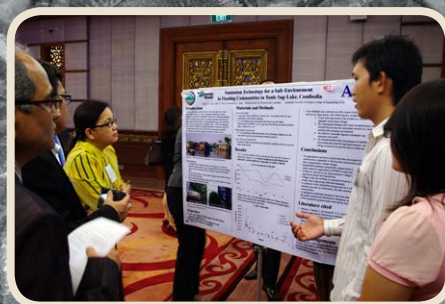
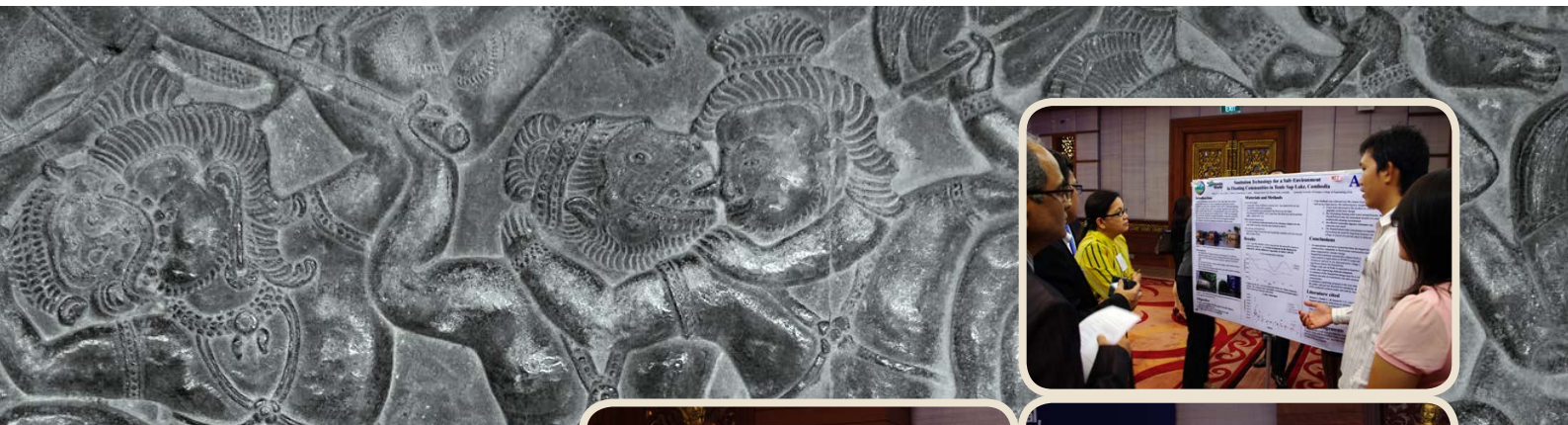


PROCEEDINGS

of the 19th Inter-Governmental Meeting (IGM)/ Scientific Planning Group (SPG) Meeting

Siem Reap, Cambodia
19–21 March 2014



Proceedings of the 19th IGM/SPG Meeting (2014 Siem Reap, Cambodia)

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Cover artwork: *Inner walls of Angkor Watt: Depicting Hindu epics of the Ramayana and the Mahabharata* (Xiaojun Deng/APN Secretariat)

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MESSAGE FROM THE DIRECTOR

The APN 19th Intergovernmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting and associated committee meetings successfully concluded on 21 March 2014. The meeting was hosted by the Ministry of Environment (MOE) of the Royal Government of Cambodia in Siem Reap – its capital city where Angkor Wat, considered a World Heritage Site, can be found.

The IGM reviewed APN's work undertaken in fiscal year 2013/14 and approved the proposed work programme and budget plan for 2014/15. Twenty-four regional research and projects were approved for funding under the Annual Regional Call for Research Proposals (ARCP) programme, and twelve capacity building projects were approved under the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE Programme).

Among the many outcomes of the meeting were the endorsement of the following new activities, which provide a clear indication of APN's strategic direction in the coming year:

Clear focus on the B&ES in the upcoming fiscal year, as 23% of the approved projects is B&ES-related. The aim is to share the outcomes of these projects with governments and relevant stakeholders, including the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES);

- Plans for new capacity-building activities and a "PAN Asia Risk Reduction" fellowship programme in collaboration with START International;
- Strengthening institutional basis for sub-regional activities by including relevant clauses and guidance in the APN Framework Document;
- Continued engagement in high-level international forums including IPBES, IPCC and UNFCCC; and
- Organisation of an expert meeting on air pollution control in urban Asia-Pacific to be held in China in later 2014, and a symposium on satoyama and

sustainable development, both in collaboration with the Hyogo Prefectural Government of Japan.

Members and invited experts participated in interactive sessions held during the IGM/SPG Meeting. The presentations and lively discussions provided insights on the following topics: 1) Tonle Sap Great Lake: Research and Community Perspective; 2) The International Global Change Research: Future Strategic Engagement with the APN; and 3) Strengthening the APN Network: Co-Financing/Co-Benefit Strategies in Global Change Research and Capacity Development. A summary of each interactive session is included in the present proceedings.

A poster session was organised to showcase activities implemented and research efforts done in the Tonle Sap Lake and the nearby communities. Five young scientists joined the poster session and Mr. Khon Puthea, from Wetlands Work, Phnom Penh, Cambodia, was awarded the "Mitra Award for Global Change Research" in recognition of his outstanding poster presentation, which is also included in this present proceedings.

In closing, I would like to thank all participants for attending this important meeting, and I extend my appreciation to national Focal Points, SPG members, invited experts, external reviewers and all other stakeholders for their invaluable contribution to the APN.



Akio Takemoto

Akio Takemoto

Director, APN Secretariat



▶ National Focal Points	▶ Scientific Planning Group Members	▶ Honoured Guests	▶ Invited Guests & Observers	▶ Government of Cambodia
Bhutan TSHERING	Bangladesh MIAH	MOE SAMAL	HYOGO AKIYAMA	OJANO
Cambodia SEM	Bhutan TSHERING	IENG	IGES-APAN SANO	BUN SONG
Indonesia GINTING	Cambodia KUM	▶ Invited Experts to SC	IT-Cambodia KHOEURN	SOPHEAP
Indonesia NIWARANDI*	India BORGAONKAR*	USA BROWN	LCS-Rnet ISHIKAWA	VUTHY
Japan HOSHINO*	Indonesia ADININGSIH	USA FUCHS	MAIRS AILIKUN	SOK KEANG
Malaysia HASSAN*	Japan FUKUSHI	New Zealand MATTHEWS	MOEJ-NCB KUJI	KHOV SOVIET
Nepal DUWADEE	Lao PDR VIRASACK		NRCT MONTHIP	LOAH HEAL
Nepal BASNAYAKE	Malaysia YUNUS			SAROEUN
Sri Lanka SIRINAPAPORN*	Nepal SHRESTHA			MONINEATH
Thailand SIRINAPAPORN*	New Zealand MATTHEWS*			PONLOK
USA UHLE	Pakistan MUHAMMED	▶ Invited Experts to SPG		SIMAEUN
	Philippines LAPITAN	ANU HEATH		SAMRAY
	Russian Federation STERIN	USM KOSHY		THY
	Sri Lanka KARIYAWASAM	Former SPG MOTEN		SOKHAPHIROM
	Thailand BOONJAWAT	Member for		KANEL
	USA TUPAS	Malaysia		
	Viet Nam NGO			
				▶ Secretariat
				TAKEMOTO
				IMANARI
				STEVENSON
				DENG
				KOSWATTA
				CONDORINI
				DE GUZMAN

* nFP/SPG Alternate or delegate member

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Section I

Chairperson's Summary and Appendices



CHAIRPERSON'S SUMMARY

Delegates (Members or their Alternates) from Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Lao People's Democratic Republic (Lao PDR), Malaysia, Nepal, New Zealand, Pakistan, Philippines, Russian Federation, Sri Lanka, Thailand, United States of America (USA) and Viet Nam attended the Meeting. Invited experts to the APN Steering Committee (SC) and Capacity Development Committee (CDC), and invited experts and representatives from the following stakeholders and partners in the international global change community were also represented at the Meeting: Ministry of Environment, Cambodia, Ministry of Environment, Indonesia, Ministry of the Environment, Japan, Hyogo Prefectural Government, Siem Reap Provincial Government, Asia Pacific Adaptation Network (APAN), Institute of Technology of Cambodia, International Research Network for Low Carbon Societies/Low Carbon Asia Research Network (LCS-RNet/LoCARNet), National Research Council of Thailand (NRCT), and Universiti Sains Malaysia (USM). The full Participants List is attached as *Appendix 1*.

