tandem book series with the Environmental Management of Enclosed Coastal Seas (EMECS) is also being considered.

Additional outputs may include an educational pamphlet for schools, a poster, CDROM, website, and a peer-reviewed paper for publication.

Future directions and follow-up work:

It is expected that this APN-funded global change CZM synthesis will identify research gaps and establish a broad research agenda for the Asia-Pacific region. The APN global

change CZM synthesis report will also be a useful resource tool to aid coastal zone executives, planners and managers in decision-making and policy implementation.

Financial Report (Final) FY 2002/2003

All amounts in US\$

	Draft Budget	Financial Report (Draft)	Financial Report (Final)
1. INCOME	<u>1,650,000</u>	<u>1,702,000</u>	<u>1,704,000</u>
Ministry of the Environment of Japan	1,100,000	1,100,400	1,102,500
Hyogo Prefecture	222,000	260,900	261,000
NSF/USGCRP	328,400	340,270	340,270
2. EXPENDITURE	<u>1,650,000</u>	<u>1,668,500</u>	<u>1,704,000</u>
A. Scientific Activities	1,256,000	1,191,500	1,222,900
Funded Activities	1,112,000	1,052,100	1,050,000
Proposals Process including Contingency Fund	903,700	903,500	903,000
Partnership Activities/Inter-Regional Collaboration		13,000	12,000
Networking and Capacity Building	60,000		
Asia-Pacific Environmental Innovation Strategy Project (APEIS)	37,000	41,000	39,000
Hyogo Prefecture Projects	111,100	94,600	96,000
Scientific Planning Group and Inter-Governmental Meetings	82,500	78,000	79,000
Liaison Officers	26,700	26,700	23,700
Publications	37,000	34,700	35,700
Newsletter	8,900	8,800	8,700
Homepage	5,900	5,900	6,000
Printing	22,200	20,000	21,000
Renewal of APN English Website			34,500
B. Administrative Expenses	394,000	477,000	481,000
Travel Costs	44,450	35,000	32,500
Salaries and Related Charges	208,200	241,400	249,000
Salaries	186,000	208,200	213,000
Insurance	22,200	33,200	36,000
Communications	24,400	18,000	14,500
Others	116,900	116,190	118,000
General Office Expenses	11,000	14,600	14,400
Office Equipment	33,000	28,600	28,000
Interest on Loan	8,900	7,400	7,700
Tax	61,000	62,900	65,000
Bank Charges	2,200	1,800	1,650
Miscellaneous	800	890	1,000
APN's Contribution to AIRIES Overheads		66,700	66,700
Savings		33,500	

Financial Report (Draft) FY 2003/2004

All amounts in US\$

	Draft Budget presented at the 8th IGM	Actual Income vs. Predicted Expenditures in FY 2003/2004
	2,065,470	2,176,400
Revenues		
MOE Japan	1,428,000	1,525,000
Hyogo Prefecture	280,000	299,000
NSF/USCCSP	340,270	330,000
Environment Australia through Australian Greenhouse Office (AUS\$ 30,000)	17,200	17,200
Ministry of Foreign Affairs and Trade, New Zealand (NZ\$ 10,000)		5,200
	2,065,470	2,176,400
Expenditures		
Scientific Activities	1,527,200	1,588,000
Approved Projects from Regular Call for Proposals	752,000	740,000
CAPaBLE	537,200	493,000
- Capacity Enhancement	280,000	240,000
- Capacity Building: US\$ 240,000 (Hyogo Pref.), US\$ 17,200 (Australia) and US\$ 5,200 (New Zealand)	257,200	243,000
- CAPaBLE Project Development Workshop, Kobe		10,000
First Coastal Zone Management Synthesis Workshop		16,000
EMECS 2003 (Bangkok, Thailand)		17,000
LUCC Synthesis Report		10,000
Brochures (x 3)		20,000
Local Outreach Meeting, Tokyo		2,500
Consultancy Fee Evaluation + 2nd Strategic Plan		40,000
Asia-Pacific Environment Innovation Strategy Project (APEIS)	40,000	40,000
Travel Support for Scientific Activities	14,400	14,000
IGM/SPG (including SC Meeting)	88,000	120,000
Networking	24,000	0
Liaison Officers	28,800	31,500
Publications (Newsletters & Printing)	42,800	44,000
Administrative Expenses	538,270	588,400
Travel Costs	32,800	32,200
Salaries and Related Costs	282,000	313,600
· Salaries	246,000	247,000
· Social Insurance and Benefits	36,000	42,000
· Resignation Payment (Shift from AIRIES to IGES)		24,600
Communications, Postage	26,400	24,000
Others	125,670	141,000
· General Office Expenses	17,600	21,400
· Leasing of Office Equipment	28,000	30,000
· Interest on Loan	8,000	8,700
· Tax	68,000	74,000
· Bank Charges (Remittance Fee)	2,070	2,600
· Miscellaneous	2,000	4,300
Contribution to AIRIES Administration	71,400	77,600

Financial Report (Draft) FY 2003/2004
Appendix 1: Funded Projects under CAPaBLE Programme in FY 2003/2004

all amounts in US\$

Project Ref. #	Project Title	PI	Award in US\$	Proposed Duration	Remarks
Comprehensive Research Projects					
2003-CRP-Theme I-Khan	Enhancement of National Capacities in the Application of Simulation Models for the Assessment of Climate Change and its Impacts on Water Resources and Food and Agricultural Production	Dr. Arshad Muhammad KHAN, Pakistan	120,000	30 Months	
2003-CRP-Theme II-Shukla	Integrated Assessment Model for Developing Countries and Analysis of Mitigation Options and Sustainable Development Opportunities	Prof. P. R. SHUKLA, India	120,000	30 Months	
Capacity Building Projects					
2003-CB01-Chinvanno	Building Capacity of Mekong River Countries to Assess Impacts from Climate Change - Case Study Approach on Assessment of Community Vulnerability and Adaptation to Impact of Climate Change on Water Resources and Food Production	Dr. Suppakorn CHINVANNO, Thailand	28,500	2 Years	
2003-CB02-Koshy	Training Institute on Climate and Extreme Events in the Pacific	Dr. Kanayathu KOSHY, Fiji	50,000	3 Years	NZ contribution of NZ\$ 10,000 will be allocated to this project
2003-CB03-Nakane	Capacity Building for Greenhouse Gas Inventory Development in Asia-Pacific Developing Countries	Dr. Hideaki NAKANE, Japan	39,500	3 Years	
2003-CB04-Meinke	Creating Climate Knowledge Networks through Strategic, Global Linkages	Dr. Holger MEINKE, Australia	40,000	1 Year	AUS contribution of AUS\$ 30,000 will be allocated to this project
2003-CB05-Naito	Capacity Building Workshop on Climate Change Mitigation with Locally Owned Technology and Systems	Dr. Masaaki NAITO, Japan	35,000	2 Years	
2003-CB06-Perdomo	UNFCCC Training Workshop for the National Climate Change Focal Points in the APN Region on the Guidelines on National Communications from Non-Annex I Parties, March 2004	Dr. Martha PERDOMO, Germany	20,000	1 Year	additionally supported
2003-CB07-Muhammed	Capacity Building Workshop on Global Change Research	Dr. Amir MUHAMMED, Pakistan	20,000	1 Year	additionally supported
2003-CB08-WCRP	A WCRP-Sponsored Regional-Scale Climate Modelling Workshop: High Resolution Climate Modelling Assessment, Added Value and Applications	Dr. Valery DETEMMERMAN, Switzerland	10,000	1 Year	additionally supported
Grand Total:			483,000		

Budget Plan (Draft) FY 2004/2005

All figures in US\$

		Draft Budget FY04/05	
Revenues		2,007,000	
	MOE Japan	1,346,000	
	Hyogo Prefecture	304,000	
	NSF/USCCSP	330,000	
	Environment Australia through Australian Greenhouse Office (AUS\$ 30,000)	21,000	
	New Zealand Climate Change Office (NZ\$ 10,000)		
		2,007,000	
Expenditures	Scientific Activities	1,542,000	
	Approved Projects from Regular Call for Proposals	760,000	
	CAPaBLE	461,000	
	- Capacity Enhancement (MOEJ):	191,000	
	- Capacity Building:		
	US\$ 156,000 (Hyogo Pref.),		
	US\$ 21,000 (Australia) and	270,000	
	US\$ 6,000 (New Zealand)		
	US\$ 87,000 (MOEJ)		
	Other Hyogo Activities		
	- Coastal Zone Management Synthesis	52,000	
	- World Conference on Disaster Reduction (January 2005, Kobe, Japan)	15,000	
	Evaluation/2nd Strategic Plan and Local Outreach Meeting	22,000	
	Internship	21,000	
	4th Group on Earth Observation (GEO) Meeting (April 2004, Tokyo, Japan)	4,000	
	IGM/SPG	110,000	
	Liaison Officers	31,000	
	Publications	34,000	
	Website Management	2,000	
			465,000
	Administrative Expenses		
	Travel for Administrative Purposes		21,000
	Salaries and Related Costs		317,000
• Salaries	264,000		
• Insurance and Social Benefits	42,000		
• Resignation Money Funds (under IGES)	11,000		
Communications, Postage		26,000	
Others		55,500	
• General Office Expenses	15,500		
• Leasing of Office Equipment	18,000		
• PC + Server Maintenance	10,000		
• Interest on Loan	1,500		
• Tax	6,000		
• Bank Charges (Remittance Fee)	2,000		
• Miscellaneous	2,500		
Equipment Transfer Payment to AIRIES		5,000	
APN's Contribution to IGES Administration		40,500	

Budget Plan (Draft) FY 2004/2005

Appendix 1: Multi-Year CAPaBLE Capacity Building Projects and their Respective Support in FY 2004/2005

Project Ref. #	Project Title	PI	Award in US\$	Proposed Duration	Remarks
Capacity Building Projects					
2003-CB01-Chinvanno	Building Capacity of Mekong River Countries to Assess Impacts from Climate Change - Case Study Approach on Assessment of Community Vulnerability and Adaptation to Impact of Climate Change on Water Resources and Food Production	Dr. Suppakorn CHINVANNO, Thailand	30,000	2 Years	
2003-CB02-Koshy	Training Institute on Climate and Extreme Events in the Pacific	Dr. Kanayathu KOSHY, Fiji	50,000	3 Years	
2003-CB03-Nakane	Capacity Building for Greenhouse Gas Inventory Development in Asia-Pacific Developing Countries	Dr. Hideaki NAKANE, Japan	40,000	3 Years	
2003-CB05-Naito	Capacity Building Workshop on Climate Change Mitigation with Locally Owned Technology and Systems	Dr. Masaaki NAITO, Japan	45,000	2 Years	
Subtotal Multi-Year Projects			165,000		
Available for New Projects, to be allocated in the first half of FY 04/05			80,000		
Contingency Fund¹⁾			25,000		
Grand Total for CB Projects in FY 04/05:			270,000		

1) To compensate any JPYen devaluation towards US\$. This amount can be used for further new CB projects in the second half of FY 04/05 if the exchange rate remains stable.

APN Review and Strategic Plan

Previous SPG/IGM meetings in Manila (March 2002) and in Hanoi (March 2003) highlighted the need to evaluate APN scientific activities since its establishment and recommended that the review/evaluation of the First Phase have specific reference to the six main goals set forth in the first APN Strategic Plan (1999-2004) and that the new strategic plan for the second phase has to be developed based on the evaluation of the first phase.

The 8th APN Steering Committee Meeting in Wellington (December 2003) recommended that one independent consultant be recruited to perform both the evaluation and write the 2nd strategic plan.

With the aforementioned issues in mind, and following Steering Committee consultation, the APN Secretariat contracted Mr. Randal Helten, Helten Communications Inc. in Canada to conduct the aforementioned tasks. The Terms of Reference is attached in the Appendix. (Mr. Helten is a previous APN Programme Manager, who worked with the Secretariat until 1999).

