



2005-2010 Evaluation Report

Evaluation Report 2005/2010
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EXECUTIVE SUMMARY

The APN embarked on an evaluation of the APN's Second Strategic Phase (2005-2010) to review its activities and programmes since 2005 and to look into where the APN wants to go in the future based on the lessons learned in the past and also considering the issues that are currently emerging in the global change community. The Steering Committee (SC) Meeting, Augmented Steering Committee Meeting (ASCM) and Writing Workshop that convened in Kobe, Japan, August 2009 marked the end of several months of review work of the APN's three Agendas: Science, Policy, Institutional.

The SC Meeting looked at the outcomes of the Institutional/Network Review while the ASCM focused on the evaluation of achievements, challenges and impacts of APN-funded scientific activities under the Annual Regional Call for Research Proposals (ARCP) and Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programmes identified in the 80 Project Sets that were completed in the second phase. The SC Meeting and ASCM made recommendations for the 3rd strategic phase of the APN.

For the Institutional review of the APN, it was noted that APN had increasingly involved member countries in its activities resulting in a greater sense of ownership among the member states, particularly evidenced by increased contributions, both in-kind and financially. The APN has increased and expanded the scientific research capabilities within the Asia-Pacific region and steadily improved its interactions with policy- and decision-makers.

Financially speaking, the APN has marginally increased its budget despite economic difficulties and the strain on government budgets throughout the period of the second strategic phase.

At the ASCM, key findings from the Independent Remote Reviews (IRRs) assigned to the Lead Reviewers for each of the five scientific thematic areas were presented. A set of criteria was used to evaluate each project independently noting specifically that no project comparisons were made and merit was based on performance against the original objectives of the projects as well as the goals of the APN. While ARCP and CAPaBLE were evaluated using the same general criteria incorporating the APN goals, three more specific objectives for the CAPaBLE Programme were also used as performance indicators.

The ASCM selected outstanding projects based on their strengths and key outcomes: had a product, a target audience and disseminated project outputs well; were regionally-specific; and were able to augment financial resources from other projects and organisations. It was concluded that the APN-funded projects overall had very good success in terms of meeting the five goals stated in the APN 2nd

Strategic Plan (2SP). Generally, the projects received above average ratings but the individual projects varied in effectiveness, impact and sustainability. The key findings under each goal are presented in the full document.

APN has made significant progress in promoting research in global change with a number of research activities producing robust scientific outputs. Through its CAPaBLE programme, the APN has reached many scientists and policy-makers and provided training course for young scientists and professionals on methods and tools to analyse global change-related issues.

While ARCP and CAPaBLE programmes still have challenges that require addressing, both pillars of APN's science and policy agendas have fulfilled their goals to the most part, resulting in policy-relevant science being conducted and increased scientific capabilities. Policy linkages and sustainability programmes initiated by APN projects are the two main areas that require strengthening.

Other challenges presented for the future are the need to secure and increase financial and in-kind contributions; achieve better alignment with relevant ministries; and strengthen the function of the Secretariat as a node for communication, outreach and scientific syntheses.

In conclusion, the APN has, in its second strategic phase, strengthened its alignment with the global change scientific community; increased engagement with APN members and stakeholders; increased involvement with the policy- and decision-making communities; developed scientific capabilities within the region; conducted successful and policy-relevant scientific research; and enhanced the networking tools of the APN by devising and implementing a new communications strategy.

Acknowledgements: The APN is grateful to the lead reviewers for their immense efforts in the evaluation process and active participation at the ASCM and Writing Workshop. Sincere gratitude is extended to the SC members and all the national Focal Points (nFPs) and Scientific Planning Group (SPG) Members, key partner organisations, remote scientific reviewers and other members from the wider global change community who engaged in the review process and provided valuable contributions. Following the outcomes of the evaluation, including the recommendations from the reviewers, the APN will continue to make a difference in the Asia-Pacific region.

MESSAGE FROM THE DIRECTOR

It is my pleasure to present the Report of the Institutional and Scientific Evaluation of Phase II (2005-2009).

The 13th Inter-Governmental Meeting (IGM), held in Kobe, Japan, 2008, approved the Secretariat's plan for the evaluation of the APN's second strategic phase and preparation of the Third Strategic Plan. The evaluation itself was categorised into two components for the evaluation of "Institutional" for the performance of the APN as a Network; and "Scientific" for the performance of the APN's projects funded under its core ARCP and CAPaBLE programmes. The APN's Policy Agenda was considered under both of these components.

To facilitate the evaluation of the eighty (80) projects supported by the APN during the second strategic phase, Project Leaders performed a self-evaluation of their respective projects. These were subsequently reviewed by the SPG and CDC members, as well as external reviewers, before being evaluated further by a Lead Evaluation Team, who provided key results of the evaluation as well as recommendations for the APN's third strategic phase. The feedback received from the Project Leaders and the hard work of all of the key scientific reviewers involved was invaluable and very much appreciated.

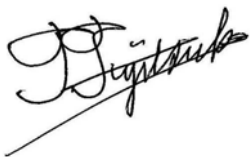
In order to review the findings of the Lead Evaluation Team and further evaluate the scientific components of the APN's activities; an Augmented Steering Committee Meeting (ASCM) was convened in August 2009, in Kobe, Japan. The ASCM consisted of the Lead Evaluation Team and the APN's Steering Committee Members. At this meeting, the findings of the review of APN-funded projects were discussed, followed by an overall evaluation of the current APN Scientific Research Framework. The meeting concluded in making recommendations for the future; the main results of which are included in the present evaluation report.

In parallel with the scientific review, the review of the APN's institutional aspects was facilitated by the Secretariat based on key input from all of the members (past and present) comprising the organs of the APN as well as the global change community. Contributions were submitted via surveys and country reports as well as through periodic consultations by e-mail.

The draft reports of the Evaluation and the APN's Third Strategic Plan (2010-2015) were prepared based on discussions at the aforementioned meetings. The draft reports were then circulated to the APN's national Focal Points and Scientific Planning Group members, as well as partners from the global change community.

This preparation process has clarified the achievements of the APN's activities in its Second Phase, made possible by all stakeholders concerned. The

implementation of the Third Strategic Plan will be an exciting time for all member countries and global change community, as the APN works to achieve its mission during its Third Phase.

A handwritten signature in black ink, appearing to read 'Tetsuro Fujitsuka', with a long horizontal stroke extending from the bottom of the signature.

Tetsuro Fujitsuka

Secretariat Director

Asia-Pacific Network for Global Change Research (APN)

March 2010

PREFACE

In preparation for the 15th Inter-Governmental Meeting (IGM) of the APN in March 2010 (this being the last IGM in the Second Strategic Phase), the APN commissioned an evaluation of the Second Strategic Phase and the preparation of a 3rd Strategic Plan (3SP), to cover the next five years from April 2010 to March 2011. This work was coordinated by the Secretariat and the present evaluation report of the second strategic phase was devised based on the responses and reviews of all of APN's stakeholders, including scientists, decision-makers and the community at large.