Session One: Inaugural Session

► Opening Ceremony

Facilitated by the master of ceremonies, opening statements were delivered by Mr. Sundara Sem, Director, Department of ASEAN and International Cooperation, Ministry of Environment, Kingdom of Cambodia and APN national Focal Point (nFP) for Cambodia; Mr. Bun Tharith, Deputy Governor, Siem Reap Province, Kingdom of Cambodia; Mr. Basnayake M. U. D. Basnayake, Secretary, Ministry of Environment and Renewable Energy, Sri Lanka and APN SC Chair; Dr. Akio Takemoto, APN Secretariat Director; and H.E. Dr. Say Samal, Minister, Ministry of Environment, Kingdom of Cambodia.

Mr. Sem welcomed all delegates to the city of Siem Reap at the heart of Cambodia where a World Heritage site is located. He expressed his appreciation to H.E. Dr. Say Samal, Minister of Environment of the Kingdom of Cambodia, for attending and presiding at the opening meeting session, noting that his presence reinforces Cambodia's commitment to promoting regional research, capacity building and science-policy linkages in collaboration with international partners. Particularly, he thanked all APN members for their hard work leading up to the IGM, and also expressed gratitude to his colleagues from various department of the Ministry of Environment and the APN Secretariat for the meeting support.

Mr. Basnayake, in his capacity as SC Chair, expressed his appreciation to the Excellencies from the royal government of the Kingdom of Cambodia for their participation, and to APN nFPs, members and experts of the SPG, SC, CDC, and the APN Secretariat Staff for their hard work in the lead-up to the present IGM, noting the objectives of the meeting and work in the upcoming three days. Particularly he thanked all APN member countries for their in-kind contribution to APN activities over the course of the past fiscal year that had ensured the successful implementation of the work programme approved at the previous IGM.

Dr. Takemoto expressed his special thanks to all participants who had travelled far and wide to visit Siem Reap and his appreciation to the Ministry of Environment, Kingdom of Cambodia, for hosting this important meeting. He highlighted the need to further support developing countries to develop scientific capacity including,

specifically, scaling up APN activities, and, in this connection, he urged all member countries to consider and identify new partnership and co-funding mechanisms to work towards this common goal.

H.E. Dr. Say Samal in his opening speech welcomed all participants to the IGM and expressed his strong support of APN's objectives, noting that the present IGM is a great opportunity to develop stronger connections among policy makers, experts, scientists, researchers, friends and colleagues from APN member countries and observers. He introduced Cambodia's commitment to sustainable development through the countries' Rectangular Strategy – Phase III, which is in line with many of APN's new and emerging objectives. Finally, expressing the hope that the knowledge and experiences shared in the coming days would better underline the value of action-oriented research and holistic approaches to global environmental change, he formally declared the opening of the 19th IGM/SPG Meeting.

▶ **Group Photograph**

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

Session Two: Institutional Issues

▶ **Participants' Introduction**

Facilitated by Dr. Takemoto, all participants introduced themselves and their affiliations.

▶ **Election of Chair and Vice-Chair**

The IGM elected the following officers, as nominated by Ms. Yuko Hoshino, national Focal Point alternate for Japan, by acclamation:

Chair: Mr. Sundara Sem (nFP for Cambodia)

Vice-Chair: Mr. Basnayake M.U.D. Basnayake (nFP for Sri Lanka and SC Chair)

▶ **Item 1: Adoption of the Draft Agenda**

Mr. Sem asked delegates to consider the **draft agenda, which was then approved as presented.**

Action 1: IGM
Agenda was adopted.

► **Item 02: Report from SC and Secretariat**

2-1: 2013/14 Activities & Action Points

Mr. Basnayake, in his capacity as SC Chair and on behalf of the SC, reported the main highlights and activities of APN during fiscal year 2013, including the implementation of action points identified at the 18th IGM/SPG Meeting in Kobe, Japan, as well as new actions resulting from the intersessional Steering Committee meetings.

The following main activities were highlighted: project management; 2013 annual calls for proposals for the core programmes: ARCP and CAPaBLE; a focused call for proposals on “Climate Adaptation, Disaster Risk Reduction and Loss + Damage”; new activities under the three frameworks — Biodiversity & Ecosystem Services (B&ES) Framework, Climate Adaptation Framework (CAF), and Low Carbon Initiatives (LCI) Framework; progress of the Third Strategic Phase evaluation and Fourth Strategic Phase planning; sub-regional cooperation activities; Proposal Development Training Workshops; new publications; communication and outreach activities, etc. Mr. Basnayake also provided a summary of changes in nFP and SPG members, as well as Secretariat staff, over the past fiscal year.

Mr. Sem thanked Mr. Basnayake for his comprehensive report and expressed his appreciation to all members involved in implementing the programme of work in the past fiscal year that had ensured the completion and/or timely progress of activities to date. He took the opportunity to thank former nFPs and SPG members for their contribution to the APN, and welcomed new members on board.

The IGM acknowledged, with appreciation, the work undertaken in fiscal year 2013 as reported by the SC Chair.

Action 2: IGM

The report was approved

Item 2-2: Financial Reporting

The Chair invited Mr. Yukihiro Imanari, Head, Division of Development and Institutional Affairs, APN Secretariat, to present the Final Financial Report for 2012/13 for IGM approval and the Status Report of the Work Programme and Budget Plan, Fiscal Year 2013, for information and discussion.

Status Report for Fiscal Year 2013

Regarding the Status Report of the Work Programme and Budget Plan, Fiscal Year 2013, Mr. Imanari explained that the main reason for renaming the Status Report from “Interim Financial Report”, as it has thus been in the past, is that the figures in the report only cover the calendar year as of 31 December 2013. As the fiscal year 2013 had not ended at the time of preparing (and presenting) the report; it was not realistic to predict the figures towards the end of the fiscal year.

He stressed that, although the figures in the Report only include monetary contributions from donor countries, continued in-kind contributions from all APN Member Countries were highly appreciated. Mr. Imanari further explained that the Status Report is for IGM information only, and will be finalised following the conclusion of fiscal year 2013; presented at the mid-term SC Meeting later in 2014; and then presented to the IGM at its 20th Meeting for final approval.

In relation to the APN Opportunity Fund (AOF) columns in the Status Report, he reported the recent recalculation of the actual amount of AOF as previously reported to the 25th SC Meeting. He explained that, as a result of the discussions among the SC members, the reallocation of such resources to the four activities listed in the Status Report was based on SC decisions. Mr. Imanari apologised for the miscalculation of the AOF and explained that the main reason was that all committed resources for activities under the core programmes that were ongoing and/or pending new contracts had been incorrectly captured.