The Steering Committee also suggested that a one-off “blue ribbon panel”, consisting of eminent scientists from the global change community look into the science of APN. The “blue ribbon panel” meeting is scheduled for October 2003 (back-to-back with the 10th SC Meeting in Kobe, Japan.)

In terms of a timeline, it was pointed out that the strategic plan needs to be approved at the 10th IGM and preparation needs to be made in advance to allow for member country comments. The final draft is to be written in January after the “blue ribbon panel” meeting. An ad hoc group would work together to do this. Tasks would include circulating comments to APN members, and in particular specific areas for SPG members to endorse the science side of the review and strategic plan. Afterwards the draft would be re-circulated, say in December, for final comments. The draft could then be finalised and printed in time for the 10th SPG/IGM Meeting.

A more detailed work plan will be explained by Mr. Helten for comment by APN members.

Report on 2003 Call for Proposals Process¹

Pre-proposals: 43 received

- For Table of Pre-proposals see: **IGM/9/07-01/Appendix 1**
SPG/9/07-01/Appendix 1
- Number received slightly lower compared with 2002 number of 52.
- Similar to 2002, just under 50% submitted a full proposal.
- 19 of the 20 pre-proposals submitted as full proposals advanced to stage 1 of the review process. 1 was rejected at the rapid assessment stage.
- 11 of the 20 pre-proposals submitted as full proposals advanced to stage 2 and have been short-listed to receive funding.

Full-proposals: 48 received

- For Table of Full Proposals see: **IGM/9/07-01/Appendix 2**
SPG/9/07-01/Appendix 2
- Number of full proposals received is down 15% on 2002, the number of proposals was **manageable** this year, given that 17 reviewers responded in the review process.
- Six proposals were rejected at the Rapid Assessment Stage. Guidelines for this stage are to be drawn up in consultation with the Steering Committee in time for the launch of the 2004 Call for Proposals (end April).
- The average funds requested was **US\$48,195** in 2003 compared with **US\$80,836** in 2002. Note on the proposal cover-page and on the website **“US\$45,000 was the average awarded for 2003/2004”** was effective in keeping funding requests reasonable.
- 23 proposals (cut-off line was set at scores of 6 and above) advanced to the final stage.
- The success rate of the 2003 Call for Proposals will be highlighted on the APN website in April as:

2003 Proposals Process

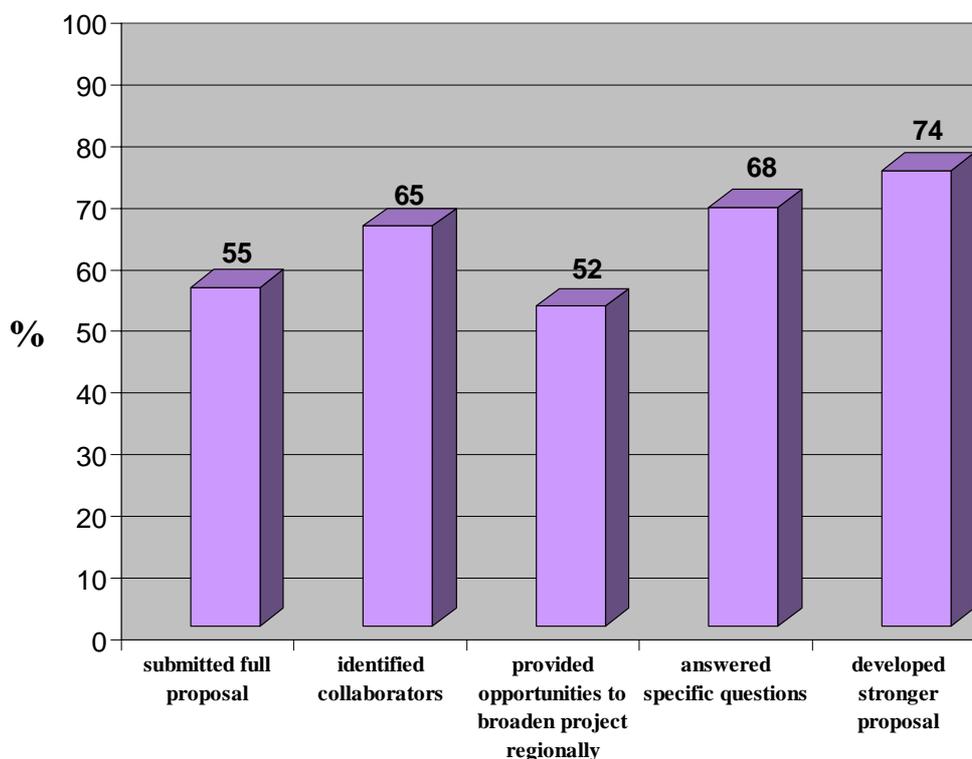
The Secretariat is pleased to announce that **48% of the proposals received** in the APN 2003 Call for Proposals advanced to the final stage of the review process and were actually considered for funding.

¹ This report is on the “Process” and will not cover proposals recommended for funding.

Review of Pre-Proposals Process - Results

The 7th SPG/IGM recommended that the success of the pre-proposals stage be investigated. In order to determine this, a questionnaire was compiled and approved for distribution at the 8th SPG/IGM. A list of proponents who submitted a pre-proposal was compiled and the questionnaire was distributed in January, 2004. Results compiled so far are indicated in the chart below:

Review of Pre-Proposals Process



Conclusion

The Pre-proposal stage of the APN Call for Proposals is a **valuable** part of the proposals process, particularly for those proponents who are unfamiliar with the APN Call for Proposals and the APN in general; and, particularly in assisting these proponents to write a stronger proposal.

Country	Location	Season code	Current per diems			% Difference (March 2004, USG)	Suggested revised per diems		
			Lodging	M&IE	Per diem (Logd. + M&IE)		Lodging	M&IE	Per diem (Logd. + M&IE)
Australia	Sydney	S1	60	30	90	37	80	40	120
Bangladesh	Dhaka	S1	55	25	80	7	55	25	80
Cambodia	Phnom Penh	S1	50	25	75	-12	45	20	65
China	Beijing	S1	70	40	110	0	70	40	110
Fiji	Suva	S1	50	35	85	9	50	35	85
India	New Delhi	S1	130	30	160	-23	100	30	130
Indonesia	Jakarta	S1	60	25	85	0	60	25	85
Japan	Osaka-Kobe	S1	120	50	170	12	120	50	170
Korea	Seoul	S1	90	40	130	-1	90	40	130
Laos	Vientiane	S1	50	25	75	0	50	25	75
Malaysia	Kuala Lumpur	S1	60	25	85	0	60	25	85
Mongolia	Ulaanbaatar	S1	50	25	75	0	50	25	75
Nepal	Kathmandu	S1	55	20	75	17	60	25	85
New Zealand	Wellington	S1	55	25	80	14	85	35	120
Pakistan	Islamabad	S1	55	20	75	14	70	30	100
Philippines	Manila	S1	60	25	85	0	60	30	90
Russia	Moscow	S1	100	40	140	7	100	40	140
Sri Lanka	Colombo	S1	60	30	90	0	60	30	90
Thailand	Bangkok	S1	60	30	90	0	70	40	110
USA	Washington DC	S1	100	40	140	25	140	45	185
Viet Nam	Hanoi	S1	60	30	90	8	60	30	90

% Difference calculated based on difference between March-2003 and current figures from USG State Dept. <http://www.state.gov/m/a/als/prdm/2004/>

Advised by SPG Member or Focal Point

Per diem revision suggested according to country request or USG rates.

Approx. 6% increase overall.

Review Process in the APN Call for Proposals

- **Review by Small Group¹ (Rapid Assessment Stage)**

The 8th IGM agreed that APN needed to confirm clear-cut scientific and technical criteria to ensure that the number of proposals moving to the SPG review stage does not pose a problem for the reviewers at Stage 1 (this depends too on the number of proposals received).

Secretariat searched the archives for RAS criteria. None exist. With the additional workload on both the Secretariat and the Steering Committee this year as a result of the CAPaBLE programme, the criteria have not yet been defined.

This was discussed further at the 8th SC Meeting in New Zealand in December, and the task will be addressed in the summer following the launch of the 2004 Call for Proposals.

- **Review by Scientific Planning Group (Stage 1 and Stage 2)**

One of the action points from the 8th IGM/SPG was to establish more refined criteria in the Reviewer Guidelines for SPG members. While the guidelines were re-written in part, this is an area that still needs work. The problem, perhaps, lies in that there is too much material to read. In consultation with the Steering Committee in December, it was suggested that an eLearning tool on CDROM be devised that provides an interactive step-by-step guide for reviewers. This too will be useful for external reviewers who will be targeted to review proposals submitted in the 2004 Call for Proposals.

- **Global Change Programmes and External Mail Review (Stage 2)**

The secretariat was to work with the Global Change Programmes in updating the list of external reviewers who could be asked to review APN proposals. Due to time constraints it was not possible to advertise this list in time for Stage 2 of the proposals. However, the Global Change Programmes' Directors all agreed to review a small number of proposals short-listed for funding at Stage 2. They were given appropriate proposals in their fields of expertise and asked to comment on the proposals. This was done in a timely manner for the Small Group to consider and recommend proposals for funding.

In order to update the Mail Review database, the following was posted on the APN website and circulated by members of the global change community:

The concept of an APN Mail Review System was devised in 2001 as an outcome of APN's Inter-Governmental Meetings, where an effective review process of APN proposals would be implemented. Under this review system we created a pool of some 130 scientists to review APN proposals in their chosen field(s) of expertise. While this method of seeking reviewers has thus far proved to be successful, we are now looking to fully incorporate the Mail Review System this year (following the

¹ The Small Group consists of the APN Secretariat Director, the SPG Co-Chairs and the START Secretariat Director.

launch of our 2004 Call for Proposals). With this in mind, the APN is now seeking your help in this process.

Reviewers can be global change scientists, global change organizations, neutral reviewers from outside the Asia-Pacific region, previous APN project leaders and collaborators, current and previous APN Scientific Planning Group members, etc. Reviewers may come from a variety of scientific backgrounds in any aspect of global change. Please note that we are also looking for generalists.

If you are interested in becoming an external reviewer of APN proposals an updated version of the reviewer background information form in MS Word format can be downloaded.

Since then, we have received approximately 40 new applications. It is hoped that a comprehensive list of potential reviewers will be available to provide comments (not scores) on the proposals received in the 2004 Call for Proposals.

Project Management

Awards

- As advised by the 8th IGM/SPG, the initial award letters and contracts issued to successful proponents' state that the award will be remitted in two instalments (80:20) and both the final activity and final financial reports must be submitted to APN before the final 20% of the award is remitted.

Contracts

- A “**Terms of Agreement**” is now attached to the Contract which highlights a number of conditions. See **IGM/9/07-06/Appendix 1**
SPG/9/07-06/Appendix 1

Notably, the following is included:

- PI establishes contact with the Liaison Officer in his/her region (based on the communication issues we discussed at 8th IGM/SPG).
- Full recognition must be given to APN in any published materials.
- All reports and project review questionnaire are to be submitted before the final 20% of the grant is remitted.
- PI follows APN guidelines on no-cost extensions.

Mandatory Project Reporting

- 6-month progress (electronically)
- Short report for publication (electronically)
- Multi-year project progress report (electronically)
- Final report (hard/soft versions and electronically)

Review Questionnaire

- Has been incorporated into the template for the final report and needs to be completed by the PI before 20% remaining grant is remitted.
- Statistics will be compiled and used by Randal Helten, consultant for the APN review/new strategic plan, and kept for future reference into the second phase.

Extension Guidelines

- One request was received this year for an extension (6 months). This was granted following consultation with the Steering Committee as a no-cost extension.
- Guidelines were compiled in consultation with the Steering Committee and are attached as: **IGM/9/07-06/Appendix 2**
SPG/9/07-06/Appendix 2

Notably the following is included:

- A detailed request for a project extension must be submitted to APN 3 months prior to the official end date of the project.
- When the request is submitted, the Secretariat, in consultation with the Steering Committee, discusses with the PI whether the proposed change of plan is needed.
- Valid reasons for the extension must be argued, although APN will encourage PI to implement the work as planned.