The evaluation comprised two parts: *Funded Project Set Review* and *APN Institutional/Network Review*. For the Project Set Review, the APN conducted evaluation of the science and policy components of 80 APN-funded projects that were completed during the second phase. The evaluation was carried out by a Lead Evaluation Team (LET) of Expert Scientific Reviewers who conducted their evaluations based on independent remote reviews of SPG members and external scientific reviewers drawn from the APN's mail review system, responses of Projects Leaders to a set of questions, and their own experiences. The LET highlighted project performance against APN's five goals identified in the 2SP in terms of Relevance, Efficiency, Effectiveness, Impact, and Sustainability. Through this process, LET members were able to identify and select projects whose performance was considered outstanding. The LET presented their findings at the ASCM in Kobe, Japan, August 2009.

For the Institutional/Network Review, a questionnaire for members was distributed to gauge how APN has advanced towards achieving its goals and implementing the strategies outlined in the 2SP. Input from the global change key partners/organisations and from the wider global change community was also sought through questionnaire distribution via email and the APN website. Specific questions were targeted to: Assess how APN's projects and activities are aligned with the programmes of the global change community; strengthen the role of key partners in shaping the future of APN and generate ideas from civil society so APN can harmonise its activities with other organisations towards achieving shared goals and meeting the needs of the region in global environmental change research; and gauge the awareness of the wider GC community in terms of APN's activities and determine the relevance of these activities in the Asia-Pacific region. Submitted questionnaires were compiled and reviewed at the SC Meeting and Writing Workshop in Kobe, Japan, August 2009.

A half-day Secretariat Brainstorming Session also convened to assess how APN has been operating in the past five years, identify areas that require greater efforts, and recommend actions to be taken in the future for APN continued success and improvement.

1. OVERVIEW OF THE SECOND PHASE (2005-2010)

1.1 Development of the Second Strategic Plan and Annual Operating Plans

The APN 2SP was developed based on the evaluation of its first ten years through an extensive scientific and institutional review. The plan was devised based on key contributions from APN nFPs, SPG Members, and partners from the global change community. The plan provides a practical and flexible approach for the APN to fulfil its mission and goals by identifying key areas of importance reflected in the three agendas: Science, Policy and Institutional. At the 10th IGM/SPG Meeting, the 2SP was endorsed and implementation commenced in April 2005. At the time of writing the present evaluation report, the 2SP is still in effect.

To ensure the effective implementation of activities outlined under the 2SP's three agendas, the need to devise an operating plan, as highlighted in the 2SP, was considered a crucial step. The Secretariat, with advice from Dr. Subramaniam Moten, SPG Member for Malaysia and member of the APN SC, prepared an Operating Plan covering three timescales: short-term, medium-term and long-term, which was subsequently endorsed at the 11th IGM/SPG Meeting. At the end of each year, the SC and the Secretariat perform an evaluation of achievements against the plan and prepare a revised Operating Plan for the following year based on the review as well as those new activities endorsed at the IGM/SPG Meeting.

1.2 Highlights of the Second Phase

A number of key highlights of the APN's scientific activities are detailed below in date chronological order.

- i. Incorporated the APN's capacity development programme, CAPaBLE, which had an initial shelf life of five years, as an integral part of APN's activities. (2005)
- ii. Financially supported and managed 143 projects (80 completed and 63 ongoing at the time of writing) under its two annual Calls for Proposals: *ARCP* and *CAPaBLE Programmes*. (2005-2009)
- iii. Revised the proposals submission and review process of the *ARCP* and *CAPaBLE* annual Calls for Proposals, resulting in a more streamlined process with greater scientific integrity and a less time-consuming procedure for proponents, reviewers and the Secretariat. (2006)

- iv. Devised and implemented an external mail review system as part of the proposals review process. The database currently holds 133 scientific expert reviewers. (2006)
- v. Launched Phase II (2006-2009) of the comprehensive research element of CAPaBLE, focussing on Water and Food Security. Three projects are being implemented. (2006)
- vi. Published APN's first book: *Global Change and Integrated Coastal Management: The Asia Pacific Region* (Springer edition). Chapters from this book and a number of outputs such as peer-reviewed papers from selected APN-funded research and capacity building projects and activities were cited in the Intergovernmental Panel on Climate Change (IPCC) 4th Assessment Report (AR4). (2006-2007)
- vii. Initiated and conducted in-house seminars and capacity development activities, including two scoping workshops in Global Earth Observations, three international seminars on biodiversity supported by Hyogo Prefectural Government, Japan, and four proposal-development training workshops. (2006-2009)
- viii. Evaluated 18 activities conducted during Phase I of CAPaBLE, which focussed on Climate Change and ran from April 2003 to March 2006, the results of which indicated that the CAPaBLE Programme is timely and crucial for the Asia-Pacific region. Three publications were devised and distributed: *CAPaBLE Phase 1: Climate Change*; *CAPaBLE Phase 1 Evaluation Report: Summary for Stakeholders*; and *CAPaBLE Phase 1: In Review*. These publications were distributed throughout the global change community and showcased at various international fora. (2007-2009)
- ix. Launched Phase III (2009-2012) of the comprehensive research element of CAPaBLE, focussing on Climate Change Impacts, Adaptation and Vulnerability. Three projects are being implemented. (2009)
- x. Launched a Special Call for Proposals for a Focused Activity: *Scientific Capacity Building for Climate Impact and Vulnerability Assessments (SCBCIA)*. Seven projects are being implemented. (2009)

In addition to the scientific activities undertaken, a number of key institutional issues were addressed and APN members have made valuable contributions, including the translation of communication materials in members' vernacular languages and subsequent distribution in members' respective countries; and annual submission of *Country Reports*. In particular, the Country Reports have been used to streamline and plan the APN's strategies, particularly in the evaluation of its second phase and in demonstrating the challenges being faced by member countries in the field of global change.

On membership, Bhutan was endorsed as a new member at the 15th IGM, bringing the number of APN member countries to 22.

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

On other institutional arrangements, the APN Framework Document was amended three times, at the 12th, 14th, and 15th IGMs. The most recent version is found in *Appendix a*. In terms of networking and raising the visibility of the APN in the Asia-Pacific region and at the international level, the APN has attended and made presentations at numerous international fora and engaged in a number of outreach activities by conducting side events and displaying exhibits of APN materials.

APN has become strategically involved in international global change events organised by the global change community and other institutions including the United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties and Meeting of the Parties (COP/MOP) and Subsidiary Body for Scientific and Technological Advice (SBSTA). The APN now participates in an annual dialogue with the global change programmes, the IPCC and SBSTA. This event is organised by the UNFCCC and the Earth System Science Partnership (ESSP).

Since 2005, the APN Secretariat has been producing all of its publication materials in-house and numerous publications have been distributed throughout the second phase:

- i. First Global Change Directory;
- ii. Proceedings of in-house meetings, symposia and workshops;
- iii. Brochure that provides a general overview of the APN and its activities;
- iv. Annual policy-brief that highlights and summarises major activities undertaken by the APN; and
- v. Annual Project Bulletins, Annual Reports, quarterly Newsletters, posters, and other promotional materials.