In addition, he reported that the Secretariat had had intense discussions regarding how to improve the entire reporting system, as it is immensely important to improve the APN's credibility in terms of resources management and mobilisation. He noted that **the Secretariat, with guidance from the SC, will consider further improving the format of financial reporting to better inform the IGM. Additionally, external auditors had offered assistance to improve the reporting process, and the Secretariat will inform the IGM about progress in this regard.**

Final Report for Fiscal Year 2013

Following an introduction and presentation of the Final Financial Report for 2012/2013, Mr. Imanari requested that the IGM review and approve the Report.

The Chair thanked Mr. Imanari for his presentation; requested the IGM to look through the report presented; and opened the floor for suggestions and discussion.

Mr Sabar Ginting, Assistant Minister for Clean and Renewable Energy, Ministry of Environment, Indonesia, and APN nFP for Indonesia, made a suggestion regarding how to best reflect carried-over funds in the Final Financial Report. He suggested that the final report be presented in a way that makes it clear how all resources for that fiscal year were settled, rather than presenting various amounts of uncommitted resources (negative or positive) in a separate column.

Responding to Mr. Ginting's suggestion, **Mr. Imanari stated that an option could be to include a final balance of uncommitted resources, i.e. the total carried-over amount, in addition to corresponding figures under individual cost items. He suggested that this correction be made and the revised Final Financial Report be included in the final proceedings of the present Meeting.** This was supported by Dr. Andrew Matthews, Invited Expert to the SC, also attending on behalf of the SPG Member for New Zealand.

Dr. Matthews suggested that, to improve financial reporting, the SC could appoint a sub-group to work closely with the Secretariat in order to develop a better reporting framework that is useful for all delegates. He offered to work with the Secretariat in indentifying a format for such a framework that would better inform the IGM.

Dr. Maria Uhle, nFP for USA, moved that the IGM approve the Final Financial Report for Fiscal Year 2013, with the above proposed revision incorporated. The Final Financial Report for Fiscal Year 2013 was then approved by acclamation.

Action 3: Steering Committee and Secretariat

The secretariat, with guidance from the Steering Committee, will consider further improving the format of financial reporting to better inform the IGM.

Action 4: IGM and Secretariat

The report was approved and the final report is to clearly indicate any carry-over funds.

► **Item 3: The APN Framework**

The Chair invited Mr. Louis Brown, Invited Expert to the SC and Ms. Peldon Tshering, nFP for Bhutan and SC Member, to introduce proposed amendments to the APN Framework Document.

Mr. Brown started with the background of the proposed amendments as presented before the IGM. He stated that, responding to an SC decision (at its 25th meeting in Wattala, Sri Lanka) to add provisions to the Document to cover the Sub-Regional Committees (SRCs) and to clarify and to improve a few other provisions of the text, he and Ms. Tshering had reviewed the Framework Document and prepared a draft set of proposed amendments with assistance from the Secretariat. The proposed amendments were sent to nFPs on 17 January 2014 for additional comments. The version presented to the IGM reflected the proposed changes as well as additional comments received.

Joined by Ms. Tshering, Mr. Brown introduced the major proposed amendments to the Framework Document as presented in Item Paper IGM-SPG-19-03-App.1 Suggested Amendments, Ver2, noting that a few additional points and questions had also been raised by some SC members during the 26th SC Meeting held one day prior to the IGM/SPG meeting.

Mr. Brown invited SC members who had raised such additional points to introduce their points to the IGM. He further suggested that any additional changes that the IGM considers appropriate should be raised under this item, but **if these changes needed more thoughtful and comprehensive discussion, a small group could be formed to discuss these points and report back to the IGM on Day 3.** He also proposed that any such amendments that could not be settled in this IGM, for example due to time constraints, they be recorded and addressed in preparations for the 20th IGM.

Before going into the details of the proposed amendments, Mr. Brown suggested that the Framework Document be understood to be a dynamic document that evolves over time to guide the APN as it evolves to meet the emerging needs of science, scientific capacity-building, science-policy interactions, etc., related to global change research in the region.

Below is a summary of the additional points raised by members under the present item that were not included in the proposed amendments presented to the IGM, and the related discussions (based on *IGM-SPG-19-03-App.1 Suggested Amendments, Ver2*):

Comment/suggestion	Discussion/proposed wording
<p><u>6.C.3.viii (SPG observers)</u></p> <p>Some “additional experts” participate fully in the SPG, not just as observers. However the SPG should consider budgetary implications of such participation when it comes to extending such invitations. (Ms. Tshering)</p>	<p>Revision to the originally proposed text to read:</p> <p><i>“The SPG may invite additional experts to participate in its meetings and other activities, as appropriate;”</i> (Ms. Tshering)</p> <p>This was tentatively agreed pending final approval on Day 3.</p>
<p><u>6.F. (Secretariat)</u></p> <p>The Secretariat section: the Secretariat mandate should be set out in more detail, comparable to the scope for the mandates of other organs and sub-organs; (Ms. Tshering)</p>	<p>This could be addressed in the next round of amendments. (Ms. Tshering)</p>

<p><u>Decision-making / voting</u></p> <p>It might be appropriate to add provisions to detail how APN reaches decisions, although the current consensus mechanism works fine so far. (Ms. Tshering)</p>	<p>This could be addressed in the next round of amendments. (Ms. Tshering)</p> <p>As opposed to a formal process, the APN has been relying on consensus to allow for the flexibility for effective decision-making. Establishing a strict process might be counterproductive for a small organisation such as the APN. The current arrangement is also appropriate for the size of the APN operating on a comparatively small budget. But, clarification could be added to the Framework Document (Dr. Matthews)</p>
<p><u>Appendix 4. CDC Guidance, vi.</u></p> <p>Parts of the Guidance for CDC Members should be updated to reflect the recent development of the CDC, especially as the CAPaBLE programme had become a core programme of the APN. (Dr. Stevenson, Head, Division of Communication and Scientific Affairs, APN Secretariat)</p>	<p>Suggested text would be provided for approval on Day 3. (Dr. Stevenson)</p>
<p><u>6.A.2.i (Participation to IGM)</u></p> <p>For some countries the nFP does not have authority to appoint an SPG member to accompany him/her to an IGM meeting as they belong to different departments. Hence the text on IGM participation should be revised to clarify the role of nFP and SPG Member in participation at IGMs. (Mr. Ginting)</p>	<p>Revision to the proposed text separating the original into two parts to address the roles of nFPs and SPG members separately. (Dr. Matthews)</p>
<p><u>6.E.2.iii (SRC Membership)</u></p> <p>SRC Membership should be clearly defined because the function of nFP and SPG members are clearly different. Suggested to delete "its SPG Member, or both" in Section 6.E.2.iii (Mr. Ginting)</p>	<p>Removing SPG members from SRC membership may imply exclusion of SPG members from participating SRC. Clarification was requested. (Prof. Miah, SPG Member for Bangladesh and Dr. Stevenson)</p>
<p><u>6.B.2.i.a (Elected nFP to the SC)</u></p> <p>There should be clear provisions as to the maximum number of continuous terms an elected SC member (nFP) can serve, in order to provide for opportunities for balanced participation to the SC. (Prof. Miah)</p>	<p>Further discussion will be carried out by the ad hoc working group open to all participants; proposed text will be presented to IGM on Day 3. (Dr. Brown and Dr. Matthews)</p>
<p><u>Resource mobilisation strategies</u></p> <p>The Framework Document is ambiguous in terms of the responsibility to develop funding for the APN. (Prof. Roland J. Fuchs, invited expert to the SC)</p>	<p>It is suggested that a modification to the Framework Document be considered to address resource development responsibilities. (Prof. Fuchs)</p>

Chairperson's Summary

The Chair thanked members for their active participation in the discussions and requested the Secretariat to take note and facilitate discussions of the open-ended ad hoc working group before the final draft was to be presented to the IGM for approval, reiterating Mr. Brown's suggestion that any additional points that require more detailed discussion could be raised for future revisions. With this he closed the present item.