- New timeline for the extension must be included, and will be subject to discussion with the PI according to the circumstances.
- All extensions are granted on a **NO-COST** basis.

APN Terms of Agreement

I. Sections of the Contract

This contract consists of four main sections, which should be read carefully before signing:

- 1) Contract of APN Funded Activity
 - a. Activity, Contractee, Contractor and Term of the Contract;
 - b. Total Grant;
 - c. Grant Installments;
 - d. Contractual Requirements;
 - e. Contract Declaration.
- 2) Final version of the APN proposal including a detailed cost estimate (a budget) and detailed timeline for the project
- 3) APN Terms of Agreement
- 4) APN Financial Regulations

II. Total Grant

The Principal Investigator should be aware that the total grant awarded is not calculated on the basis of a detailed cost estimate provided by the Principal Investigator. The total grant awarded is based on the approval of the Inter-Governmental Meeting (IGM) and negotiations between the Principal Investigator and the APN Secretariat.

III. Remittance of Grant

The remittance of the APN grant can only be done upon receipt of an invoice prepared by the Institution of the Principal Investigator. This invoice must be an original invoice and printed on the official letterhead of the said Institution. Please note that a template invoice has been prepared for your convenience and will be sent to you in electronic format.

IV. Grant Instalments

The total grant awarded will be submitted in two instalments. Generally, the first instalment will be 80% of the total grant, remitted on receipt of an invoice as detailed under “**Remittance of Grant**” above. The final remittance of up to 20% of the total grant will be remitted when all of the mandatory documentation under “**APN Reporting Requirements**” has been received and reviewed to the satisfaction of APN and START.

V. APN Reporting Requirements

The professional quality and content of reports submitted by the Principal Investigator of an APN-funded project is of KEY IMPORTANCE. During the term of this contract, the APN Secretariat will ask you to complete the following reports:

(i) Mandatory Submission

The following mandatory reports must be submitted to APN:

- Short Report (for all Projects)
deadline (2nd February 2004)
- MY Progress Report (for continuing Multi-Year Projects)
deadline 16th February 2004)
- Final Activity Report (for One-Year and ending Multi-Year Projects)
deadline (28th February 2004)

- Financial Report (for all Projects)
deadline (15th March 2004)

The APN Secretariat shall provide templates for all of the above mandatory reports. The Final Activity Report will also include a “**Project Review Questionnaire**” that must be completed by all Principal Investigators.

(ii) Submission Upon Request

Upon request by the APN Secretariat the following must also be submitted:

- An article for the APN newsletter
- Progress report
- At least 2 hard copies and an electronic copy (in MS Word format) of all publications resulting from the funded project (e.g. workshop reports, CD-ROMS, Conference Proceedings, articles, etc.), and
- Website information, if applicable.
- Poster for project dissemination (if appropriate to the activity).

The final remittance of up to 20% of the total grant as stated in “**Grant Instalments**” will only be remitted when all of the mandatory documentation outlined above has been received and reviewed to the satisfaction of APN.

VI. APN Networking

The Principal Investigator should make every effort to expand the networking of the APN. Accordingly, the Principal Investigator is asked to establish contact with the APN Liaison Officer for his/her region. The APN Liaison Officer details are outlined below:

Southeast Asia

Dr. Anond SNIDVONGS

Southeast Asia START Global Change Regional Center
Room 508, 5th Floor, SWU Pathumwan Building Number 5
Chulalongkorn University
Henri Dunant Road, Bangkok, Thailand 10330.
Tel: +66-2-218-9464 to 7,
Fax: +66-2-251-9416
Email: apnsea@start.or.th

South Asia

Dr. C. SHARMA

National Physical Laboratory
Dr K. S. Krishnan Marg, New Delhi 110 012, India
Tel: +91-11-574-5298
Fax: +91-11-585-2678
Email: csharma@csnpl.ren.nic.in

Oceania

Ms. Leigh-Anne BULIRUARUA
START-Oceania

c/o SPAS, University of the South Pacific
PO Box 1168, Suva, Fiji
Tel: +679-3212-446
Fax: +679-3309-176
Email: startoceania@usp.ac.fj

Temperate East Asia

Ms. Ying YANG

c/o Institute of Atmospheric Physics
Chinese Academy of Sciences
Qi Jia Huo Zi, De Sheng Men Wai Street
Beijing, 100029 China
Tel: +86-10-6204-1317
Fax: + 86-10-6204-5230
Email: sec@tea.ac.cn

VII. APN Recognition

The publication of any materials, such as peer-reviewed journal publications, posters, proceedings etc, that is the direct result of receiving APN funding, must duly give full recognition to the APN. Acceptable recognition can be in the form of a written acknowledgement of APN as well as the display of the APN Logo in 300 dpi resolution (available from the APN Secretariat), as appropriate. Please also note that the full title of the APN is “**Asia-Pacific Network for Global Change Research**” and should be quoted in all APN acknowledgements. Principal Investigators are strongly encouraged to produce peer-reviewed papers and, should a peer review publication result, a reference to the contribution by APN *must* be made.

VIII. Project Changes and Non-Performance

While it is expected that the project will run smoothly, the Principal Investigator must return all remitted funds and sign a disclaimer for the second installment of the **total grant** if it is clear that the project objectives will not be met in the specific timescale of the project and when no “**Project Extension**” as detailed below has been applied for. Notification must be given to the APN in the case of any major changes to the project and/or in the performance of the project and subsequent approval from APN must be sought. Otherwise, the APN reserves the right to request the return of part or all of the **total grant**.

IX. Project Extension

If it is clear that a project will not meet the objectives of the original proposal for which the grant was awarded in the timescale outlined in the present contract, the Principal Investigator may request a No-cost Extension. This extension can only be applied for at a time **not less than 3 months** before the official term end of the present contract. Basic guidelines for a project extension are available from the APN Secretariat. The Principal Investigator should be aware that a no-cost extension will not be automatically granted and the project will be subject to review before any no-cost extension is agreed upon.

X. Future Proposal Submission

The Principle Investigator is **not eligible** to submit a new proposal under the APN regular

Call for Proposals while being funded under the term of the present contract. However, the APN **strongly encourages** the Principal Investigator to submit a proposal to the APN for future, related research in the Call for Proposals that is launched in the April following the term end of the present contract. Please note, however, that should a proposal be submitted, funding is not guaranteed.

XI. Ownership of Purchased Equipment

The ownership of any equipment, as agreed in advance of signing the present contract, purchased using APN funds following completion of the project will depend on the successful outcomes of the project. The decision will be informed to the Principal Investigator following a review of the project.



NO-COST EXTENSION FOR AN APN-FUNDED PROJECT - GUIDELINES -

Q. What is a no-cost extension?

APN expects principal investigators to complete all requirements of an award by the termination date listed in the award contract and stated in the Terms of Agreement. However, if the principal investigator feels that the scope and objectives of the project cannot be met by the project deadline, a no-cost extension can be requested. This no-cost extension **MUST** be submitted to APN at least 3 months (90 days) before the contract officially ends.

Q. How do I apply for a no-cost extension?

See the information below for details on how to apply for a no-cost extension

Q. What should I include in my written request?

1. First, you must be the Principal Investigator of the Project. All details, including name, organization, project title and reference number, must be included.
2. The current termination date of your project as indicated in your contract with APN.
3. The extended termination date (day/month/year) you are requesting. See note below about the maximum time APN will allow.
4. Justification-reasons you need an extension. See guidelines below for help.

Q. Is there a "form" for no-cost extension requests?

No. However, please submit a request based on the above details and note that APN prefers submission of the request electronically as an MS Word document.

Q. Where and to whom should I send my request?

The request should be sent to the APN Secretariat for the attention of the Programme Manager for Scientific Affairs: Dr. Linda Stevenson. Please send the request to the following e-mail accounts: l Stevenson@apn.gr.jp and info@apn.gr.jp

Q. How long of an extension can I request?

APN will allow first-time requests of 3-month, 6-month or 12-month extensions. Second-time requests are dealt with on a case-by-case basis and are usually never required for an APN project. Please note that the extension period allowable varies in accordance with the regulations of APN's sponsors (some APN sponsors may, for example, not allow a 12-month extension period).

Q. What happens if my request to APN is late?

If your request is late, APN may deny it. Dealing with costs incurred after the termination date would be subject to strict conditions; however, in extreme cases, the APN may terminate the contract and request immediate return of unspent funds.

Q. Who approves or denies my request for a no-cost extension?

The APN Secretariat, under consultation with the APN Steering Committee, approves or denies any request for a no-cost extension

Q. How will I know if my request has been approved?

The APN Secretariat will send you a notice by e-mail indicating we have approved the request. The notice will include the revised termination date.

Q. After my no-cost extension request is approved, may I spend the funds remaining in my account?

Yes. All remaining funds can be used for project purposes before the extended termination date. The term "**no-cost**" is sometimes misinterpreted. It does not mean you cannot spend during the extension period. It means you have requested additional time beyond the original termination date of the project without having received any additional funding.

Q. May I request additional funds in my no-cost extension request?

No.

Membership Development

APN Members (national Focal Points and SPG members)

After the 8th IGM in Hanoi, the APN has new national Focal Points in Bangladesh, Fiji, Japan, Mongolia, Republic of Korea and Thailand; and new SPG members in Cambodia and the Republic of Korea. However, nominations for national Focal Points for Nepal and the Russian Federation, and SPG members for Bangladesh and Viet Nam have not yet materialized.

Pacific Island Countries (PICs)

Possible avenues for collective representation of Pacific Island Countries are still on-going. There are a range of organisations that could potentially represent APN, and discussions are underway to find appropriate representation. (unrealistic for 19 independent Pacific Island states attend IGM/SPG meetings).

APN Membership

APN membership is generally open to any country within the Asia-Pacific region, however, countries within the region should independently decide and APN should not actively pursue membership other than sending initial paperwork and inviting potential countries to attend annual meetings.

With the aforementioned issues in mind, and following Steering Committee consultation, the Secretariat has already collected contact information for Brunei and Singapore with the help of the UNEP Regional office in Asia and Pacific, and they will be provided with IGM/SPG proceedings, APN newsletter and other related materials. Brunei and Singapore may also be invited to the 10th IGM/SPG, should they so wish.

Overall, there has been concern at recent IGM's that the expansion of APN membership may drain APN resources. However, if we increase APN membership and introduce national contributions then this will increase our donations overall. This is a point worth considering for the future, particularly toward the new Strategic Plan.

Ad Hoc Financial Resources Committee

Introduction

At APN 7 (Hanoi) there was discussion about opportunities for obtaining additional monies to fund APN's future activities. Dr Michael Stoddart, Australian Focal Point, undertook to coordinate a paper for report to APN 9 (Canberra). A mechanism was established for an Ad Hoc committee to be established, should that prove necessary. In the event there appeared little need for the Ad Hoc committee to meet.

Progress to date

Before any clear proposals could be put before APN it was necessary to analyse carefully and precisely, APN's role in facilitating research and capacity building in the field of global change.

The APN is a body designed to allocate resources made available by two major sponsors (Japan and the USA) for research into global change, with small amounts contributed from other nations. Its systems are geared for assessing the relative merits of mostly *ad hoc* proposals made to it and for handling the transference of financial assistance to run approved projects. It is not a body designed to initiate research proposals and to seek external funds to resource them.

Continued efforts should be made to find new sources of funds on the same bases as is the case for the major contributors. Some brief discussions of this were made by the Steering Committee at Hanoi, and should be followed up. While this may be unlikely to provide a large revenue stream it need to be explored.

There are a number of agencies that fund research in the areas of APN's interests. These include the Asia Development Bank, World Bank, Global Environment Facility, START etc. The question that must be answered is what special '*value-adding*' would the APN give to an application to one of these bodies that would not be given by any other body? In other words, what would make a proposal made by the APN more favourable than a proposal made by some other body/institution/country, and more likely to be funded than a proposal made by another body? The answer to this is not clear to the Steering Committee. A mechanism would have to be developed that would allow the APN to seek proposals from member nations while convincing the member nations that there would be a better chance of success if they pursued their proposals through APN rather than through some other route. It is anticipated that this will not be easy, though with the right amount of enthusiasm it may be achievable.