An internal database was created and is continuously updated. This is very useful in maintaining the electronic mailing list (EML), which is a tool used by the Secretariat to strategically inform, support and disseminate information throughout the network. The EML has a network of over 1,500 members, not only from the Asia-Pacific region, but from the global community as well.

A Communications Strategy (please refer to *Appendix b*) was devised and endorsed at the 14th IGM in 2009. As part of implementing this strategy, the APN website has improved its webpage and a new interactive website is being developed and will be timely launched when the APN enters its Third Strategic Phase, from April 2010.

A Resources Development Strategy (*please refer to Appendix c*) was devised at the 15th IGM in March 2010. This strategy highlights three (3) strategic domains that APN shall look at in the years ahead.

Another major highlight of the APN second phase is the review process of all three agendas based on the strategies outlined in the 2SP and the formulation of the Third Strategic Plan (3SP). The 13th SC Meeting, ASCM and Writing Workshop, held in August 2009, marked the culmination of the evaluation process¹.

1.3 The APN’s Donors and Financial Status

Despite the global economic scenario, strong exchange rate fluctuations and competition for limited resources, APN has been quite successful in securing funds. The APN is very grateful to the following member countries that provided direct financial support to the APN for its activities in the second phase: Japan (Ministry of the Environment, US\$ 5.5 million and Hyogo Prefectural Government, US\$ 1.5 million); USA (National Science Foundation/United States Global Change Research Program, US\$ 2.3 million); Australia (former Australian Greenhouse Office, US\$ 68,000); New Zealand (Ministry for the Environment, US\$ 67,000); and Republic of Korea (Ministry of Environment, US\$ 40,000). **Figure 1** displays member countries’ contributions while the financial summary for the fiscal years from 2005 to 2010 is provided in *Appendix c*.

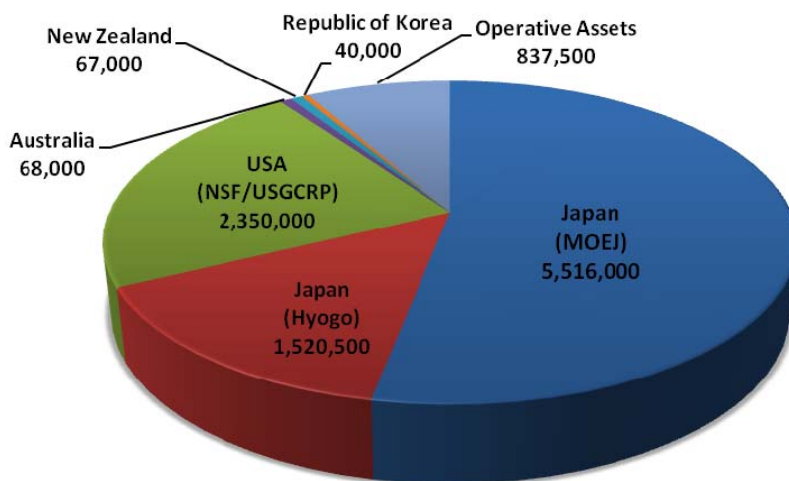


Figure 1. Revenue in 2005-2009 (US\$)

¹ The results of these events are in the process of being finalised and will be cited in the final version of the present Evaluation Report

The overall budget of the second phase, amounting to around US\$ 10.4 million (refer to *Appendix c* for the APN financial summary), is leveraged by the considerable in-kind contributions by the member countries, including Hyogo Prefectural Government.

Furthermore, in order to successfully conduct many APN-funded projects/activities, substantial in-kind support, as well as additional resources, in the form of matching funds, are in the order of US\$ 2 million/year by the institutions of the Leaders and Collaborators of the projects/activities and other sources of funding.

Also, APN's 21 member country governments, including Hyogo Prefectural Government, the host of the APN Secretariat in Kobe, Japan, together with the staff from a whole range of institutions, strongly support the network with in-kind contributions including providing their time and equipment, supplies and other support. In addition, nFPs and SPG Members spend considerable time on issues directly related to the APN. These include:

- Attending annual IGM/SPG and Sub-Regional Cooperation Meetings, including direct payment of travel expenses;
- Hosting APN Meetings (Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Sri Lanka, Thailand, USA);
- Reviewing the science activities and agendas of the APN;
- Reviewing proposals under the APN annual Calls for Proposals;
- Producing APN materials in vernacular languages and distributing at strategic events and to in-country institutions;
- Communicating with the Secretariat on issues that require regular input throughout the year; and
- Promoting APN and its programmes and activities on various occasions at the national, sub-regional and international levels

In addition, Hyogo Prefectural Government generously supports the Secretariat by providing office space and fixtures, etc. This in-kind support amounts to more than US\$ 500,000/year.

Of the overall direct cash contributions to APN of approximately US\$ 10.4 million, the majority (92%) was invested in supporting/conducting global change research, capacity development, and networking activities. Investments were also made in fellowship programmes, science/policy fora, and climate synthesis work, which was initiated in August 2009. **Figure 2** shows the breakdown of expenditure for science, policy and networking activities for the period covered by the APN's Second Strategic Phase (2005-2009).

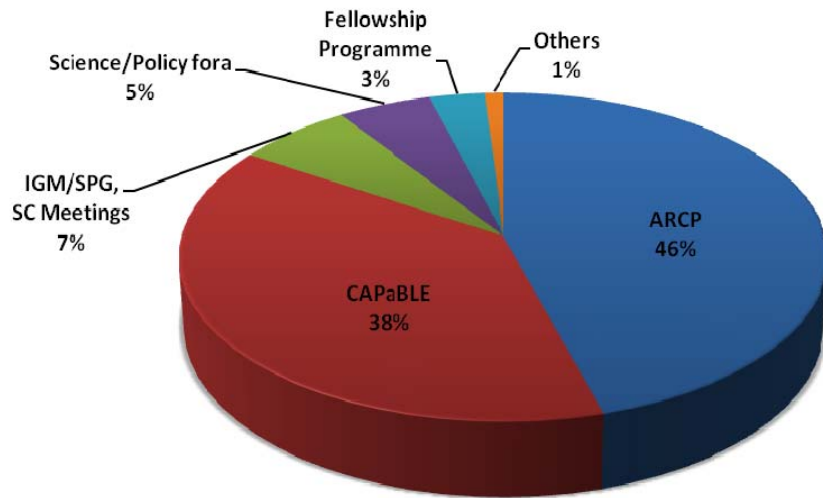


Figure 2. Breakdown of the Expenditure for Science, Policy and Networking Activities (2005-2009)

2. EVALUATION OF SCIENCE AND POLICY AGENDAS

2.1 Overview of the Evaluation Process

During its second strategic phase, the APN has conducted its global environmental change activities primarily through its two main pillars of activities, the ARCP and CAPaBLE Programmes.

Types of activities eligible for funding included synthesis and analysis of existing research and new research addressing knowledge gaps in key scientific areas, planning and scoping workshops for global change research, policy-relevant tools such as the development and use of models, impact and other assessments and synthesis activities. Other key activities included scientific capacity development and enhancement at various levels from local (grassroots) to national and regional levels; science and policy interfacing; awareness raising and outreach activities for scientists, decision-makers, end-users and civil society.