Action 5: Ad Hoc Group on Framework Document, Secretariat

Comments are to be discussed further and updated suggestions be presented to the IGM for final approval on Day 3.

► Item 4: Progress Report from the Task Committee —3SP Evaluation and 4SP Planning

The Chair suggested Item 4 be moved forward to make use of the time remaining before the Meeting was scheduled to be adjourned for lunch. This was agreed by the IGM.

Prof. Kanayathu Chacko Koshy, Centre for Global Sustainability Studies, Universiti Sains Malaysia, Malaysia, and invited expert to the SPG, presented on the progress and plan of work on behalf of the Third Strategic Phase Evaluation & Fourth Strategic Plan Task Committee (3SP & 4SP Task Committee). He introduced the members of the Task Committee and, recalling decisions at the 18th IGM/SPG Meeting, emphasised that the evaluation report should be concise and donor-oriented, incorporating reviews by external experts. This was followed by a report about the scoping meeting held on 26 and 27 August 2013 in Kobe, which identified a range of work and revised the outlines of the 3SP Report and updated the work plan for the year ahead.

Following a walkthrough of the revised structure for the 3SP Report, Prof. Koshy reported that the first draft of the report **is expected to be completed in May 2014. The draft will then be sent to external experts for their review, and a second workshop will be held in summer 2014 to include external reviewers' comments in to the report, and to start drafting the 4th Strategic Plan.** The full report and strategic plan will be presented to the 20th IGM for approval.

The Chair thanked Prof. Koshy for his progress report and thanked the Task Committee for their work and the Secretariat for its support. The IGM acknowledged the progress to date and approved the related plan for fiscal year 2014 as presented.

Action 6: IGM

The report was approved and the Task Committee is to continue its activities.

► Item 5: Ongoing and New Activities

Mr. Basnayake, Vice-Chair of the Meeting, presided over the afternoon session. He invited the Secretariat to introduce proposed ongoing and new activities, reminding members that related budgetary issues would be subject to discussion and approval under the ensuing item (Item 6) on the Proposed Work Programme and Budget Plan. Below is a summary of proposed continuing and new activities for 2014/15:

Item 5-1 Core Programmes

Dr. Linda Anne Stevenson, Head, Division of Communication and Scientific Affairs, APN Secretariat introduced the sub-item. Drawing attention to the discussion paper, she started by recognising the substantial donor contributions particularly from the governments of Japan and USA. However, she indicated that, as the levels

of resources from APN stakeholders were expected to be reduced and, in the light of ensuring the sustainability of the ARCP programme without having a significant mortgage on multi-year projects (in other words, carried-over budget requests shifted from a fiscal year to the next), it was proposed by the SC and SPG for IGM consideration and approval, that:

- new funds received in Fiscal Year 2014 be allocated firstly to continuing multi-year projects approved by the present IGM, secondly to new awardees, and lastly to potentially be shifted back to the CAPaBLE budget, where certain funds had been shifted in order to supplement the ARCP budget.
- the call for ARCP proposals be deferred by one year to 2015, to ensure consistency and sustainability of the ARCP programme in terms of supporting both new and ongoing activities.
- the CAPaBLE call will be launched as usual, incorporating a new advisory service process that utilises online submission tools.

Before concluding her presentation, she indicated that more external reviewers had been engaged in the annual calls for proposals process, which had significantly supplemented the expertise of the SPG.

The Vice-Chair opened the floor for discussions reiterating that budgetary issues will be discussed in a later item for final approval on Day 3.

The IGM accepted the report and approved the proposal regarding funding arrangements for ARCP projects in fiscal year 2014, and the proposal to defer the ARCP call for proposals for one year to 2015, as summarised above.

Action 7: Secretariat, IGM

Secretariat is to implement with close guidance from the Steering Committee. The budget is to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 5-2: Frameworks of the APN

Dr. Stevenson presented on the ongoing and proposed activities under the following three focused frameworks: the B&ES, CAF and LCI. She noted that a key difference between the core programmes of ARCP and CAPaBLE and the frameworks is that the latter tend to have a variable “shelf-life” depending on emerging science-policy needs of the donor community, as opposed to the core programmes that are embedded in the core of APN.

She noted that the B&ES Framework opens up opportunities for collaboration in related areas, and welcomed all members to propose such activities to be undertaken in collaboration with the APN. She drew attention to the opportunity paper and the tri-fold publication, and further noted that certain new ARCP/CAPaBLE activities would fit the areas of interest under the B&ES Framework. She proposed, therefore, that newly approved B&ES-related activities be shifted to the Framework, the outcomes of which could then be shared strategically with international partners, including the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES).

Additionally, in terms of new activities, she reported a partnership will be developed with the University Network for Climate and Ecosystems Change Adaptation Research (UN-CECAR) to develop a toolkit for climate impacts on biodiversity and ecosystems services, utilising funds approved at the 18th IGM. Further, some networking activities will be undertaken to promote the networking and sharing of knowledge related to B&ES.

On the CAF, Dr. Stevenson introduced its background and work undertaken to date, in particular the progress of the focussed call for proposals on linking Climate Adaptation, Disaster Risk Reduction and Loss + Damage,

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launched in 2013. She stated that SPG reviewers were presently considering 21 full proposals submitted by proponents shortlisted from a total of 85 Expressions of Interest (EOIs). She reported that new projects were expected to begin their activities in mid-spring 2014. Finally, she highlighted the balanced geographical distribution of member country involvement in terms of EOIs submitted, and the proposed budget allocation for the new activities.

On the LCI Framework, she summarised recent progress in LCI-funded activities, including communication activities undertaken with matching funds from LoCARNet as an example of mutual benefits brought by co-funding. Regarding proposed future activities she indicated that the results of LCI projects were expected to be synthesised into a report and policy brief, the initial planning of which would likely be held in conjunction with the 2014 International Forum for Sustainable Asia and the Pacific (ISAP) annual meeting.

The Vice-Chair thanked Dr. Stevenson for the presentation and opened the floor for discussion.

Dr. Uhle sought clarification regarding the seemingly sharp decrease of the number of proponents invited for full proposal submission, which is a 75% reduction from the 85 EOIs received and, in this connection, asked how the selection criteria had been developed. Dr. Stevenson explained that the main reason was to guarantee at least a 50% success rate for proponents invited to submit a full proposal, taking into account the actual resources available under this call. Regarding the screening criteria, she stated that they had been established at the expert workshop on Climate Adaptation, Disaster Risk Reduction and Loss + Damage held prior to the call in Kobe Japan, August 2013.

Referring to the B&ES framework, Dr. Uhle introduced potential opportunities for APN to work with other ongoing international efforts. Particularly, she noted that **the Belmont Forum is presently preparing for a call related to biodiversity and ecosystem services. APN projects with funding already secured could respond to this call and become part of a consortium where additional knowledge and matching resources could be leveraged. She indicated that this could be a pilot opportunity for making best use of available funds, especially considering the expected budget cut that is expected for the Directorate of Geosciences of the National Science Foundation (NSF), through which APN receives US contribution. Dr. Uhle indicated that she would provide further information to the Secretariat regarding this opportunity.**

Dr. Matthews requested clarifications to how the Belmont Forum could be beneficial to APN in terms of APN's funding needs, given that the above-mentioned call targets existing projects with resources available. Dr. Uhle responded that an example for B&ES funded projects was to seek partnership with their US counterparts, whose involvement could be funded by the Belmont Forum; in other words, APN through the B&ES framework could bring the "developing country involvement" into the consortium to generate co-benefits. She added that a research matching site has been established for researchers to search for potential collaborators.