An extension of the above that deserves consideration is that the APN approaches the Asian Development Bank (ADB) to seek their assistance. The APN has some claim to being an intergovernmental organisation and this may help it to gain a sympathetic hearing. Japan is the largest contributor to the ADB so it might be appropriate for the

Director of the APN to make the initial, and perhaps informal, approach. Even if ADB were able only to 'rebadge' some existing expenditure as APN expenditure it would help to offset the perception that the APN is running low on funds.

Following discussions at the 8th SC meeting, Mr. Sombo Yamamura, Director of the APN Secretariat, informally contacted the ADB in Manila to tentatively explore opportunities. He concluded that it is not likely that ADB will be a major funding source for APN, but the possibility of co-funding/joint activities still remains and should be pursued further.

His conclusion is based on the following considerations: (i) ADB does not focus on environmental monitoring and research in general, rather, it focuses on specific topics in specific countries/sub-regions; (ii) ADB projects that explicitly address global change issues are perhaps limited to those on energy efficiency, renewable energy, disaster prevention, etc.; (iii) the recipients of ADB funds should be countries and, thus APN's status is not suitable to become the recipient of its fund; (iv) ADB is a bank and its funds are basically prepared for loan projects; (v) although ADB has some technical assistance (TA) programs, APN is an inter-governmental network whose mission is not to provide any service on technical assistance independently; and (vi) ADB's resources for sub-regional and regional TAs are becoming smaller than before, compared with those for specific countries.

Examples of ADB's TA programme include:

1. Promotion of cleaner production in the Philippines, ADB's Southeast Asia Department is cooperating with ICETT. (ICETT is registered in ADB's "Data on Consulting Firms (DACON)" database.)

2. National Performance Assessment and Subregional Strategic Environment Framework (SEF) in Greater Mekong Subregion (GMS), ADB's Mekong Department is cooperating with UNEP RRC.AP, IGES, and NIES. (ADB has committed US\$ 800,000 to this \$2.4 million project.)

No approach has yet been made to the other international development agencies listed, such as the World Bank, Global Environment facility, START etc. but the lack of success with ADB does not suggest that approaches to these would be more successful.

IGM of the 9th APN is asked to consider if there are regional funding and/or partnership opportunities that could be developed. APN's principal values are that it consists of Focal Points who are mainly officers of Environment Departments, or their equivalent, and who have knowledge of governmental approaches to regional issues. It also has access to scientists from each member country who are aware of global change issues in their countries and regions.

APN members are asked to consider how this matter should be advanced.

Amendments to APN Framework

(1) Transferring APN Secretariat from AIRIES to IGES as of April 1st 2004

Japanese Ministry of the Environment (MOE-Japan) decided to transfer the body which maintains an APN account, from AIRIES (Association of International Research Initiatives for Environmental Studies) to IGES (the Institute for Global Environmental Strategies) as of April 1st 2004. This means that all the functions of AIRIES, with regard to APN Secretariat, will be transferred to IGES.

IGES is an independent, non profit think tank, 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 realize greater sustainability and equity in the global community.

It should be noted that APN decision-making is independent from IGES. 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. In addition, the Japanese contribution (MOE-Japan) to APN will change to a contribution fund (to IGES earmarked for APN) as of the Japanese 2004 fiscal year. IGES will receive 3% in overheads from the MOE-Japan's contribution to APN.

With this change, APN's budget implementation of the Japanese contribution from MOE-Japan will be more flexible and APN's burden from the Japanese taxation system will significantly be reduced. APN's financial report will be submitted for external audit by an independent body with an international reputation. Thus, APN's status will become more robust with the aforementioned financial, legal and administrative arrangements.

MOE-Japan came up with the plan during the course of the reform plan of public service corporations lead by the national government.

In this regard, based on the following clause of the "Framework of the APN", Japan would like to propose amendments of the framework for approval by the 9th IGM.

(Framework of the APN: Date and Effect of Amendments)

I. Amendments to this document must be proposed by a member country and approved by the IGM.

For your information, IGES's meeting of the Board of Directors was held on 28th February 2004 at it's headquarter in Hayama Japan. I am pleased to inform you that all the proposals related to APN, which included APN's special account and its decision making procedures, were approved.

(2) 9th Inter-Governmental Meeting Approval

As a result of the move of the APN Secretariat from AIRIES to IGES, as explained by the Japanese government, the 9th IGM approved the following amendments:

Changes to the APN Framework:

(1) Organisational Arrangement and Procedures,

C. Steering Committee,

C. 2 Membership:

To add the following article:

“III. The SC may invite observers to participate in SC activities.”

and original article III to be re-numbered to IV.

“IV. The names of individuals ...as soon as possible.”

(2) Organisational Arrangement and Procedures,

D.Secretariat,

D. 1 Mandate

“I. The Secretariat is the principal administrative organ of the APN and is located at the APN Centre, 5F, IHD Centre Building, 1-5-1 Wakinohama Kaigan Dori, Chuo-Ku, Kobe 651-0073, Japan. The Secretariat consists of a Director, appointed by the Ministry of the Environment, Japan, and an appropriate number of staff, and:

a. carries out the day-to-day operations of the network;

b. provides secretariat support to the organs of the APN; and

c. implements IGM decisions.”, and

“II. For financial and administrative purposes, the Secretariat operates under administrative arrangements reached between the Secretariat and the Institute for Global Environmental Strategies (hereinafter referred to as IGES).”

(3) Organisational Arrangement and Procedures,

D. Secretariat

D. 2 Financial Provisions,

i) Entire article V to be amended as following:

“V. The Secretariat will first submit a financial report to IGES. IGES will incorporate APN’s financial report into its Financial Statement and submit it for external audit to an independent body. The Secretariat will then submit an audited APN financial report to the IGM for approval.”*

ii) Footnote

To amend the entire footnote as following:

“The APN maintains 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.”

(4) Date and Effect of Amendments,

“I. Amendments to this document must be proposed by a member country or the SC and approved by the IGM. Proposed amendments and supporting documentation must be distributed to member countries no later than two months prior to the IGM at which the proposed amendments are to be considered. All amendments so approved will take effect on the day

following the IGM at which these amendments are approved, unless the IGM decides on another date.”

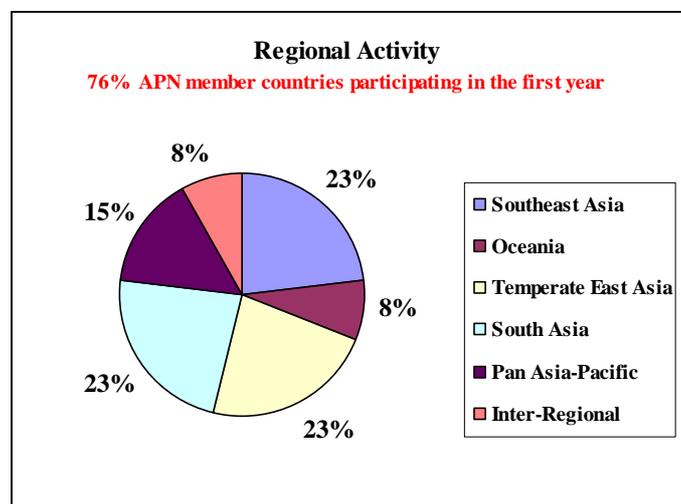
It should be highlighted in the 9th IGM Chair Summary that the move from AIRIES to IGES will be effective from April 01, 2004.

CAPaBLE Programme

1. Summary of Progress

Following the launch of the CAPaBLE Programme on April 16th 2003, there have been considerable developments:

- Announcement on the APN website and other websites in the GC community;
- Preparation of a poster and pamphlet for dissemination;
- Call for Proposals for comprehensive research project proposals;
CAPaBLE Programme Development Workshop in Kobe - see **IGM/9/12-02**
SPG/9/12-02
- Submission of proposals from various stakeholders within the APN community;
- The selection of CRP proposal reviewers and the establishment of an interim CAPaBLE Standing Committee (under the Steering Committee);
- Establishment of a review process for CRPs;
- Establishment of a “proposal application” for capacity building activities;
- Review of CRP and CB proposals by an Interim CAPaBLE Standing Committee and external IPCC reviewers;
- Selection and approval of two CRPs and eight capacity building activities;
- Dissemination of the results of the projects selected for funding in 2003/2004;
- Establishment of a logo;
- 12-page brochure being prepared for distribution at various scientific and political arenas;
- New poster being prepared that highlights Year 1 developments and future outlook;
- The opportunity to showcase CAPaBLE at various scientific and political fora in the region including:
 - PALM, Okinawa
 - Eco-Asia 2004, Hiyama
 - 13th AP Seminar on Climate Change, Miyazaki
 - Climate & Policy Dialogue, Tokyo
 - START SSC Meeting, Italy
 - IGFA Meeting, South Africa
 - Sustainable Development Conference, Perth, WA
- 16 APN member countries are currently involved in CAPaBLE activities.



2. Programme Development Workshop Proceedings

The final version of the proceedings was completed following comments from SPG members and national Focal Points. The proceedings can be used as a reference document providing information and guidance on the implementation of CAPaBLE. A printed version is provided – see **IGM/9/12-02**
SPG/9/12-02

An electronic version can be downloaded from the APN website at:
<http://www.apn.gr.jp/activity/capable/proceedings_pdw.pdf>.

3. Selected Projects in 2003/2004

For a summary table of the 8 capacity building activities and the 2 comprehensive research projects currently being funded under CAPaBLE - see **IGM/9/12-03**
SPG/9/12-03

4. CAPaBLE Standing Committee

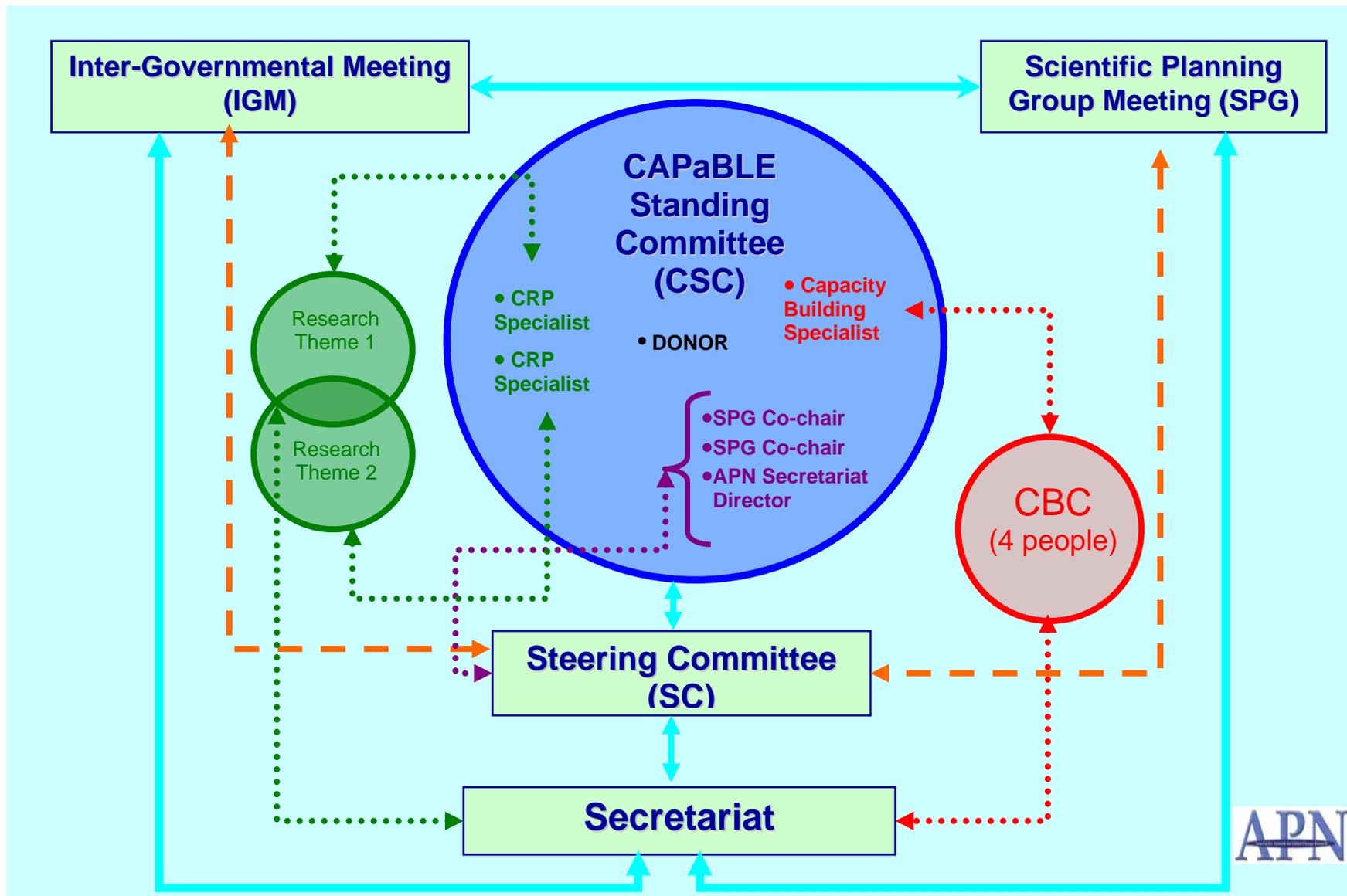
With the development of CAPaBLE happening at a very rapid pace, it is vital that the APN creates an effective implementation strategy and mode of operation for the CAPaBLE Programme in its current, first phase from April 2003 to March 2006. To do this effectively, it has been proposed that a CAPaBLE Standing Committee (CSC) that incorporates a smaller Capacity Building Committee (CBC) be established. The CSC will work under the APN's Steering Committee and will possess the necessary expertise and capabilities to take a strategic and progressive approach in the implementation and development of the CAPaBLE Programme.