Box.1 2SP Scientific Themes
1. Climate (24)
2. Ecosystems, Biodiversity and Land-Use (22)
3. Changes in Atmospheric, Terrestrial and Marine Domains (11)
4. Use of Resources & Pathways for sustainable Development (11)
5. Crosscutting & Science-Policy Linkages (12)

Seven Expert Scientific Reviewers who formed the Lead Evaluation Team (LET) were invited to evaluate the science and policy components of the 80 APN projects that were completed during the Second Strategic Phase (until April 2009) and present their findings at the ASCM, held in August 2009.

The LET conducted its evaluation based on independent remote reviews of SPG Members and

external scientific reviewers drawn from the APN's mail review system, responses of project leaders to a set of questions, and their own experiences. The LET highlighted project performance against APN's five goals identified in the 2SP in terms of Relevance, Efficiency, Effectiveness, Impact and Sustainability.

The LET (was) also asked to identify projects whose performances were outstanding. The present Scientific Review focussed on 80 Project Sets divided into five thematic areas and selected through the ARCP and CAPaBLE Programmes.

The 80 project sets were divided into the APN's five thematic areas outlined in the 2SP, and shown in Box 1.

2.2 Key Findings

The ASCM concluded that the APN-funded projects overall had very good success in terms of meeting the five goals stated in the APN 2SP (2005-2010). A distribution of the ratings of the 80 project sets is shown in **Figure 3**. Generally, the projects received above average ratings, although ratings of the individual projects varied in terms of effectiveness, impact and sustainability. The overall assessment under each goal is presented below. The few projects rated as poor were either projects awarded seed grants to develop further a proposal but failed; or projects that did not meet their original objectives due to poor project implementation or collaboration.



Figure 3. Distribution of Ratings (%)

Goal 1: Supporting regional cooperation in global change research on issues particularly relevant to the region: Global change issues were addressed with excellent regional collaboration. Most of the projects were able to form strong regional networks of scientists.

Key Rating: Excellent

Goal 2: Strengthening appropriate interactions among scientists and policy-makers, and providing scientific input to policy decision-making and scientific knowledge to the public: There were genuine attempts to have policy and decision-makers participate in mainstream science, however, it was realised that more interactions are still necessary in this field. It is important to assure that policy-making is made more aware of the results of APN science and their potential value in policy-making.

Key Rating: Good

Goal 3: Improving the scientific and technical capabilities of nations in the region: Scientific and technical expertise was considerably increased through workshop and hands-on training. With some project initiatives, institutional units were formed and were able to sustain their functions after APN funding ended. Some projects communicated effectively at all levels, particularly at the grassroots level.

Key Rating: Excellent

Goal 4: Cooperating with other global change networks and organisations: Collaboration with other global change institutions facilitated projects to look at global change issues from a regional perspective and, at the same time, provided opportunities for scientists to communicate with their counterparts in the global change programmes. However, more interactions with the global change community are needed.

Key Finding: Good

Goal 5: Facilitating the development of research infrastructure and the transfer of know-how and technology: The transfer of knowledge and methodologies were conducted well through training and workshops. Research infrastructure in the region is improving; and some APN projects were able to help in establishing those infrastructures.

Key Finding: Very good

2.3 Selected Outstanding Projects

Theme 1: Climate

Project Set 1: Applying Climate Information to Enhance the Resilience of Farming Systems Exposed to Climatic Risk in South and Southeast Asia

Project Leader: Dr. Holger Meinke

Selected Publications (2006)

1. Donald, A., Meinke, H., Power, B., Wheeler, M., Maia, A.H.N., Stone, R.C., Ribbe, J. and White, N., 2006. Near-global impact of the Madden Julian Oscillation on rainfall. *Geophysical Res. Letters*, Vol. 33, L09794.
2. Meinke, H., Nelson, R., Stone, R.C., Selvaraju, R. and Baethgen, W., 2006. Actionable climate knowledge – from analysis to synthesis. In: Hansen, J.W., Sivakumar, M.V.K., and Bates, B.C. (eds.), *Advances in Applying Climate Prediction to Agriculture*. Climate Research Special 16, Volume 33: 101-110.
3. Selvaraju, R., Venkatesh, R., Babu, C., Meinke, H. and Hansen, J.W., 2006. Impact of climate variability on smallholder farmers' farm level income inequality and food security: a comparison across farming systems and water availability scenarios. *World Development*.
4. Kumar, K.K., Rajagopalan, B., Hoerling, M., Bates, G. and Cane, M., 2006. Unraveling the Mystery of Indian Monsoon Failure During El Niño. *Science* 314, 115, DOI: 10.1126/science.1131152.

Project Set 23: Development and Application of Climate Extreme Indices and Indicators for Monitoring Trends in Climate Extremes and their Socio-economic Impacts in South Asian Countries

Project Leader: Mr. Munir Sheikh

Selected Publications (2008)

1. Baidya, S., Shrestha, M. and Sheikh, M.M. 2008. *Trends in Daily Climatic Extremes of Temperature and Precipitation in Nepal*. Journal of Hydrology and Meteorology. 5(1):38-51.

Theme 2: Ecosystems, Biodiversity and Land-Use

Project Set 20: Standardisation and Systematisation of Carbon-Budget Observation in Asian Terrestrial Ecosystems Based on AsiaFlux Framework

Project Leader: Yoshikazu Ohtani

Selected Publications (2005 & 2006)

1. AsiaFlux Workshop Organizing Committee (Ed.). 2005. *Proceedings of AsiaFlux Workshop "International Workshop on Advanced Flux Network and Flux Evaluation"*, 96 pp.
2. Lakanavichian, S. (Ed.). 2006. *Proceedings of AsiaFlux Workshop 2006 "International Workshop on Flux Estimation over Diverse Terrestrial Ecosystem in Asia"*, 113 pp.
3. Asia Flux Steering Committee (Ed.). 2006. *Practice of Flux Observations in Terrestrial Ecosystems*.

Project Set 69: Greenhouse Gas (GHG) and Aerosol Emissions under Different Vegetation Land Use in the Mekong River Basin Sub-region

Project Leader: Dr. Sirintornthep Towprayoon

Selected Publications (2007)

1. Towprayoon, S., et.al. 2007. *Greenhouse Gas and Aerosol Emissions From Rice Field and Forest in the Mekong River Basin Sub-Region*. GMSARN International Journal 2 (2008), 163 - 168

Theme 3: Changes in Atmospheric, Terrestrial and Marine Domains

Project Set 48: Capacity Development for Greenhouse Gases Inventory Development in Asia-Pacific Developing Countries

Project Leader: Dr. Hideaki Nakane

Theme 4: Use of Resources and Pathways for Sustainable Development

Project Set 2: Water Resources in South Asia: An Assessment of Climate Change - Associated Vulnerabilities and Coping Mechanisms

Project Leader: Dr. Amir Muhammed

Selected Publications

1. Muhammed, A., Mirza, M.M.Z. and Stewart, B.A. (Eds.). 2007. *Climate and Water Resources in South Asia: Vulnerability and Adaptation*. Islamabad, Pakistan: Asianics Agro Dev. International.
2. Mitra, A.P. (Guest editor). 2005. *Science and Culture*, Special Issue: Water Resources in South Asia: An Assessment of Climate Change-Associated Vulnerabilities and Coping Mechanisms. Vol. 71, No. 7-8, July-August 2005.