Dr. Stevenson responded that this could be a good opportunity for APN and suggested that such information be provided to relevant ARCP and CAPaBLE awardees to explore how to utilise such an opportunity.

Action 8: IGM

The budget is to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Action 9: IGM, nFP for USA, Secretariat

For B&ES, as a pilot study, consider any new B&ES-related projects involvement, potentially, in the new call for proposals on B&ES that will be launched around May 2014 under the Belmont Forum. This might be an opportunity to have a pilot case to see how such partnership mechanisms work. More information on the call will be provided by the national Focal Point of the USA.

Steering Committee and Secretariat is to investigate opportunities to work with other international efforts.

Item 5-3: Science-Policy Engagement

The sub-item on science-policy engagement, presented by Dr. Stevenson, focuses on three main areas: engagement in the activities of the United Nations Framework Convention on Climate Change (UNFCCC) and its Subsidiary Body for Scientific and Technological Advice (SBSTA); engagement in the work of IPBES; and activities and plans for science-policy dialogues to be organised by APN in collaboration with regional partners. Among others, she highlighted an important message generated from the APN side event organised at UNFCCC COP19 — APN should continue to mobilise funds to scale up its activities by involving both developed and developing countries. She also noted that APN has established a strong connection with IPBES and aims to further contribute to the Platform by directly providing relevant input from APN activities.

Regarding science-policy dialogues, Dr. Stevenson shared some important messages generated from the first Science-Policy Dialogue for Southeast Asia, and proposed, as detailed in the corresponding item paper and its appendix, that a dialogue for South Asia be organised in January 2015 and one for Temperate East Asia (TEA) later in 2015 or early 2016. A synthesis report of these activities was proposed to be published in 2016. She requested the IGM to provide comments and guidance.

The Vice-Chair thanked Dr. Stevenson for her presentation and opened the floor for discussion.

Dr. Takemoto provided additional information regarding APN's engagement with IPBES: the Platform strongly encourages stakeholder engagement and, therefore, shifting the APN approved projects with biodiversity and ecosystem components to the B&ES Framework would create good opportunities for APN to collectively provide their outcomes to IPBES as stakeholder in-kind contribution, which the IPBES encourages and welcomes. This, said Dr. Takemoto, is one of the many ways that APN could establish strong links with IPBES.

The Vice-Chair thanked Dr. Stevenson for her presentations and thanked delegates for their intervention and comments. Before inviting Dr. Takemoto to introduce the next Item, the Vice-Chair announced that a small group led by Mr. Brown and Dr. Peldon would be working on updates to the Framework Document to reflect the earlier discussions under Item 3, for final submission to the IGM on Day 3. He emphasised that the group was open to any participant concerned and/or interested, and announced the time and venue for the group.

Action 10: Secretariat, IGM

Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 5-4: Scoping Activity: Reduce, Reuse, Recycle (3R)

Dr. Takemoto introduced a proposal to organise a scoping workshop that aims to formulate a framework for "Reduce, Reuse and Recycle" (3R), in line with APN's science agenda of "resources utilisation and pathways for sustainable development" under its Third Strategic Phase. He noted that activities under this proposed framework would contribute to the Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific (2013-23), which calls for voluntary actions in the region.

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He indicated that many organisations and member governments of APN are interested in 3R-related activities and that the APN has been encouraged to promote such activities in the region. This initiative, he noted, could be part of the LCI framework because many aspects are linked to low carbon development and would generate co-benefits. Finally, he expressed the hope that the initiative could provide input to the Fourth Strategic Plan.

In the ensuing discussion Prof. Roland J. Fuchs, invited expert to the SC, commented that Reduce, Reuse and Recycle, in a narrow sense, might not fit directly into the general umbrella of global change; and therefore it might be a good idea that it becomes a part of APN's LCI framework.

Dr. Takemoto explained that there might be different interpretations in different countries as to the definition of 3R and therefore a scoping workshop might be useful to identify how specifically APN could contribute to and benefit from 3R .

Dr. Matthews then urged that the APN find a niche in this areas that suits its vision and goals in a regional context, and therefore important to look at how it relates to global change in the region.

Mr. Ginting expressed his support to the proposed activity stating that it was in line with the policy agenda of Indonesia. He shared Indonesia's new initiative of "waste banks" that explores innovative ways of solid waste management. Dr. Kim Chi Ngo, SPG Member for Viet Nam, joined Mr. Ginting in supporting the proposal. She noted that more effort is needed to translate research into actionable knowledge for communities.

Action 11: Secretariat, IGM

Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 5-5: Communication, Outreach and Networking

Mr. Xiaojun Deng, Programme Officer for Communication and Development, APN Secretariat, reported on communication, outreach and networking activities in the past fiscal year, especially as they relate to the action plan for implementing the APN Communications Strategy approved at the 15th IGM in 2010. Through a brief analysis of some data and statistics, he reported on improvements to the publications process, usability of the website, performance of the online information systems, among others.

A tentative work plan for the new fiscal year was then presented for the IGM's suggestions and endorsement. The plan included: 1) development of an alumni directory and service, as part of the fourth component of the APN information system; 2) website redesign to mark the 20th anniversary of APN; 3) a short promotional video; 4) new publications; and 5) a potential press conference in collaboration with the host of the 20th IGM.

In the ensuing discussion, Prof. Fuchs congratulated the Secretariat for the progress on communication and outreach. He commented, as reminded by the statistics on top downloads of APN outputs, that one of the foci for the next Science-Policy Dialogue could be to look at how much of the APN output has found its way from the scientific community to the policy arena. In this regard, the next dialogue could focus more on APN-specific issues, which would provide feedback to the APN process.

Mr. Ginting asked whether the e-Lib was linked to other libraries and whether it was accessible by all member countries. Mr. Deng and Dr. Stevenson responded positively, adding that the e-Lib was open to all visitors with internet access and that specific requests had been received for publications to be included in third party libraries, for example, in universities.

Dr. Konstantin Lutaenko, nFP alternate for Russian Federation, joined Prof. Fuchs in congratulating the Secretariat for the progress made. He stated that the Temperate East Asia sub-region of APN presently suffers from a lack of regional cooperation and, in this context, a lack of comprehensive information about partner organisations. He suggested, therefore, that APN **develop and arrange a directory of organisations categorised by geographical distribution and thematic area. This would help to provide information for new comers and make the APN website more useful.**

Action 12: Secretariat, IGM, nFP Alternate for Russia

Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

In addition, the Secretariat is to categorise themes sub-regionally. Secretariat is to work with Dr. Konstantin Lutaenko, nFP alternate for Russia, on this.

Item 5-6: New Hyogo Activities

Dr. Takemoto started by acknowledging the Hyogo Prefectural Government for hosting the APN Secretariat and providing annual monetary and in-kind support to the APN. He stated that the Hyogo government has been providing earmarked monetary contributions to the APN to promote activities of benefit to APN members and Hyogo Prefecture. In fiscal year 2014, two new activities were proposed:

- an expert meeting on air pollution control in urban Asia-Pacific to be held in the latter half of 2014, in collaboration with the Beijing Normal University of China, in Zhuhai, China, to share latest scientific information and identify areas for APN programmes, involving scientists and practitioners in APN member countries; and
- a symposium on Satoyama and Sustainable Development to be organised in collaboration with the Han-shin-Kita regional office of Hyogo Prefecture, tentatively in December 2014.