With this in mind, 6 members for the CSC are being sought who:

1. Are well versed in APN activities;
2. Are willing to commit for a minimum of 2 years (mode of operation via e-mail and tele-conferencing);
3. Have relevant expertise in scientific capacity building activities at the local, national and/or regional levels;
4. Have relevant expertise in the areas of climate change as related to food and water security and sustainable development; and
5. Have good knowledge of the IPCC and UNFCCC processes.

In addition to the above, two CSC members will act as Mentors in the supervision of the Comprehensive Research Projects and will have full working knowledge of the IPCC process, particularly Working Group II and Working Group III activities in the Third Assessment Report.

The establishment of the CSC was discussed with the Steering Committee and an e-mail canvassing for nominees was distributed among the global change community. The deadline for receiving nominations is 31 March, 2004. The aim is to formally establish the CSC, incorporating the smaller CBC, by early May, 2004. The structure of the CSC is outlined on the next page.



Capacity Building Projects and Activities							Project Budgets		
Proposal	Title	Project Focus	Regional Focus	PI & Country	PI Email	Countries Involved	Year 1: 2003/2004	Year 2: 2004/2005	Year 3: 2005/2006
2003-CB-01	Building Capacity of Mekong River Countries to Assess Impacts from Climate Change - Case Study Approach on Assessment of Community Vulnerability and Adaptation to Impact of Climate Change on Water Resources and Food Production	Scientific Capacity Building	SEA	Suppakorn Chinvano, THAILAND	suppakorn@start.or.th	Cambodia-optional, Lao PDR, Thailand , Viet Nam-optional	28,500	30,000	0
2003-CB-02	Training Institute on Climate and Extreme Events in the Pacific	Scientific Capacity Building & Awareness Raising	Oceania	Kanayathu Koshy, FIJI	koshy_k@usp.ac.jp	Fiji , New Zealand, PICs, USA	50,000	50,000	50,000
2003-CB-03	Capacity Building for Greenhouse Gas Inventory Development in Asia-Pacific Developing Countries	Scientific Capacity Building	TEA/SEA	Hideaki Nakane, JAPAN	nakane@nies.go.jp	Cambodia, Japan , Thailand,	39,500	40,000	40,000
2003-CB-04	Creating Climate Knowledge Networks through Strategic, Global Linkages	Scientific Capacity Building	APN-IAI Inter-regional	Holger Meinke, AUSTRALIA	holger.meinke@dpi.qld.gov.au	APN (Australia, India, Indonesia, Pakistan, Viet Nam); IAI (Argentina, Bolivia, Brazil, Paraguay, Uruguay)	40,000	0	0
2003-CB-05	Capacity Building Workshop on Climate Change Mitigation with Locally Owned Technology and Systems	Scientific Capacity Building	TEA and others	Masaaki NAITO, JAPAN	ecosoundmail@kiess.org	China, India, Japan , USA	35,000	45,000	0
2003-CB-06	UNFCCC Training Workshop for the National Climate Change Focal Points in the APN Region on the Guidelines on National Communications from Non-Annex I Parties	Scientific Capacity Building	Pan-Asia	Martha PERDOMO, UNFCCC Secretariat	mperdomo@unfccc.int	All countries in Asia	20,000	0	0
2003-CB-07	National Capacity Building Workshop on Global Change Research	Scientific Capacity Building and Awareness Raising	SA	Amir MUHAMMED, PAKISTAN	amir@nu.edu.pk	Pakistan (local capacity building)	21,000	0	0
2003-CB-08	WCRP-sponsored RCM workshop / CLIVAR Conference	Scientific Capacity Building	Pan AP	Valery DETEMMERMAN, WCRP Secretariat	vdetemmerman@wmo.int	All countries in Asia-Pacific	10,000	0	0
Comprehensive Research Projects							Project Budgets		
Proposal	Title	Project Focus	Regional Focus	PI & Country	PI Email	Countries Involved	Year 1: 2003/2004	Year 2: 2004/2005	Year 3: 2005/2006
2003-CRP-Theme I	Enhancement of National Capacities in the Application of Simulation Models for the Assessment of Climate Change and its Impacts on Water Resources and Food and Agricultural Production	Theme I (from IPCC TAR WGII)	SA	Dr. Arshad Muhammad Khan, PAKISTAN	gcisc@comsats.net.pk	Australia, Bangladesh, Nepal, Pakistan , USA	120,000	90,000	90,000
2003-CRP-Theme II	Integrated Assessment Model for Developing Countries and Analysis of Mitigation Options and Sustainable Development Opportunities	Theme II (from IPCC TAR WGIII)	SA/TEA/SEA	Prof. P. R. Shukla, INDIA	shukla@iimahd.ernet.in	China, India , Thailand	120,000	90,000	90,000
							Year 2 and Year 3 Awards will be based on sufficient progress and are estimated budgets. Review of projects will be carried out by the CAPaBLE Standing Committee		

New CAPaBLE Activities in 2004

This year, there is approximately **US\$80,000** available for new activities under the **Capacity Building**¹ pillar of CAPaBLE.

Numerous potential activities are listed in the Proceedings of the CAPaBLE Programme Development Workshop. Those highlighted below were discussed at the recent Steering Committee meeting in New Zealand:

- **Activities proposed by member countries**
Opportunities are available to IGM and SPG members for proposing activities under CAPaBLE for 2004/2005. Proposals are welcome from the member countries (although no new proposals have been received to date).
- **Travel fellowship awards**
Under the CAPaBLE Programme, an idea for establishing a Travel Grant Fellowship programme was presented to the Steering Committee meeting in New Zealand. In exploring this area and potential opportunities, the Steering Committee advised that a careful and strategic approach be taken in determining who is eligible for funds.
- **Capacity building activities at the national level**
SPG Co-Chair, Amir Muhammed, expressed an interest in building capacity at the national level for countries that do not have adequately developed research capacity in global change. It would be essential to have workshops for younger scientists (or scientists who are within 5 years of receiving their PhD) to create awareness about global change, research challenges and the international effort in global change research. The objective is to stimulate young scientists to undertake research in global change issues especially relevant to their countries and local areas. This is different from supporting already active researchers through competitive research grants. The first workshop will take place in Islamabad, Pakistan on 12-14 April, 2004 (funds already allocated from 2003/2004 budget).
- **eLearning for capacity building, awareness raising and networking**
The APN Secretariat has been involved “eWorld” meetings held at UNEP/IETC in Osaka with IGES, to learn more about eLearning activities and its potential benefits as a capacity building and awareness-raising resource. This idea was discussed with the Steering Committee who agreed that it is a useful exercise worth exploring. Interactive media courses would be developed and initially distributed via CDROM and on the website addressing issues on APN and its activities/opportunities, global change research and the global change community, sustainable development issues, climate change and related issues, etc. These CDROMS could be distributed by member countries and at capacity building workshops and other arenas providing

¹ Proposals are only open for capacity building and dissemination activities. Unless additional funds become available for Comprehensive Research Projects (CRPs), only the two currently selected CRPs will be funded during Phase I of CAPaBLE.

information to scientists, and policy-makers at the national level. eLearning tools could also be established in local languages, giving SPG members and national Focal Points opportunities to expand the APN network in their own countries/regions.

The long-term aim would be to raise the profile of APN, while building capacity and creating awareness about global change research activities in developing countries. With eLearning, this can be achieved at minimal cost.

APN Capacity Building Strategies

The intent of the APN is to:

- Foster global changes research in the Asia-Pacific region;
- Increase developing country participation on that research; and
- Strengthen interactions between the science community and policy makers.

However, scientific research capacity is complex, involving the strength of individuals to carry out the research and the institutional arrangements that support the individuals. Neither is possible without the cultural and political environment where the research can find application and is valued. Sub-elements of these components are illustrated in the attached Figure (page 5).

Each country of the Asia-Pacific region is at a different stage of development of these core components of capacity. Whilst the generally less developed countries may require significantly more emphasis on issues of institutional support and the building of the strength of individual scientists, it can be argued that all countries are still struggling with how to provide a strong science-policy interface. The latter is crucial because on the one hand it is the mechanism by which new knowledge concerning the changing global environment can be incorporated into decision-making, and on the other hand, it can ensure that the science can be focussed on key issues of policy concern and is recognised for its value to the wider community.

The challenge for the APN, with its restricted resources is to:

- Remain sufficiently broad in its remit to be able to respond to the significantly different needs of the individual nations of the region, and
- Focus its efforts where it can deliver the most benefit.

In this session we seek the input of the IGM/SPG in developing a clearer and shared description of what kind of Capacity Building is appropriate for APN. We might look briefly at the broader and full spectrum of opportunity, but we need to discuss what is regarded as the best focus for APN. This should then be reflected in the criteria used to direct and select research proposals, workshops and other activities with a key Capacity Building element.

The following are ideas extracted from previous discussions to paint the broader picture of the kinds of activities that have been or might be envisaged.

General tenets

1. Capacity Building can be a number of things, e.g. institutional, individual and country, resource capability, scientific, technological, etc;
2. Capacity building MUST lead to sustainable capability,
3. Contribution of science to sustainable development is becoming a very important issue. What can science and technology do in the prediction of extreme events, etc.?

4. What is the contribution of sustainable development?
5. Global change science that identifies impacts, assesses vulnerability and offers options for adaptive and mitigative policies is part of the new contribution of science to sustainability. We need to recognise that the models that may work well at the global level and regional levels may be ineffective at the sub-regional and local levels;
6. Need to take the best science available at the regional and sub-regional levels – there is an opening here for CAPaBLE involvement; and
7. Country involvement at the local /indigenous level is important.