Project Set 62: Integrated Assessment Model for Developing Countries and Analysis of Mitigation Options and Sustainable Development Opportunities

Project Leader: Prof. P.R. Shukla

Selected Publications

1. Garg, A., Shukla, P.R., Kapshe, M. 2007. From Climate Change Impacts to Adaptation: A Development Perspective for India. *Natural Resources Forum*, 31 (2007) 132-141.
2. Garg, A., Shukla, P.R. and Kapshe, M. 2006. Multigas Emissions Inventory of India: Sectoral and Regional Trends. *Atmospheric Environment*, 40, 4608-4620.
3. Shukla, P.R., Garg, A., Kapshe, M. and Nair, R. 2006. India's Non-CO2 GHG Emissions: Development Pathways and Mitigation Flexibility. *Energy Journal [Special Issue]*, 461-483.
4. Shukla, P. R., Rana, A., Garg, A., Kapshe, M., Nair, R. 2006. Global Climate Change Stabilization Regimes and Indian Emission Scenarios: Lessons for Modeling of Developing Country Transitions. *Environment Economics and Policy Studies*, 7(3), 205-231.
5. Menon-Choudhury, D., Shukla, P.R., Biswas, D. and Nag, T. 2006. Electricity Reforms, Firm Level Responses and Environmental Implications In Kalra, P.K. and Rue,t J. (Eds), *Electricity Act and Technical Choices for the Power Sector in India* (pp. 183-216).

Theme 5: Crosscutting Issues & Science-Policy Linkages

Project Set 42: Carbon Financial Markets, Rural Poverty, and Global Climate Change in Southeast Asia – Scoping Workshop, Training and Project Site Development

Project Leader: Dr. David Skole

Selected Publications

1. Developing Small-Holder Carbon Offset Projects: Lessons Learned from SE Asia (In progress)
2. Charismatic Carbon - Inpang Community Small-Holder Teak, Northeast Thailand (In progress)
3. Website: www.carbon2markets.org

2.4 Scientific Research²

ARCP Programme: APN funds scientific research mainly through the ARCP Programme. This programme focusses on the implementation of regional collaborative scientific research according to the main themes identified under the Science and Policy Agendas of the APN.

A) ARCP Strengths

Many of the ARCP-funded projects reviewed were policy relevant. The successful and highly rated projects focussed on specific impacts on the environment and society. These projects identified relevant problems and proposed well-developed methodologies to achieve outcomes beneficial to either a scientific community or the public at large. The projects improved regional and national networking of scientists in specialised fields of research, which resulted in improved collaboration. The research outcomes resulted in better understanding of the impacts of climate change in the region and an increased awareness of these issues by policy-makers and resource managers. All projects were designed to meet the needs for scientific information relevant to regional issues.

B) ARCP Challenges

The projects all have important policy considerations but the degree of science and policy interaction needs to be strengthened. Sustainability of project implementation (where sustainability was a project objective) also needs to be improved, particularly those with long-term support and not a one-time only activity. Projects classified under the Crosscutting and Science-Policy Linkages had the weakest ratings. It was difficult to assess outcomes when the criteria for determining success were not well defined. There is an increasing need to evaluate economic impacts; food, water and energy security; and financial consequences to facilitate science-policy interfacing. Without adequate metrics to determine a successful project outcome, it is difficult to determine if a science-policy linkage has been made.

C) ARCP Recommendations

- Devise specific criteria that defines a successful science-policy linkage(s)
- Encourage trans-disciplinary approaches for projects to include economic, social, behavioural and political science.
- Encourage plans for on-going/continuous support of project in appropriate types of proposals.

² The evaluation under 2.4 Scientific Research and 2.5 Scientific Capacity Building considers both the Science and Policy Agendas of the Second Strategic Plan.

2.5 Scientific Capacity Building

CAPaBLE: The CAPaBLE Programme was launched in April 2003 and is an initiative to realise parts 107-114 of the Johannesburg Plan of Implementation (JPOI) for the World Summit on Sustainable Development (WSSD) and is registered as a WSSD Type II Partnership. CAPaBLE is the scientific capacity development pillar of APN's activities, standing parallel with the scientific research programme, the ARCP. The CAPaBLE Programme focuses on the implementation of scientific capacity building, including science-policy interactions and outreach activities, according to the main themes identified under the Science and Policy Agendas of the APN.

A) CAPaBLE Strengths

All the CAPaBLE Programme funded projects reviewed were policy relevant. Capacity building under the CAPaBLE Programme provided opportunities for young scientists to discuss relevant issues on global change and developed professional networking for future collaborative efforts. The workshops and meetings provided excellent fora for interactions between scientists and policy-makers as well as enhanced the knowledge base of information relevant to regional climate change impacts. The projects augmented technical training of scientists and science support personnel and produced some well-designed educational and training materials for local application. Local outreach through workshops was very effective in disseminating information.

B) CAPaBLE Challenges

There were only limited indications that policy linkages were established and inadequate feedback to determine whether the meetings had substantive impact on policy-makers. Dissemination of information through proceedings or journals targeted mostly the scientists and may not be as interesting or useful for non-science readers. Other methods of dissemination may be more appropriate when providing information to policy-makers.

A single conference or workshop does not appear to be sufficient to ensure long-term capacity of an individual participant and a follow-up of the activities of the participants needs to be documented to determine long-term impacts.

C) CAPaBLE Recommendations

- Establish a definition of successful capacity building for short- and long-term outcomes.
- Consider supporting policy-based workshops where the invited participants are a good and relevant mix of policy-making groups, local scientific experts and a cross-section of stakeholders.
- Adapt and disseminate scientific results for non-science audiences in order for policy-makers, implementers, and the general public to have a better appreciation of global change issues.
- Encourage the publication of policy-briefs.

2.6 Concluding Remarks

Two areas that require strengthening are policy linkages and sustainability (i.e., the ongoing support of projects beyond APN funding support) of programmes initiated by APN projects. Many scientists and scientific bodies face these challenges and the reviewers recommend that APN find innovative ways to address them. Some strategies include:

- Encouraging governance studies that will involve collaboration with social, economic, business, political, and behavioural scientists and professionals.
- Enhancing networks of scientists by including countries/continents outside the APN region.
- Enhancing APN networks by being more pro-active in engaging member and non-member states to participate and play a more active role in APN programmes and activities.
- Encouraging regular monitoring and self-evaluation of funded projects and including indicators of success during project implementation.
- Encouraging climate change adaptation studies that promote sustainability.

Strategies to improve the evaluation process include:

- Providing appropriate guidelines and more specific criteria to the project review process to limit discrepancies in independent reviews.
- Providing more time for the project review process to carry out more comprehensive assessments of projects.
- Establishing a mentoring system particularly for beginning investigators and for long-term projects.
- Creating concrete metrics to measure the success of projects under the ARCP and CAPaBLE Programmes.