Action 13: Secretariat, IGM

Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 5-7: Capacity Development Activities

Dr. Stevenson introduced the PAN Asia Risk Reduction (PARR) Fellowship Programme that had been approved by the Steering Committee at its 25th Meeting in Sri Lanka in 2013 through the AOF. The fellowship programme aims to train young scientists and professionals in areas of global environmental change and human and environmental security; to strengthen the capacities of institutions to provide inter- and trans-disciplinary research opportunities, and to nurture a network for exchange of information, knowledge and experience. She noted particularly that the proposed amount will be for direct support of the fellows themselves.

The second part of her presentation related to the APN's Proposal Development Training Workshops (PDTWs). Dr. Stevenson shared that since the first one organised in 2008, the PDTW series had been very successful, with 11 PDTWs that trained 186 young scientists and led to 8 projects being undertaken and an additional 3 proposals submitted to the APN.

She suggested that, In order to use available financial resources most effectively, one PDTW be held annually on a regional-rotation basis. The first workshop would be held in Lao PDR in summer, 2014, and participants

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would be selected through an open call targeting early-career/young scientists and practitioners from developing countries. It was also proposed that the PDTW be extended to three days, based on the evaluation of feedback from past participants. Finally, Dr. Stevenson noted that more details of the PDTW evaluation are available on members' request.

Prof. Fuchs asked what role APN plays in the alliance that launched the PARR fellowship programme, and whether it was a one-off activity. Dr. Stevenson responded that the APN partners with START (and possibly other co-sponsors as well) in response to a proposal that had been submitted by an expert member of the SC during the call for AOF activities process in 2012 as a one-off request. She emphasised that the APN funds will go entirely to the fellows and not to implement the programme itself. START might well request continuation of support that would have to be considered through the competitive call under the CAPaBLE programme. Any decision to continue support would, of course, have to be based on an evaluation of the success of the initial fellowship awards.

Action 14: Secretariat, IGM

Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

► Item 6: Needs Assessment and Proposed Work Programme and Budget Plan

Item 6-1 Needs Assessments

The Vice-Chair invited Dr. Matthews to present the results of a needs assessment undertaken at the request of the 25th Steering Committee. Dr. Matthews noted that the assessment provided a realistic evaluation of the needs of the Asia-Pacific community, and was an estimation that matched APN's capacity. He commended the Secretariat for their brainstorming exercise that had culminated in the results presented to the IGM. He emphasised that the needs assessment is different from a budget as such; rather, the estimates reflected a realistic situation that APN aspires to, taking into account the size of the APN, and thereby could be used to appeal to the donor community in a broader sense, for any possibility to contribute to APN, either through direct monetary contributions or through any other mechanisms that member countries find appropriate.

With that, Dr. Matthews drew attention to, and explained the contents of, the needs assessment paper presented to the IGM, and called for all members to think seriously not only about the funding strategy, but also to think about opportunities that would enable APN's growth and take advantage of potential opportunities, rather than simply continue the current situation.

Dr. Uhle commented that a lot of financial resources under ARCP had been used to support developed countries; and a large amount could be saved if APN were to fund developing countries only. **She indicated that funding only developing countries with US funds would be the only way forward for USA as a donor;** and hopefully through such arrangements, more agencies would be encouraged to become engaged in the APN. She also suggested further that APN could consider mobilising resources development agencies as much of the work had been relevant to development aid.

In response, Dr. Takemoto shared that, as an example and possibly in a similar situation as the USA, the government of Thailand through the National Research Council of Thailand (NRCT), which had been invited to the Meeting, had shown strong interest in engaging APN and had been considering a co-funding mechanism making use of APN's unique strengths, to encourage international collaboration with Thai researchers. Through

such mechanisms, Dr. Takemoto stated that APN could leverage funds from other organisations, funding agencies, research institutes or even universities.

Referring to Dr. Uhle's comment, Dr. Fuchs asked how developed country scientists could engage in APN research activities without going through a separate process that would be extremely time-consuming and potentially impractical. Dr. Uhle noted that it is unreasonable to fund developed-country scientists, for example for travelling, using US contributions to the APN; and explained that an example mechanism that APN developing countries could use was through the Partnerships for Enhanced Engagement in Research (PEER) programme managed by USAID, which allows developing country scientists to submit proposals to work with developed country scientists that have secured funds through other channels.

Dr. Matthews commented that APN should acknowledge the conditions set by donors regarding the use of their financial contributions, while at the same time recognise that it should facilitate the involvement of all member states, developed or developing, and therefore more focus should be on the content of the work that's being supported. It is important that APN uses the limited resources available to ensure work is not duplicated across boundaries and makes effective use of the skills and knowledge of developed states, said Dr. Matthews. He said, however, that travel funds are not always easy to secure for developed country scientists.

Dr. Takemoto expressed his understanding of the position expressed by the USA. He said that according to his understanding, APN funds from the Japanese government were not considered as official development assistance (ODA), but were for promoting global change research for better environmental policy in member countries. Japanese scientists, through such a mechanism, were encouraged to be engaged in regional and international research activities, hence creating mutual benefits for all countries involved. As APN is in a unique position to promote such activities, this was the reason for Japan to continue its support of the APN.

Ms. Hoshino agreed with Dr. Takemoto, adding that Japan was interested in working with other Asian countries, which on the one hand builds capacity of Japanese scientists, and on the other hand is important for enhancing regional cooperation for global change research. She added that Japan's position is that developing country contribution in terms of knowledge generation was equally important as any knowledge generated by Japanese scientists.

The Vice-Chair thanked everyone for their comments and invited views and perspectives from developing countries. He welcomed member countries to share any ideas on the general topic of increasing APN financial resources. Dr. Takemoto clarified that this session was not intended to impose any request for pledges, but to solicit ideas and suggestions.

Dr. Madan Lall Shrestha, SPG member for Nepal, expressed similar concerns about how to accommodate developed country involvement in APN projects if its funds could not be used for developed country participation. He suggested that some mechanism should be in place to allow for developed country scientist involvement while ensuring most funds are used by developing country scientists.

Dr. Uhle provided additional information about the PEER programme and said that it had already provided a few million US dollars to developing country researchers. A first step for APN, she indicated, was to **encourage developing country scientists to take the lead to find out who has been funded, and for this purpose, she offered to provide a list of relevant and eligible Principal Investigators (PIs) to the Secretariat.** She reiterated that presently the APN spends a significant amount of money supporting countries with robust scientific enterprises already; and that removing that component alone could release funds for four or five

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additional ARCP projects. Therefore, she proposed a complete change, and called for APN to play a key role in taking advantage of new opportunities.

Mr. Prasert Sirinapaporn, nFP alternate for Thailand shared that Thailand was developing a similar co-funding arrangement with APN, and encouraged other member countries to look at whether bilateral research funds related to the objectives of the APN could be utilised for APN activities making use of the APN funding mechanism. This partnership approach, he said, would be a good start for expanding the funding base of the APN.

Dr. Monthip Sriratana, Director, Climate Change Research Center, NRCT, Thailand, thanked APN for inviting her to the meeting and shared an example of a project on watershed and climate change, following on a success of a climate change strategy project jointly implemented with USAID. She noted that, under the co-funding arrangement, all expenses on the Thai part (involving Thai researchers) were borne by the Thai government and vice versa; and **she stated that such an arrangement could also be applied to Thai-APN cooperation, and NCRT was looking at allocating its budget to create a win-win situation. She said that this could start with APN finding good project proposals in line with the needs of the Thai government, which would be beneficial to all ministries and departments concerned.**

She requested the Secretariat to provide reports of past projects so that NRCT could evaluate how it could join hands with APN. She observed that many Thai proponents were from the Asian Institute of Technology and requested the APN to distribute the call for proposals more widely at the national level.