Science capacity

- i. Train and enhance the capacity of existing senior people and develop junior capacity as well
- ii. There are very few structured courses in global change and even in environmental science. We must build on this. Is it possible to do this under CAPaBLE?
- iii. More interdisciplinary work is needed. If we can get regional networks started that have strength then it is particularly policy relevant as well. This will have help create capability/capacity
- iv. Approaches to be developed might include:
 - Young Scientists Travel Fellowship
 - Key meeting travel grants
 - Specific criteria to be established (poster/paper presentations, climate change-related, PhD within 5 years, report on outcomes, training workshops, etc.)
 - Sub regional/national meetings/workshops etc. on climate change
 - Training courses
 - current programmes, new programmes
 - Set aside CAPaBLE funds
 - Fund the writing of a specific course related to climate change
 - Capacity building activities in local language
 - Online courses – eLearning
- v. Relevant Capacity Building activities:
 - Contribution ESSP encompassing all global change programmes
 - Internal networks
 - Mentoring
 - Literature relevant to IPCC
 - Dedicated sustainable development through travel support for workshop/seminar/conference support
 - International networking
 - Young scientists
 - Greenhouse gas inventories, carbon accounting, methodologies
 - National methods for accounting, national guidelines
 - SIDS
 - Technology transfer
 - Adaptation Strategies, Impacts assessment, Vulnerability assessment
 - Adaptation opportunities
 - Integrated assessments and policy options

- Mitigation
 - i. Biological pathways
 - ii. Industrial/technological pathways
- Science-Policy interfacing
 - i. Policy-relevant scientific agenda
- vi. Scientifically-sound policy formulation
- vii. Specific topics under climate change:
 - GHGs
 - SIDS
 - Impacts/vulnerability/adaptation/mitigation
 - Other partnerships:
 - i. IAI-APN (ENSO, climate extremes or agriculture)
 - ii. DIVERSITAS/IGBP/WCRP/IHDP - ESSP
 - iii. ESSP's MAIRS
 - iv. START
 - v. CGIAR has launched various Challenge Programmes including rainforests, food and water, which may match well with the CAPaBLE programme
 - vi. GCOS and their capacity building agenda

Science-Policy Interface Capacity

- A. More should be done to interface science and policy; this is different for each country and a complicated process;
- B. Need to seek a method of converting knowledge-based interactions in terms of policy relevancy;
- C. The IPCC has been a huge experiment in global coupling of science and policy. In many ways it has been very successful. To convince policy-makers of the usefulness of APN is to make a significant difference to the IPCC through APN activities;
- D. Activities can contribute to UNFCCC and IPCC in a different way, through GHG inventories, etc.;
- E. Policy-makers and financial authorities are impatient; we need tangible outputs that appeal to the financial authorities;
- F. Policy-science interfacing and improvement of decision-making: Should we invite a research proposal in terms of how sustainable development legislation gets into major projects?
- G. Governments in developed countries are putting environmental legislation on their agenda but there are still no real linkages;
- H. Awareness raising activities;
- I. Some ways for APN Science-Policy interface development
 - Dissemination of APN activities at specific fora such as the Pacific Islands Forum, ECO ASIA, the Asia-Pacific Seminar on Climate Change, COP, IPCC, UNFCCC, etc., was discussed. Although relevant to an extent, is this the best way to create the policy-science interface? This is a very complicated process and we should perhaps consider the following:
 - SPG/IGM overlap
 - Bring together a group of scientists and policy-makers that could discuss how best to interface. (see Figure)
 - Develop activities based on the outcome which might include:

- i. Fora for APN dissemination
- ii. Involvement of APN national Focal Points
- iii. Mode II Science (knowledge generation)
- iv. Civil society – unsure – too many differences at each country-level

How should we define capacity building for APN?

How can we ensure that scientific results receive full credence in the policy process?

SCIENCE

Primary and Secondary Education

Tertiary Education

Research Institutions

Infrastructure/Equipment

Networks/global partnerships

Policy/national priority relevance

INSTITUTIONAL

Bricks and Mortar

- Schools
- Universities
- Institutions

Cultural

- Understanding of pluralistic contribution of science
- Commitment to scientific/technological literate society
- Education with science/technology component

Governance

- Science/technology portfolio in government
- Application of science in decision making
- Multi-sectoral decision making process

**SCIENCE/
POLICY INTERFACE**

**Mode II Science
Multi-sectoral decision making process**

Parts 107-114 of the Plan of Implementation for WSSD

107. Assist developing countries in building capacity to access a larger share of multilateral and global research and development programmes. In this regard, strengthen and, where appropriate, create centres for sustainable development in developing countries.

108. Build greater capacity in science and technology for sustainable development, with action to improve collaboration and partnerships on research and development and their widespread application among research institutions, universities, the private sector, governments, NGOs and networks, as well as between and among scientists and academics of developing and developed countries, and in this regard encourage networking with and between centres of scientific excellence in developing countries.

109. Improve policy and decision-making at all levels through, inter alia, improved collaboration between natural and social scientists, and between scientists and policy makers, including through urgent actions at all levels to:

- (a) Increase the use of scientific knowledge and technology, and increase the beneficial use of local and indigenous knowledge in a manner respectful of the holders of that knowledge and consistent with national law;
- (b) Make greater use of integrated scientific assessments, risk assessments and interdisciplinary and intersectoral approaches;
- (c) Continue to support and collaborate with international scientific assessments supporting decision-making, including the Intergovernmental Panel on Climate Change, with the broad participation of developing country experts;
- (d) Assist developing countries in developing and implementing science and technology policies;
- (e) Establish partnerships between scientific, public and private institutions, and by integrating scientists' advice into decision-making bodies in order to ensure a greater role for science, technology development and engineering sectors;
- (f) Promote and improve science-based decision-making and reaffirm the precautionary approach as set out in principle 15 of the Rio Declaration on Environment and Development, which states: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

110. Assist developing countries, through international cooperation, in enhancing their capacity in their efforts to address issues pertaining to environmental protection including in their formulation and implementation of policies for environmental management and protection, including through urgent actions at all levels to:

- (a) Improve their use of science and technology for environmental monitoring, assessment models, accurate databases and integrated information systems;
- (b) Promote and, where appropriate, improve their use of satellite technologies for quality data collection, verification and updating, and further improvement of aerial and ground-based observations, in support of their efforts to collect quality, accurate, long-term, consistent and reliable data;

(c) Set up and, where appropriate, further develop national statistical services capable of providing sound data on science education and research and development activities that are necessary for effective science and technology policy-making.

111. 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 knowledge, experience and best practices and building scientific capacities, particularly in developing countries.

112. Use information and communication technologies, where appropriate, as tools to increase the frequency of communication and the sharing of experience and knowledge, and to improve the quality of and access to information and communications technology in all countries, building on the work facilitated by the United Nations Information and Communications Technology Task Force and the efforts of other relevant international and regional forums.

113. Support publicly funded research and development entities to engage in strategic alliances for the purpose of enhancing research and development to achieve cleaner production and product technologies, through, inter alia, the mobilization from all sources of adequate financial and technical resources, including new and additional resources, and encourage the transfer and diffusion of those technologies, in particular to developing countries.

114. Examine issues of global public interest through open, transparent and inclusive workshops to promote a better public understanding of such questions.

Proposed APN Activities (1)

Joint APN & WHO Session
“Climate Calamities and Human Health”

A side-event at the World Conference on Disaster Reduction

Climate change is already increasing the frequency and intensity of natural disasters, and to tackle such disasters, a wide variety of knowledge, wisdom and resources needs to be mobilized and effectively integrated. With this in mind, institutions and centres in Kobe formed a Disaster Reduction Alliance (DRA^{*}) in 2003 with a goal to synergize international cooperation towards disaster reduction.

From 18-22 January 2005 the World Conference on Disaster Reduction (WCDR) will convene in Kobe, and as part of a DRA initiative, APN and WHO Centre for Health Development are seeking IGM approval for a joint session at the WCDR.

Draft program for three-hour Session on “climate calamities and human health”:

15 Minutes:

- Welcome remarks by Hyogo Prefectural Governor or Vice-Governor
- Opening Address by either the APN Secretariat Director or the WHO Kobe Centre for Health Development Director

30 Minutes:

- APN general presentation (15 minutes)
- WHO general presentation (15 minutes)

60 Minutes, two 30 minute Keynote Addresses:

- Climate Change and Human Health (incorporating science-policy interfacing)
- Early Warning Systems

65 minute Panel Session:

- Panel, including the Chair, will consist of four international experts. The floor will open for an inter-active discussion.

10 minute Closing remarks:

- Made by either the APN Secretariat Director or the WHO Kobe Centre for Health Development Director

* DRA membership includes, APN; Asian Disaster Reduction Center (ADRC); International EMECS Center; Japan International Cooperation Agency (JICA); United Nations Office for the Coordination of Humanitarian Affairs (OCHA); United Nations Centre for Regional Development (UNCRD); Earthquake Disaster Mitigation Research Center (EDM); World Health Organization (WHO) Centre for Health Development; IGES Kansai Research Center; Japanese Red Cross Society (JRCS); Disaster Reduction Institution (DRI); and Hyogo Emergency Medical Centre.

List of possible presenters and panelists:

1. Climate Change and Human Health: Carlos Corvalan (project leader of WHO, WMO, UNEP report on "climate change and human health - risks and responses")
2. Early Warning Systems: Mickey Glantz, National Center for Atmospheric Research (NCAR), USA. Website: www.esig.ucar.edu/warning/
3. Land-Use and Cover-Change: Ryosuke Shibasaki, Center for Spatial Information Science, University of Tokyo. Scientific steering committee of the LUCC Core Project of IGBP/IHDP.
4. Science - Policy Interfacing: Shuzo Nishioka, National Institute for Environmental Strategies (NIES)
5. Natural Disaster Management in Asia-Pacific (climate induced, e.g., ENSO), to be arranged
6. Panel Chair, Climate Change and Human Health: Anthony McMichael (Australia National University, editor of aforementioned WHO report)
7. WHO, to be arranged
8. APN, Martin Rice, Programme Manager, APN Secretariat

Logistics

- *Estimated Budget: US\$ 30,000*
- Both APN and the WHO Centre for Health Development will co-share costs.
- *Venue:* To be arranged, preferably next to main conference hall on Port Island, Kobe.
- *Expected audience:* 200 researchers, policy-makers, disaster relief managers and civil society.

Proposed APN Activities (2)

APN's Poster Presentation at GEO-4 in Tokyo

The 8th Steering Committee meeting highlighted recent movements regarding GEO, as APN was highlighted at the GEO-2, held in November 2003, as an organisation who could be involved with GEO in terms of its capacity building component. GEO stands for the inter-governmental *ad hoc* Group on Earth Observations and it was established as a result of the First Earth Observation Summit, held in Washington DC in July 2003. They have had intensive discussions to develop a conceptual framework and a 10-year Implementation Plan for building a comprehensive, coordinated, and sustained Earth observation system of systems aiming at its completion in late 2004. The APN Steering Committee recommended that APN can also be incorporated into the GEO programme in terms of the training and capacity building component of the GEO programme (e.g. CAPaBLE exactly fits into the GEO agenda).

Taking the opportunity of the fourth plenary meeting followed by the Earth Observation Summit II, side events of GEO4 is being planned from 21st to 24th April, 2004 at the National Museum of Emerging Science and Innovation, which is adjacent to the venue of the GEO4 meeting (from 22-23 April) at the Tokyo International Exchange Center. Earth Observation Summit II on April 25, 2004 at Hotel Okura in Tokyo does not have any side events; however, GEO4 will be more important in a practical sense. APN will be provided with a space of panels' display by the courtesy of the organizers.

A poster specifically focused on some APN activities that exactly fit the GEO agenda is being prepared by APN Secretariat in collaboration with NIWA, New Zealand. Dr Andrew Matthews, SPG Co-chair and APN secretariat will participate in the side event in Tokyo, as they had done similarly at the Pacific Island Summit in May 2003.