3. EVALUATION OF THE INSTITUTIONAL AGENDA

APN has effectively managed its programmes and has not only built the research base in the region, but also increased the scientific research capabilities of the developing countries in the Asia-Pacific region. The APN has also steadily improved and expanded its interactions with policy- and decision-makers, thus helping to provide a sound scientific basis for policy- and decision-making related to global change in the region.

3.1 Involvement of Member Countries

There has been a continued and increasing involvement of member countries in APN activities during the period of the second strategic phase. Member countries' sense of ownership has increased as evidenced by the willingness to host APN meetings and providing direct and in-kind contributions and representing APN at relevant global change fora, and members have also taken the opportunity to directly influence the APN's science agenda by creating sub-regional committees. However, in some of the member states, APN is still seeking better alignment with relevant ministries.

3.2 Financial Resources

During the review period, the APN's budget has marginally increased despite the economic difficulty and demands on government resources. The Governments of Japan and the USA, and the Hyogo Prefectural Government have continued to be the main financial contributors to APN. These contributions are very much appreciated by the APN.

The Governments of New Zealand and Australia Government have directly contributed financially during the second strategic phase specifically for the APN's CAPaBLE Programme. The Government of the Republic of Korea decided to make direct contribution to APN's core budget from 2006.

3.3 Alignment with Programmes of the Global Change Community

The feedback from the global change key partners confirms that APN's activities and programmes are aligned well with their programmes and strategies. APN's activities are also well aligned with the needs identified by the Parties of the

UNFCCC and through the Nairobi Work Programme (NWP)³ on impacts, vulnerability and adaptation to climate change.

3.4 Communications and Outreach

During the present strategic period, APN devised and is implementing a new Communications Strategy, which includes the production of new communication tools to reach out to a wider audience, particularly through electronic means. The number of publications has increased and the quality has significantly improved. Among recent publications is a book published by Springer in 2006: *Global Change and Integrated Coastal Management - The Asia Pacific Region*. APN also participated in international conventions/events and made representation at several high-profile international fora such as SBSTA of the UNFCCC. The efforts on co-organising international seminars and side-events on climate change and other related issues proved very useful. These activities helped in raising APN's profile and establishing linkages with other organisations.

3.5 Institutional Arrangements

While the members noted that the current framework document is adequate, clear and precise in defining the organisational arrangements and procedures of the APN, several minor revisions have been suggested for the next strategic phase. The APN's structure is seen as relevant, effective and useful while the management of the organs is viewed as efficient and well managed. However, it is important to help new members play an active role in the APN. The APN's Operating Plan is seen by the members as continuing to provide an effective tool designed to ensure that APN's activities are implemented to meet the goals of the strategic plan.

Recommendations from the evaluation of the APN Institutional Agenda are reflected in the APN's 3SP.

³ http://unfccc.int/adaptation/nairobi_work_programme/items/3633.php

4. CONCLUSION

Since 1995, the APN has made significant progress in promoting research in global change that has implications in the Asia-Pacific region. Significant scientific research has been conducted through the ARCP Programme that has produced strong and robust scientific outputs. Several high-priority collaborative research studies have been implemented during the second strategic phase that cover a range of cross-cutting issues on climate change and have strengthened global change science in the Asia-Pacific region, particularly in developing countries.

Through the projects supported under the CAPaBLE Programme, the APN has reached many scientists and policy-makers in countries of the region and made possible the conduct of training courses for young researchers and professionals on methodologies and tools to analyse issues related to global change. The APN has also become a stronger network creating new ties and strengthening links among individuals, organisations, countries and sub-regions within and outside the Asia-Pacific region.

The projects funded by APN have contributed to the IPCC, particularly the AR4. It has produced several good publications such as the book, *Global Change and Integrated Coastal Management - The Asia Pacific Region*. Recognition in the global change community significantly increased through APN participation in international conventions/events and representation at several high-profile international fora. The efforts to co-organise international seminars and side-events on climate change and other related issues have been highly positive.

The ASCM concluded that the overall evaluation of the APN-funded projects were considered as very successful in terms of meeting the five goals stated in the APN 2SP (2005-2010). Goals 1 and 3 were rated Excellent in terms of outcomes and performance, Goal 5 was rated Very Good, while Goals 2 and 4 were rated Good. Although the ARCP and CAPaBLE Programmes still face challenges that need to be addressed, both fulfilled their goals for the most part during the second strategic phase and resulted in policy-relevant science.

Policy linkages and sustainability of programmes initiated by APN projects are the two areas identified that require strengthening. The reviewers recommend that APN explore ways to address them. Governance studies that will involve collaborations with social, economic, business, political, and behavioural scientists and professionals should be encouraged as well as the regular monitoring and self-evaluation of funded projects. ASCM suggested including indicators of success during project implementation, enhancing APN networks by including other nations in the region and encouraging climate change adaptation studies that promote sustainability.

Though there is an enhanced involvement and ownership of member countries in the second phase, there is still a need to further improve financial and in-kind contributions and achieve better alignment with relevant ministries. While the Secretariat has been effective and efficient in implementing the day-to-day operations of the network, there is a need to strengthen the Secretariat's function as a node for better communication/outreach and scientific synthesis.

As the threat of climate change and urgency of mitigation and adaptation responses are becoming greater with every passing year, the role of the APN in enhancing scientific research capacity in the region becomes more important.

5. APPENDICES

A. Framework Document

Introduction

Changes in the Earth system are clearly impacting upon the societies and economies of the countries within the Asia-Pacific region, which supports more than half of the world's population. Recognising this, the APN was established in 1996 as an inter-governmental network in the Asia-Pacific region to foster global change research⁴ in the region, increase developing country participation in that research, and strengthen interactions between the science community and policy-makers.

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

1. Mission

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

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

⁴ "The APN defines global change research as "research regarding global change (the set of natural and human-induced changes in the Earth's physical and biological systems that, when aggregated, are significant at a global scale) and its implications for sustainable development in the Asia-Pacific region."

2. Core strategies

The core strategies of the APN are to:

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

3. Vision

Changes in the Earth system are clearly impacting the societies and economies of the countries within the Asia-Pacific region. These countries support more than half of the world's population. Recent research and supporting observations have provided new insights into some of these changes and their impacts, but have at the same time opened a number of new and challenging scientific issues.

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

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

4. Goals

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

- Goal 1.** Supporting regional cooperation in global change research on issues particularly relevant to the region
- Goal 2.** Strengthening appropriate interactions among scientists and policy-makers, and providing scientific input to policy decision-making and scientific knowledge to the public
- Goal 3.** Improving the scientific and technical capabilities of nations in the region
- Goal 4.** Cooperating with other global change networks and organisations
- Goal 5.** Facilitating the development of research infrastructure and the transfer of know-how and technology

5. Membership

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

6. Organs

The Organs of the APN are:

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

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

Organisational Arrangements and Procedures

A. The Inter-Governmental Meeting

1. Mandate

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

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

2. Participation

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

3. Meeting Procedures

- i. The IGM convenes annually/biennially.