Prof. Kensuke Fukushi, SPG Member for Japan, commented that, in Japan, some funds were restricted to domestic use only and it was very good that APN provides funds for international activities. However, he stated that for this purpose separate proposal needs to be developed hence creating potential risk. Therefore, he noted that APN could explore the possibility of requiring a single proposal with split funds.

Dr. Stevenson responded that in some situations APN is implementing such fund-splitting mechanism, which was dependent on donor conditions.

The Vice-Chair thanked everyone for their interventions and invited Dr. Matthews to present the Proposed Work Programme and Budget Plan for 2014/15, reminding members to consider and approve the plan as appropriate.

Action 15: Secretariat

Secretariat is to assure that future funds allocation from the USA is for developing countries.

Action 16: Secretariat, SC

Needs assessments are to continue to be undertaken with close guidance from the Steering Committee.

Action 17: All APN Members

All members are asked to consider the financial future of the APN with a view to strengthening its financial position.

Item 6-2 Proposed Work Programme and Budget Plan for Fiscal Year 2014

Dr. Matthews drew members' attention to the spreadsheet and explanatory notes in front of them, thanking all donor countries for their sizable contributions and for their continued trust to the APN, and commended the

efforts of officials working behind the scenes to secure the current budget. He explained the structure of the budget plan and highlighted the total resources available for fiscal year 2014 as follows:

1. Core Budget: US\$ 2,448,000
2. Committed Resources: US\$ 927,668

The Vice-Chair thanked Dr. Matthews and asked members to approve the budget, adding that on Day 3 there will be an opportunity to review action points, including those on the work programme and budget plan.

The Proposed Work Programme and Budget Plan for Fiscal Year 2014 was approved.

Action 18: Secretariat, IGM

The IGM approved the Work Programme and Budget Plan for FY2014, which is to be reaffirmed under Item 15.1 on day 3.

Session III: Parallel Sessions: Sub-regional Cooperation

► **Item 7: Parallel Sessions: Sub-regional Cooperation**

The Sub-Regional Committees for South Asia and Southeast Asia held parallel sessions to discuss common issues, progress of activities and future plans. Outlines of their discussion are listed below.

South Asia Sub-Regional Committee (SA-SRC)

- Review of action points from the 5th SA-SRC Meeting
- Institutionalising Sub-Regional Committees in the Framework Document
- South Asia Science-Policy Dialogue
 - » Identification of organising committee members
 - » Development of tentative organising plans
 - » Identification of invitees and partners
- Future plans and activities

Southeast Asia Sub-Regional Committee (SEA-SRC)

- Review of action points from the 6th SEA-SRC Meeting
- Institutionalising Sub-Regional committee in the APN framework document
- Seed grant proposal on urban planning
- Future plans and activities

Each SRC appointed a chair and a rapporteur to facilitate their meetings and to report to the IGM on Day 3 under Item 9. Following the respective SRC meetings, the chairs and rapporteurs from SA-SRC and SEA-SRC had a joint meeting to exchange ideas and issues between sub-regions.

Action 19: Sub-Regional Committees

SRC Committees shall report to the IGM under Item 9.

► **Item 8: SRC Chairs and Rappourters Meeting**

The Meeting was attended by Ms. Tshering and Dr. Shrestha representing South Asia; and Dr. Wan Azli Wan Hassan (nFP alternate for Malaysia), Mr. Virasack Chundara (SPG member for Lao PDR) and Dr. Jariya Boon-jawat (SPG Member for Thailand) representing Southeast Asia, and Ms. Taniya Koswatta, Coordinator, APN Secretariat.

Regarding the Framework Document, especially as it is related to SRCs, both sub-regions agreed that nFP and SPG members should participate in SRC activities. Regarding SC membership, members generally agreed that at least one nFP from each sub-region should be represented in the SC as elected nFPs.

Regarding annual PDTWs, both sub-regions agreed on holding them on a rotational basis, and noted that the 2015 PDTW is expected to be held in Temperate East Asia, unless the group is unable to hold the workshop for whatever. If this is the case, South Asia is willing to hold a PDTW in 2015. They also felt that donor members, especially USA, could consider funding PDTWs to develop capacity of young and early career scientists in developing countries.

It was suggested the half-day sessions allocated for sub-regional parallel meetings was insufficient, and members felt that sub-regional parallel meetings could be held immediately prior to the IGM in order to make recommendations. Members proposed that, if SRCs do not meet intersessionally, they could meet for one full day prior to the IGM.

Ad Hoc Group Meeting on Framework Document

Mr. Brown, Dr. Matthews and Mr. Ginting participated in the ad hoc meeting that took place after the SRC parallel sessions on Day 2. The work focused on preparing and agreeing on the text for Section 6.A.2.1 on nFP and SPG participation in the IGM and on updates to the guidance for CDC members. Participants felt that other points raised under Item 3 would require more substantive discussion and hence suggested addressing these in future rounds of review. The agreed modifications to the latest version of proposed amendments would be presented to the IGM for final approval on Day 3.

Session IV: Reports and Project Recommendations

► **Item 9: Sub-Regional Committee Reports and Discussion**

The Chair invited representatives of the SEA-SRC and SA-SRC to report to the IGM on results of the parallel sessions on Day 2.

Southeast Asia Sub-Regional Committee

Dr. Wan Hassan reported on behalf of the SEA-SRC regarding the discussions took place under Item 7 on Day 2. Firstly he reported the highlights of the 6th SEA-SRC Meeting held in November 2013 in Kuala Lumpur, which include further development of the timeline and content for the proposal on urban planning summer school, actions to improve communication among members, identification of Myanmar scientist to be involved in SRC activities as an observer, and on dates and venue of the 7th Meeting.

Dr. Wan Azli Wan Hassan, nFP alternate for Malaysia was elected acting Chair and Mr. Virasack Chundara, SPG member for Lao PDR, was elected Vice-Chair.

Then, Dr. Wan Hassan introduced the highlights of the parallel session, sharing that a detailed plan has been developed for the seed grant proposal and a timeline should be completed in April. Regarding sub-regional evaluation, a first draft had been prepared by Dr. Ngo, Dr. Subramaniam Moten (invited expert to the SPG) and Dr. Fariza Yunus (SPG Member for Malaysia) and sent to members for comments. On the Framework Document, Dr. Wan Hassan proposed some amendments in relation to the vice-chairmanship of SRCs, namely to remove the reference of "second Vice-Chair" and replace it with "Vice-Chair".

Regarding the full proposal on urban planning (prepared with an APN Seed Grant), Dr. Boonjawat has invited Dr. Bundit Chulasai and Dr. Banasopit Mekvichai to organise the training in Bangkok, and will invite Cambodia, Lao and Myanmar. Dr. Erna Sri Adiningsih (SPG Member for Indonesia) will be the coordinator for training in Indonesia and invite Malaysia. Dr. Ngo will provide the CV of the coordinator of the training in Viet Nam and invite the Philippines. Financial support for each training will be sought from local funding agencies. The full proposal is to be submitted by October 2014 to the APN Secretariat.

Regarding the Synthesis of Science-Policy Dialogues, he noted the SEA-SRC suggestion that the Synthesis should be in 2015, to coincide with the APN 20-year anniversary. Finally, he called for countries like USA to support PDTWs, in order to facilitate capacity building of young scientists and researchers in developing countries, which are beneficial to both USA and sub-regions.

The Chair opened the floor for discussion.