Presentations

Pacific Islands Regional GCOS Program



22-March-2004

**9th APN Scientific Planning Group Meeting
Canberra, Australia**

**Howard Diamond, NOAA/NCDC
U.S. National GCOS Program Manager
Silver Spring, Maryland USA**



Agenda



- Background of Global Climate Observing System (GCOS)
- Overview of In-Situ GCOS Networks
- Pacific Islands Regional GCOS Program
- NOAA PRIDE Initiative
- Contact Information

OBJECTIVES OF THE GLOBAL CLIMATE OBSERVING SYSTEM

TO PROVIDE THE DATA REQUIRED TO MEET THE NEEDS FOR:

- Climate System Monitoring, Climate Change Detection and Attribution, and Response Monitoring, Especially in Terrestrial Ecosystems and Mean Sea-Level
- Research Toward Improved Understanding, Modelling and Prediction of the Climate System
- Application to National Economic Development
 - Demonstrated Benefits of Climate Forecasts in Support of Agriculture
 - Advance Forecasts of El Niño/La Niña Events
 - Improved Tropical Storm and Extreme Weather Prediction
 - Increased Leadtimes for Drought Prediction



INTERNATIONAL BACKGROUND TO GCOS

- Second World Climate Conference (Nov. 1990)
- UN Conference on Environment and Development (UNCED June 1992)
- Intergovernmental Meeting on World Climate Programme (April 1993)
- Four International Sponsors:
 - World Meteorological Organization (WMO) – (<http://www.wmo.int>)
 - International Council for Science (<http://www.icsu.org/>)
 - Intergovernmental Ocean Commission (<http://ioc.unesco.org/iocweb/index.php>)
 - United Nations Environment Program (<http://www.unep.org/>)
- GCOS Secretariat based at WMO in Geneva



INTERNATIONAL GCOS STRUCTURE



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graph TD
    A[GCOS Steering Committee (GCOS SC)  
Chairperson: Dr. Paul Steiner, UNEP, UNEP] --- B[GCOS Secretariat  
Director: Dr. Alan Thomson]
    A --- C[Working Group on Socio-economic Benefits  
Chairperson: TBD]
    A --- D[Science Panels]
    D --- E[Atmospheric Observation Panel for Climate (AOPC)  
Chairperson: Dr. Michael Horel, NOAA]
    D --- F[Ocean Observations Panel for Climate (OOPC)  
Chairperson: Dr. Ed Rienecker, NOAA]
    D --- G[Terrestrial Observation Panel for Climate (TOPC)  
Chairperson: Dr. Alan Thomson, UNEP]
  
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WMO GCOS Office Home Page
<http://www.wmo.ch/web/gcos/gcoshome.html>

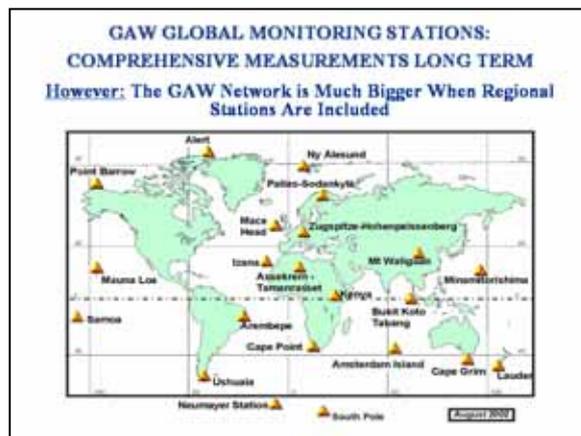
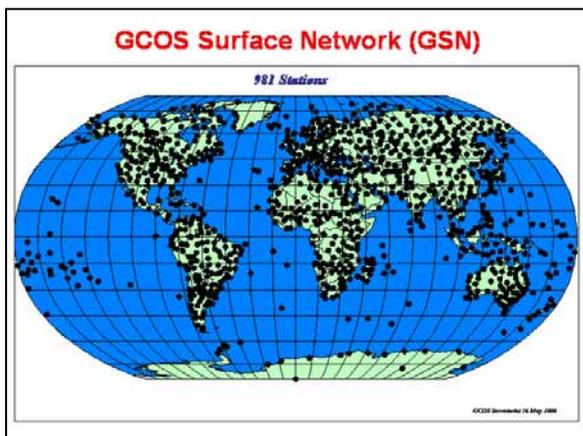
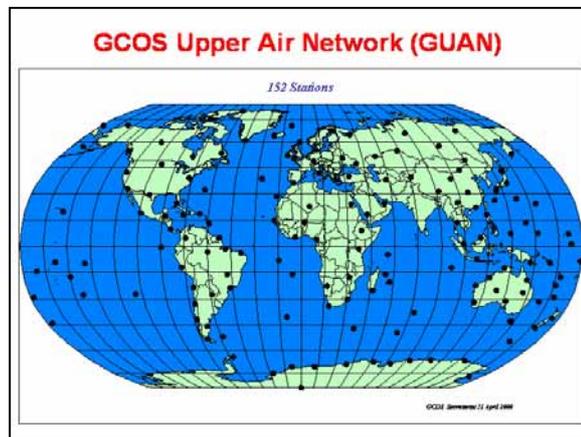


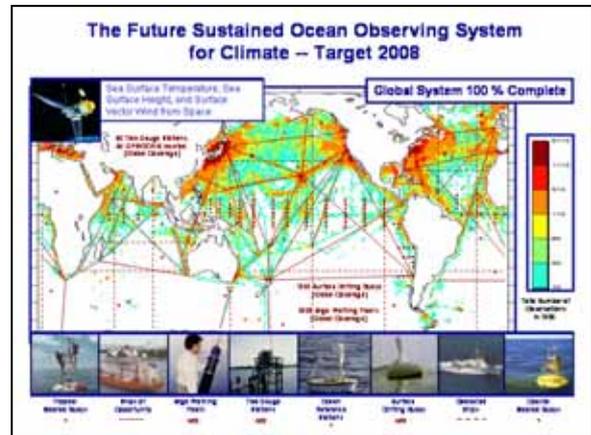
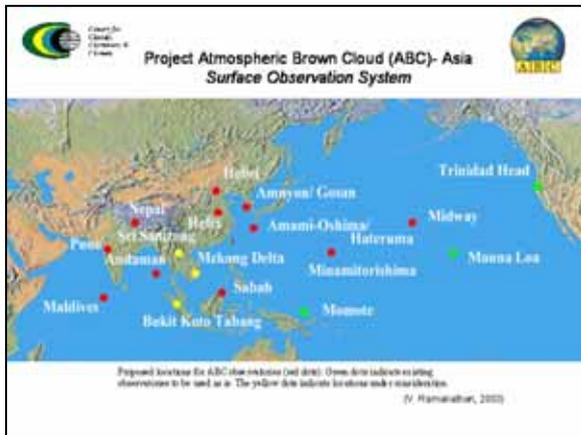
GCOS OBSERVING NETWORKS



◆ **ATMOSPHERIC OBSERVATIONS:**

- GCOS Surface Network (GSN)
- GCOS Upper-Air Network (GUAN)
- Global Atmosphere Watch (GAW)
- Atmospheric Brown Cloud (related to GAW but not a formal GCOS network per se)





GCOS OBSERVING NETWORKS

◆ OCEAN OBSERVATIONS:

Climate Components of:

- Ships of Opportunity Programme (SOOP/XBT)
- Global Sea-Level Observing System (GLOSS)
- Tropical Atmosphere-Ocean (TAO) Array
- PIRATA
- Drifting Buoys (DBCP)
- Array of 3,000 ARGO Floating Buoys in Pacific, Indian, and Atlantic Oceans
 - Multinational Contributions (including New Zealand)

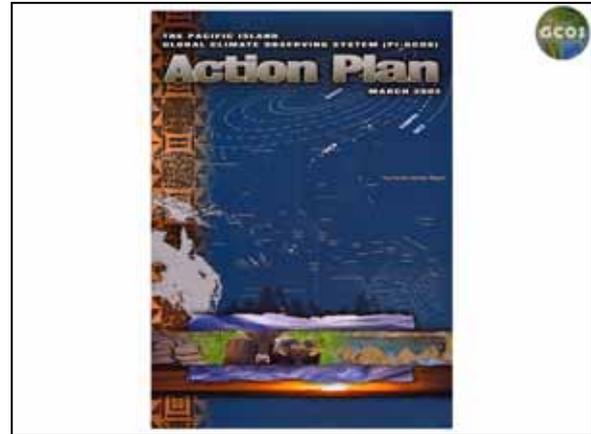
GCOS OBSERVING NETWORKS

◆ TERRESTRIAL OBSERVATIONS:

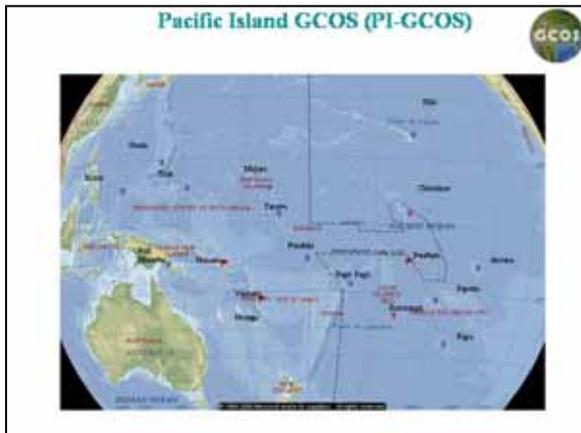
Climate Components of:

- Coral Reef Monitoring (e.g., Hotspot Monitoring)
- Coastal Observations (e.g., IOOS)
- Other Paleoclimate Proxies
- Carbon Flux (FLUXnet)
- Hydrology (GTN-H) [proposed]
- Permafrost (GTN-P)
- Glaciers (GTN-G)

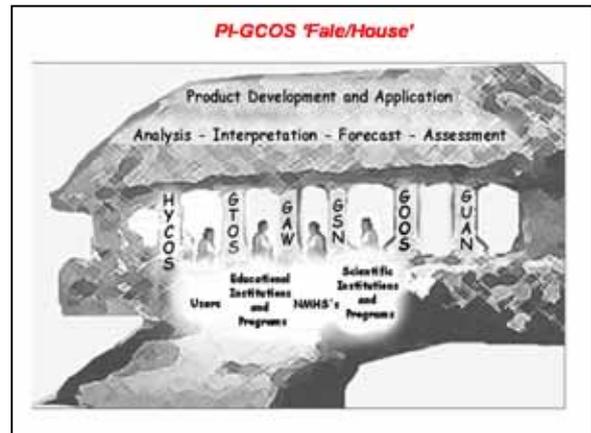
Global Observing System Information Center (GOSIC)
<http://gosis.org>



Pacific Island GCOS (PI-GCOS)



PI-GCOS 'Fale/House'

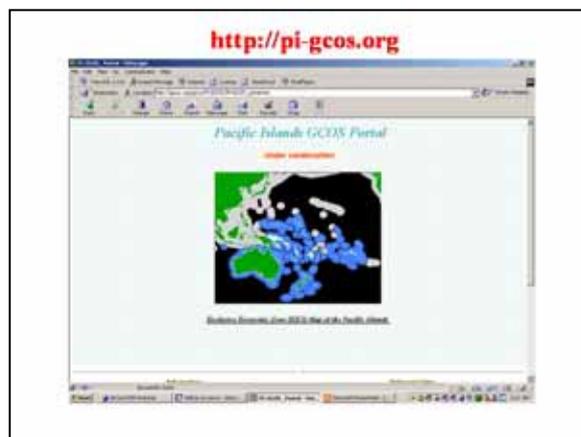
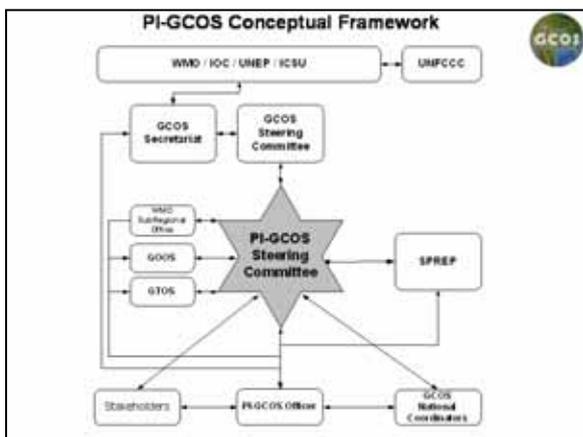