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

B. The Steering Committee

1. Mandate

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

- i. acts on behalf of the IGM during the period between the IGMs, implementing IGM decisions, with assistance from the Secretariat
- ii. facilitates administrative and management arrangements necessary to implement the programme of activities of the APN. This includes thorough consideration of the APN budget
- iii. consults the national Focal Points regarding the potential attendance of observers as referred to in section A. 2 Participation - iii

In particular, the SC guides the Secretariat in:

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

2. Membership

- i. The SC includes:
 - a. three Focal Points elected by the IGM, in addition to one Focal Point from the country to host the next IGM
 - b. the Focal Point from the country to host the next IGM has a one-year term on the SC while the other three Focal Points are elected for a two-year term
 - c. the two SPG Co-Chairs
 - d. if an SPG Co-Chair is also a Focal Point, then another Focal Point will be included

- ii. The SC may co-opt experts as members to participate in SC activities for a term of one-year (renewable).

3. Procedures

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

C. The Scientific Planning Group

1. Mandate

The Scientific Planning Group (SPG):

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

2. Membership

- i. Each member country of the APN may appoint one member to the SPG.
- ii. Members should be selected for their ability to contribute to development and implementation of APN scientific activities through:
 - a. relevant knowledge of high priority APN science issues;
 - b. participation in research or programmes directly related to APN activities;
 - c. capacity to initiate and strengthen science-policy links; and
 - d. availability to participate in the annual SPG meeting.
- iii. A member country may appoint an alternate to participate in SPG activities, including meetings, when the regular SPG Member is unavoidably unavailable.
- iv. International organisations (such as DIVERSITAS, IAI, IGBP, IHDP, START, WCRP, etc.) and research institutions, involved in global change research activities, may be invited to attend the SPG meeting as observers and to participate in SPG activities.

3. Meeting Procedures

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

4. The SPG Sub-Committee

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

5. The Capacity Development Committee (CDC)

- i. convenes prior to the SPG meeting
- ii. reviews and prioritises, with the cooperation of the Secretariat, CAPaBLE proposals received for APN funding, for consideration by the SPG
- iii. the CDC members are:
 - a. Steering Committee Chair (ex officio)
 - b. two SPG Co-Chairs (ex officio)
 - c. one donor representative

- iv. the CDC may co-opt up to four experts as members to participate in CDC activities for a term of one-year (renewable) among members with strong link to the International Organisations (such as DIVERSITAS, IAI, IGBP, IHDP, START, WCRP, etc.) and regional programmes that are involved in capacity development activities
- v. the CDC may invite additional representatives to attend its meeting as observers.

D. The Secretariat

1. Mandate

- i. The Secretariat is the principal administrative organ of the APN. The APN Secretariat address and contact details of the staff are listed in Appendix 2 (page 13).
- ii. Resources and support for the Secretariat are provided by the host country, including the Central and Local Governments. In addition, the host country provides the services of a senior expert in global change issues, seconded as the Director of the Secretariat.
- iii. The Secretariat:
 - a. facilitates the day-to-day operations of the network;
 - b. provides secretarial support to the organs of the APN; and
 - c. implements IGM, SC and SPG decisions on behalf of these organs.
- iv. The Secretariat operates under the administrative arrangement of the Institute for Global Environmental Strategies (IGES). For further information, refer to Appendix 3 (page 14).

7. Financial Arrangements

- i. The APN maintains a special funding/financial account within the IGES administration. The purpose of this account is to independently administer contributions pledged by member countries and other sources.
- ii. The APN special account is subjected annually to external audit.
- iii. As described in the Secretariat section, D.1.ii., resources and support for the Secretariat are provided by the host country; however, this does not exclude other member countries from providing support to the Secretariat.
- iv. Member countries are strongly encouraged to contribute to the budget on a regular and/or project basis.
- v. In-kind support from governments and/or institutions of the member countries is also encouraged. This includes providing human resources, supporting workshops and meetings, particularly the IGM, SPG and SC meetings, and providing equipment.

- vi. APN funds are administered in a transparent and cost-effective manner.
- vii. The Secretariat manages the APN account and presents annual financial reports to the IGM.
- viii. The fiscal year is from April 1 to March 31, the following year.

8. Additional Arrangements

- i. The APN may appoint APN representatives to encourage and promote cooperation between the APN and specific geographic regions/sub-regions in Asia and the Pacific.
- ii. The IGM, SC and SPG may establish small ad-hoc groups for specific tasks such as planning or provision of specialised advice.
- iii. Expected roles of the nFPs, SC Members, SPG Members and the Secretariat are specifically elaborated in the Appendix 4 (pages 15-18) as guidance.

9. Language and Records

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

10. Date and Effect of Amendments

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

Appendix 1.

Current APN member countries are:

Australia, Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Nepal, New Zealand,

Pakistan, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Thailand, United States of America, Viet Nam

Note: APN Approved Countries:

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

Appendix 2.

The APN Secretariat is located at the APN Centre:

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Appendix 3.

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

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

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

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

Appendix 4.

Guidance for APN national Focal Points (nFPs)

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

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

NFPs are called upon to participate in IGM efforts to identify important issues, evaluate these, consider options for resolving them, and assist the IGM to take decisions to implement them. Such issues could, but are not limited to, setting policy for APN programmes and finances; approval of APN rules and procedures; development and production of the APN's annual operating plan; review and approval of the APN's annual financial report and budget; review and approval of projects and activities to be undertaken or supported by the APN, based on recommendations made by the Scientific Planning Group; providing thematic guidance to the Scientific Planning Group, the Steering Committee and the

Secretariat; implementation of long-term plans, including the APN's Strategic Plan, and regular evaluation and review of these. NFPs are the only IGM participants authorised to formally approve or otherwise vote on actions to be taken and are expected to do so.

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

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

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

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

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

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

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

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

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

If the Chair finds it necessary to be absent or is otherwise unavailable (e.g., because of a conflict of interest), a Vice-Chair may be asked to serve as a Co-

Chair on an interim basis and, in doing so, to act in accordance with the above guidance.

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

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

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

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

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

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

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

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

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

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

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

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

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

Guidance for Steering Committee (SC) Members

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

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

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

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

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

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

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

Guidance for the APN Secretariat

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

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

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

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

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

B. Communications Strategy

This Communications Strategy was endorsed at the 14th Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting to facilitate continuity and to advance APN efforts in:

- Demonstrating its work within and outside the region;
- Effectively communicating the outcomes of the projects it supports;
- Strategically disseminating the results and outputs of its activities to the global change (GC) community, including scientists, decision-makers and the public through various platforms
- Enhancing communications among the APN organs and with the wider global change community

STRATEGY 1: Continue to produce and improve the communication tools

Publications

Continue to produce (in-house) and improve the appearance and quality (in terms of conciseness and clarity) of the following publications to make them more interesting and effective in providing information to the broader scientific community, policy-makers and the public.

- Proceedings of meetings, symposia, workshop
- Brochure that provides general introduction about APN
- Flyer that highlights major activities undertaken by the APN in the previous year and summarises the current projects being supported
- Project bulletin
- Annual report
- Quarterly newsletters
- Posters
- CD-ROMs containing APN publications and project reports

Website

Revamp the APN website to attract more visitors who access information on global change and thus further promote APN and its activities in the public domain. Changes may include but not be limited to: enhanced and dynamic navigation structure, extensive linkages to other appropriate organisations, continuously updated content that clearly and accurately reflects APN's structure, activities under the Annual Regional Call for Research Proposals (ARCP) and *Scientific Capacity Building and Enhancement for Sustainable Development in Developing Countries* (CAPaBLE) Programmes, and a number of searchable databases for contacts, meetings and publications, etc.