PI-GCOS Implementation

- Regional GCOS Implementation Plan Developed (Finalized but still in draft form)
- Prioritized list of 31 Projects in 5 Objective Areas
 - Advocacy
 - Sustaining Operational Observing Networks
 - Managing and Exchanging Regional GCOS Data
 - Accessing and Developing Products and Services
 - Building Capacity for Long-Term PI-GCOS Sustainability
- Selected Projects With Identified Funding
 - Regional GCOS Coordinator [US]
 - Demonstration Project for GCOS [NZ]
 - Expanding the Use of Climate Prediction [BoM]
 - Maintenance Support [US]
 - Pacific Data Portal
- Scope of the other 27 Pacific Island GCOS Projects is in the range of \$24M (US) over the period from 2003 through 2008

PI-GCOS Update

- Concept of a regional GCOS Steering Committee endorsed by GCOS Steering Committee - April 2003
- PI-GCOS Steering Group established - August 2003
- PI-GCOS Coordinator selected and in place at South Pacific Regional Environment Programme in Apia - January 2004
- Initial PI-GCOS SG Meeting Held in Fiji - February 2004; TOR Approved
- Regional Steering Group will be policy level group owned by the region
- Subsidiary Science and Technology (S&T) Panel will provide advice and technical support
- S&T Panel is an evolution from the initial group of interested persons as part of the PI Regional GCOS Implementation Team (PIRGIT) that developed original RAP
- S&T Secretariat will be in NOAA; TOR in development



PRIDE Initiative

PRIDE:

Pacific Region Integrated Data Center for Environmental Ocean, Climate, and Ecosystem Information and Services

Advance NOAA's mission objectives and meet critical regional needs for ocean, climate, and ecosystem information to protect lives and property, support economic development and enhance the resilience of Pacific Island communities in the face of changing environmental conditions.

Conceptual Framework for PRIDE



<http://oco.noaa.gov>



Contact Information



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 Cell: +1-301-801-4855

For 9th Intergovernmental Meeting & 9th Scientific Planning Group Meeting

APN – NIES Collaboration

Takashi IJIMA
Executive Director,
National Institute for
Environmental Studies (NIES),
JAPAN



CO₂ flux observation tower in Hokkaido

Today's Topics

1. **Outline of National Institute for Environmental Studies**
2. **Global Environmental Monitoring conducted by NIES**
3. **Climate Change Modeling Research**
4. **Center for Global Environmental Research**
5. **APN-NIES Collaboration Case**
6. **NIES Global Environment Monitoring Symposium**

Outline of National Institute for Environmental Studies (NIES, Japan)

Main Campus	Tsukuba-Science-City(23ha)
Permanent Official Staffs	277 (incl. 6 foreign researchers)
Temporary Researchers	546 (incl. 65 foreign researchers)
Budget	15,019,000,000 JPY (2003FY)

Organizations (70 research sections or teams)
 6 Priority Projects, 3 Research Centers, 8 Fundamental Divisions, 2 Support Centers, 1 Laboratory

Researchers' Expertise Fields:
 Basic Science (Physics, Chemistry, Biology), Engineering, Agricultural Sciences, Medical Sciences, Pharmacology, Fisheries Sciences, Economics

Preparation of Researchers with Doctoral Degrees: 90.6%(2003FY)



6 Priority Research Projects

NIES Objectives for 5 years(2001-2005)



Climate Change



Ozone Layer



EDs & DXNs



Bio-diversity



Watershed Management



Urban Air Pollutants

2 Policy Response Researches

NIES Objectives for 5 years(2001-2005)



Material Cycles & Waste Management



Environmental Risk of Chemicals



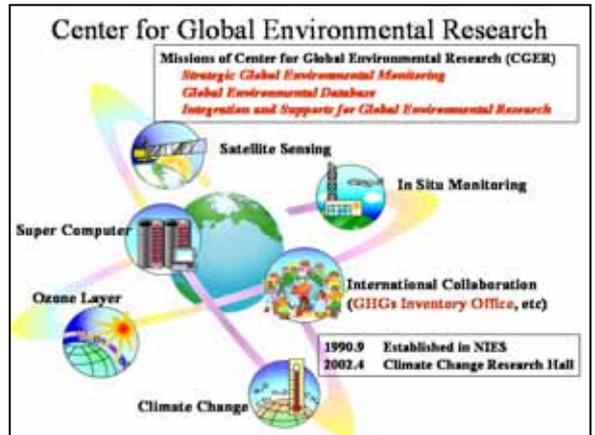
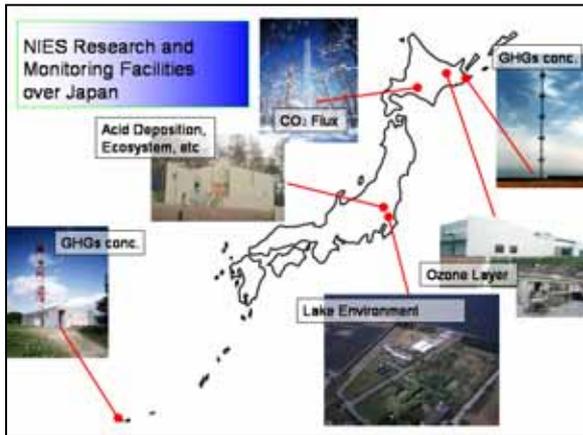
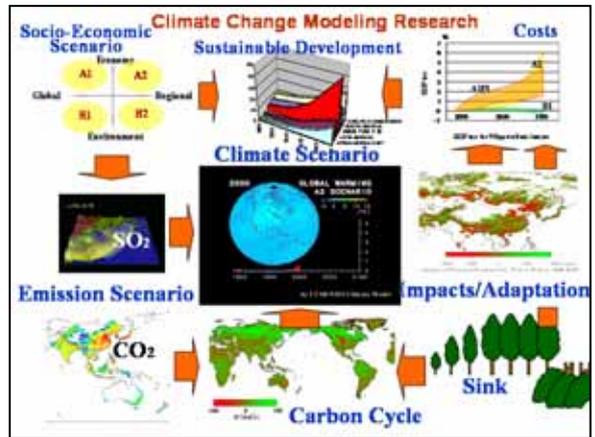
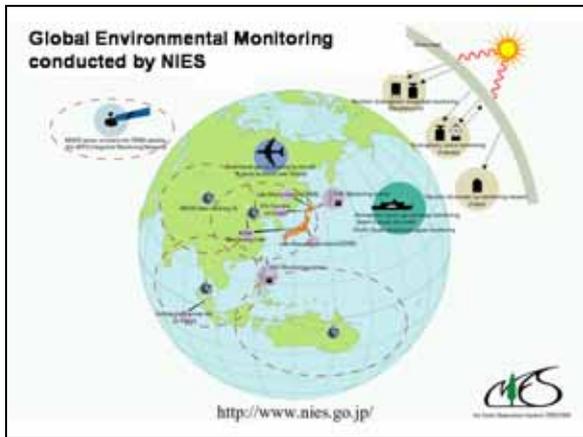
NIES



Close Collaboration



MOE



GIO Center for Global Environmental Research, Institute of Environmental Science and Technology, AIST

APN-NIES Collaboration Case

1. In 90's NIES adopted good Eco Frontier Research Fellows through APN advertisement program from Canada and Pakistan

2. An APN-CAPaBLE Project as a Pilot Project for Developing GHG Inventories in Asia

National Institute for Environmental Studies Center for Global Environmental Research
http://www.nies.go.jp

GIO Center for Global Environmental Research, Institute of Environmental Science and Technology, AIST

An APN-CAPaBLE Project as a Pilot Project for Developing GHG Inventories in Asia

“Capacity Building for Greenhouse Gases Inventory Development in Asia-Pacific Developing Countries”

National Institute for Environmental Studies Center for Global Environmental Research
http://www.nies.go.jp

GIO Center for Global Environmental Research, Institute of Environmental Science and Technology, AIST

APN-CAPaBLE
Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries

(1) Capacity Enhancement for Experienced Leading Scientists (Comprehensive Research Projects)

(2) Capacity Building for Young and Aspiring Scientists

- Targeting **specific countries** in the Asia-Pacific;
- Targeting specific topics under climate change and variability;

➔ CAPaBLE Project by Japan/Thailand/Cambodia (40 thousand US\$/year) (CAPaBLE Pilot Project)

National Institute for Environmental Studies Center for Global Environmental Research
http://www.nies.go.jp

GIO Center for Global Environmental Research, Institute of Environmental Science and Technology, AIST

Background

- (1) **Developing countries are particularly vulnerable** to adverse impacts and threats of climate change.
- (2) Improvement of GHG inventories in the Asia-Pacific region is an essential element to prioritize countermeasures against climate change.
- (3) It is frequently pointed out that the common issues of GHG inventories in these countries are **insufficient applicability of the default emission factors in the IPCC Guideline** and the lack of accurate activity data.
- (4) **Leadership and involvement of ASIA-PACIFIC developing countries** in the discussions for new IPCC guideline is important to facilitate development of good GHG inventories in these countries.

National Institute for Environmental Studies Center for Global Environmental Research
http://www.nies.go.jp

GIO Center for the Science Office of APN

Main Objectives

- (1) To carry out **pilot studies on improvement of GHG inventories** for effective countermeasure against Global warming in typical ASIA-PACIFIC developing countries.
- (2) To make sustainable systems to develop GHG inventories **with well organized contribution from researchers and government officials.**
- (3) To provide **more realistic emission factors reflecting country and regional conditions** which could contribute to **IPCC Emission Factors Database (EFDDB)** and to discussions for the new IPCC guideline.
- (4) To exchange information and experiences to establish accurate activity data.
- (5) To clarify the direction to apply the methodologies developed in the pilot studies to all ASIA-PACIFIC countries.
- (6) To enhance involvement and **leadership of ASIA-PACIFIC** developing countries in the international efforts to improve GHG inventories and their application to mitigation against global warming.
- (7) To provide policy makers with basic information to formulate and implement measures to reduce GHG emissions and enhance GHG removals.

National Institute for Environmental Studies Center for Global Environmental Research
http://www.gio.nies.go.jp

GIO Center for the Science Office of APN

Approach

- (1) Choosing two countries with different developing stage (Thailand and Cambodia)
- (2) Identifying priorities of emission factors and activity data to be improved
- (3) Listing up experts on the prioritized sectors in Japan and developing countries and organizing cooperation
- (4) Disseminating a new technology developed in a project funded by MOEJ (real-time CO₂ and Methane sensors)
- (5) Seeking for developing countries to build capacities by themselves
- (6) Close linkage with the workshop supported by MOEJ

National Institute for Environmental Studies Center for Global Environmental Research
http://www.gio.nies.go.jp

GIO Center for the Science Office of APN

Activities in FY 2003 (NIES-APN fruitful collaboration case)

- (1) A governmental official in charge of GHG Inventory of Cambodia visited NIES for about one week to discuss on the inventory file systems and on the priority of sectors.
- (2) A scientist from Thailand was invited to NIES for one month and studied on the real-time CO₂ and methane sensors.
- (3) The 1st Workshop on GHG Inventories in Asia Region was held.



National Institute for Environmental Studies Center for Global Environmental Research
http://www.gio.nies.go.jp

EARTH OBSERVATION SUMMIT  **NIES, Japan**

NIES Global Environment Monitoring Symposium as Official Side-Event of 2nd Earth Observation Summit in Tokyo (2004.4.24(Sat), Miraikan-Hall)




National Institute for Environmental Studies Center for Global Environmental Research
http://www.gio.nies.go.jp

Birds' View of NIES Main Campus in Tsukuba

(23ha)



ASIA-PACIFIC NETWORK FOR GLOBAL CHANGE RESEARCH

APN Secretariat

IHD Centre Building 5F, 1-5-1 Wakinohama Kaigan Dori, Chuo-ku, Kobe 651-0073 JAPAN

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Website: <http://www.apn.gr.jp>



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