STRATEGY 2: Develop new communication tools

- Press release – actively consider press releases to the media; issue joint press releases from the Secretariat and the country where an APN-related activity is taking place and ensure that the national Focal Points are well-informed
- Policy briefs – start from the submitted country reports by the member countries
- Synthesis reports or book from the synthesis activities
- Other useful publications

STRATEGY 3: Organise outreach activities

Continue to organise outreach activities and disseminate APN materials to further promote the network in the region and to encourage involvement of more stakeholders in APN activities.

STRATEGY 4: Establish/strengthen partnerships

- Maintain close liaison and strengthen the relations with the global change programmes and key organisations to explore better ways of collaboration in achieving shared goals
- Be more open and pro-active in establishing new ties/collaboration with other organisations in the region involved in global change research, capacity building/enhancement and policy development
- Explore mechanisms of engaging other countries (institutions) outside the region for mutually beneficial endeavours

STRATEGY 5: Raise APN visibility

- Expand more substantive APN activity to and supportive of policy-making, such as policy fora and symposia to contribute in raising APN profile in the region
- Use all opportunities to mention the APN at high-level ministerial meetings attended by national Focal Points
- Fully utilise other available infrastructure (such as the facility of the Institute for Global Environmental Studies) in promoting APN and disseminating information

STRATEGY 6: Empower APN members

The use of an appropriate communication platform is important in engaging the APN members to be more actively involved in APN activities.

- Create a web-based information tool where Members can have free access (or password-protected) to all the APN materials that they need.
- Add a portal on the APN website that will serve as a forum where Members can exchange information and ideas. This portal could be later expanded and opened to the public.

- Provide/supply the APN Members with useful materials for information and dissemination to their own networks.
- Convene a meeting (or include as a separate session/item of the IGM) devoted solely on empowering the Members and assessing how they progress on being more involved in APN activities and defining specific actions they have done as an APN Member. This strategy requires strengthening of the membership and full support/commitment from the Members should be realised beforehand.
- Be more proactive and diligent in reminding the Project Leaders to report the progress and outcomes of their activities to the National Focal Points (nFPs) and SPG Members in their countries/sub-regions.

C. Resources Development Strategy

This Resources Development Strategy, endorsed at the 15th Inter-Governmental (IGM)/Scientific Planning Group (SPG), highlights the three (3) strategic domains that APN should be looking at in the years ahead.

Direct financial contributions from the Governments of the APN member countries

1. Investigate those scientific and policy-relevant areas of global change the Governments of the member countries are interested in. Confer with the national Focal Points (nFPs) and SPG members member countries regards the kinds of activities that are pressing and under which conditions the member countries may be ready to provide contributions to undertake these pressing activities.
2. Investigate, together with the nFPs of those member countries that are already contributing to the APN directly and financially, areas of their specific interest in global change research and possibilities of how to achieve increased contributions. Vice versa, check the obstacles that may hinder these countries to increase their contributions so the APN may consider them while trying to improve its structural basis.

In-kind contributions from the Governments of the APN member countries

1. While the Ministry of the Environment of Japan remains the major donor for the expenses related to personnel at the APN Secretariat, possibilities must be investigated to secure human resources by, perhaps, secondment of junior staff from member countries to the APN Secretariat. While a part of the remuneration/allowance during their stay in Japan may be covered by APN, a substantial portion would be expected to be borne by the seconding Governments of the member countries. Explore this strategy with member countries.
2. Encourage Governments of the developing member countries to cover, at least partially, the travel costs of their APN members to attend APN meetings.
3. Encourage members, in particular the developing country members, to develop, organise and fund/co-fund events, such as workshops, symposia, etc., that could be held in conjunction or back-to-back with major international events related to global change research, that are held in their countries, respectively. Proposal Development Training Workshops (PDTW) are a good example. Seek advice and guidance from the nFPs and SPG members.

Direct financial support provided by external sources, such as foundations, funding agencies, and private sector, etc.

1. While starting to search for potential funding agencies and foundations, identify with the member countries, particularly the SPG members, the 'scientific products' APN wants to offer.
2. Create 'products' to offer that have 'added value' component: What is the APN specific 'added value' that would make the products more attractive

- for potential donors? This is an ongoing process and must be consistently and sensitively re-considered and re-developed.
3. Think strategically how to receive financial support from external donors while being aware that, at least partially, the APN is a funding agency itself.

D. APN Financial Summary 2005-2010

		2005	2006	2007	2008	2009 ¹⁾	
Revenue	MOEJ	1,260,000	1,034,000	917,000	963,000	1,342,000	
	Hyogo	327,000	294,000	282,500	295,000	322,000	
	NSF/USCCRP	475,000	435,000	460,000	480,000	500,000	
	Australia	23,000	22,000	23,000	--	--	
	New Zealand	--	16,000	17,000	20,000	14,000	
	Republic of Korea	--	10,000	10,000	10,000	10,000	
	Operative Assets from the previous Fiscal Year	150,000	228,000	178,500	160,000	45,000	
Savings through exchange rate fluctuations					76,000		
Revenue total		2,235,000	2,039,000	1,888,000	2,004,000	2,233,000	
Expenditure	Science, Policy, Communications, Networking	ARCP	636,000	629,000	669,000	718,000	720,000
		CAPaBLE	564,000	596,000	494,000	525,000	660,000
		Climate Synthesis	--	--	--	--	50,000
		ZSP Evaluation and 3SP Formulation	--	--	--	--	30,000
		Science/Policy fora	163,500	41,000	31,000	102,000	50,000
		Fellowship Programme	50,800	47,500	45,000	31,000	55,000
		IGM/SPG Meetings, SC Meetings	68,100	118,000	92,000	105,000	100,000
		Salaries and related costs, for professional service (science & policy)	244,000	230,000	224,000	258,000	290,000
		Sub-Regional Cooperation	16,300	--	13,000	--	25,000
		Travel costs	40,000	29,500	17,000	27,000	35,000
	Publication & Website	30,700	28,000	24,000	18,000	32,000	
	Contingency					1,000	
	Institutional Expenditure	Salaries and related costs for professional service administration	65,400	45,500	48,000	68,000	65,000
		General Operational Costs	63,700	65,000	56,000	64,000	80,000
		IGES Overhead	34,500	31,000	27,500	29,000	40,000
Compensation exchange rate fluctuation		25,000					
Expenditure total		2,010,000	1,860,500	1,740,500	1,965,000	2,233,000	
Operative Assets to the next Fiscal Year		225,000	178,500	147,500	39,000	0	

Exchange rates applied: 2008: US\$ 1 = JPYen 115

2009: US\$ 1 = JPYen 100

1) In 2009, the amounts shown under "Expenditure" are taken from the budget plan as actual figures would not be available until April 2010.

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