In the ensuing discussion, Prof. Fukushi expressed his appreciation to the SEA-SRC and commended their active work that developed into an active agenda to date.

Dr. Luis Tupas, SPG Member for USA, commented in regard to financial support for PDTWs. He said that the proposal could be offered to USAID of the State Department, which is an agency that actually targets similar kinds of professional development. Responding to Dr. Takemoto's question about what role the Secretariat should play in order to make this happen, Dr. Tupas answered that it depends on what mechanism was to be used. It could be in the form of a proposal, or through US Embassies in host countries; and the Secretariat could help prepare the necessary documents to provide plans of budget, milestones, targets and logistics.

Regarding the SEA-SRC's call for USA contribution, Dr. Matthews expressed concern about the implication of splitting the Network, as developed countries like the USA are members of the APN, which is *regional* network. Dr. Takemoto added that, from his understanding, the US policy of contribution towards APN at present had been principally the policy of NSF and does not necessarily represent the US government as a whole. Therefore, the positions of USAID and other agencies remained to be explored and there was no US official position about APN capacity development issues, in his opinion.

Mr. Chundara commented that one of APN's goals is to help developing countries build capacity. He suggested that the focus should be on how to support these countries to develop the capacity that meets APN requirements; and from the developing countries' point of view, the expertise and knowledge is more important than where the experts are from.

Action 20: Secretariat, SEA-SRC

Secretariat and SEA members are to consider how to work with the USA and other countries regarding additional, future support for PDTWs.

Action 21: SEA-SRC

SEA-SRC CAPaBLE proposal is to be submitted according to the discussions under the 2014 Call for CAPaBLE proposals.

Action 22: SEA-SRC, Secretariat

Organise and hold the 7th Southeast SRC Meeting with the APN's first, revised annual PDTW.

South Asia Sub-Regional Committee

Ms. Tshering presented on behalf of the SA-SRC. She reported that the following officers were elected as Chair and Vice-Chair of the SA-SRC for the one year period of 2014–2015:

- Chair: Ms. Peldon Tshering, the nFP of Bhutan
- Vice Chair: Mr. Sunil Kariyawasam, SPG Member for Sri Lanka

Ms. Tshering shared that (1) significant progress had been made with regard to the South Asia Science-Policy Dialogue, and (2) the two proposals developed at the SRC Meeting, one on “Climate resilience in farming systems under sloping lands of South Asia” and another on the “Assessment of ecosystem services of selected landscapes of South Asia”, had been revised and summary proposals had been provided to the committee for input from the members.

Regarding the Framework Document, she reported that the SA-SRC stressed the following points:

- The SPG members should present at the IGM/SPG meeting.
- At least one member from each sub-region should be present in the total of the 5 nFPs in the SC.
- It was suggested that no term be renewable for SC members unless all member have been represented at least once, to avoid permanent fixtures.

She then shared the progress of SRC evaluation, noting that Dr. Amir Muhammed, SPG member for Pakistan, will coordinate the evaluation report to be completed in May 2014. To enhance communication with other regional networks, contact details of SAARC bodies in each country had been received.

Regarding the next SA-SRC Meeting and SA Science-Policy Dialogue, the dates and venue were fixed from 19-23 January 2015 in Pune, India. A list of potential invitees was to be prepared by each member nFP.

Additional action points were reported as follows:

- Dr. Stevenson will continue interactions with the Climate and Development Knowledge Network (CDKN), START and LEAD Pakistan for their involvement in the Dialogue;
- The Secretariat was to explore for more partners in terms of funding and expertise
- Ms. Peldon Tshering would explore SAARC Development Fund as another source of funding.
- Both nFPs and SPG Members were to be involved in the organising committee for the Dialogue.

Regarding the South Asia Science-Policy Dialogue, Dr. Stevenson clarified that she had been in contact with CDKN and START; the former had confirmed their commitment to be involved; and the latter would submit a proposal to NSF in the coming October for funding for this project.

The Chair thanked Ms. Tshering for her report and Dr. Stevenson for the clarification. He asked relevant persons to work with the Secretariat, including especially with regard to the organisation of the South Asia Science Policy Dialogue. He then invited Prof. Fukushi to update on activities of the TEA-SRC.

Action 23: SA-SRC, Secretariat

Organise and hold the 6th South Asia SRC Meeting with the APN's second, sub-regional Science-Policy Dialogue in January 2015.

Action 24: SA-SRC, Secretariat

Request the APN Secretariat to work with the members and consider and coordinate with international partners for the science-policy dialogue, particularly CDKN and START.

Action 25: SA-SRC, Secretariat

Members shall provide further input via email to prepare the Summary Proposals for submission under the next call for proposals for the ARCP programme.

Action 26: SA-SRC, Secretariat

Members shall provide further input via email on useful contacts for the region, particularly the country contact points for SAARC.

Temperate East Asia Sub-Regional Committee

Prof. Fukushi reported that a meeting was not held among TEA members due to the absence of China, Mongolia and Republic of Korea. He apologised on behalf of the TEA-SRC and noted that the region shared many issues of mutual concern; and in the months to come, the committee would communicate via email to identify activities on which they could work together and then the committee would share information on its progress with the Secretariat.

Action 27: TEA-SRC

The TEA-SRC will communicate electronically to identify issues of common interest and report to the Secretariat about the progress.

The Chair thanked Prof. Fukushi for his update and requested that the TEA-SRC share their work with other sub-regional committees. He then invited Dr. Tupas to present the SPG Co-Chairs' Report to the IGM.

► Item 10: SPG Co-Chairs' Report

On behalf of the SPG and the CDC, Dr. Tupas reported on highlights and results of the SPG meetings held prior to the IGM Meeting, starting by sharing some statistics on current projects (ARCP/CAPaBLE) and statistics on the 2013 Annual Call for Proposals (ARCP/CAPaBLE).

Regarding the proposal review process and project evaluation, he stated that the current proposal review process works well, but that the timing of the review process presents some difficulties for reviewers based in Southern Hemisphere. In addition, it was recommended that more external reviewers be involved in and integrated into the review process. Additionally, he noted the following:

- The SPG recommends that projects be evaluated immediately upon completion;

Chairperson's Summary

- SPG recommends that proposals will be equipped with proper log-frame analysis for better evaluation of the attainment of the objectives;
- Project leaders and collaborators will be asked for publishable article at the end of the project period for the Science Bulletin as part of the contract terms;
- The Science Bulletin is to become a peer-reviewed in order to enhance more citations, hence more exposure of the APN and its activities; and
- To serve the purpose of the bullet point directly above, the SPG recommends to have a review board for the Science Bulletin.

On the topics of interest that will be highlighted under the 2014 call for proposals, the SPG recommended, in addition to the main scientific thematic areas specified in the Third Strategic Plan, the following: (1) climate impacts related to agriculture, livestock and forestry; (2) green economy and sustainable development; (3) green consumption and production; and (4) coastal zone megacities and urban issues.

Regarding evaluation of capacity development, he reported that the SPG and CDC agreed that realistic and reliable set of metrics of success needs to be developed; review on successful projects be conducted and outputs should derive from such reviews; indirect outcomes should be tracked; and finally, inputs should be submitted to the SPG Co-Chairs for development of metrics for capacity development.

In relation to the 3SP report, the SPG and CDC had no objection on the structure of the report; and recommended to look carefully at the target audience.

On PDTWs, the two groups agreed that future PDTWs would start by an open call and participants should come from APN developing countries; additionally, the SPG and CDC recommended that candidates should also present a motivation essay for the selection process. Further, careful grouping should be considered as age gap would be an issue. The two groups also recommended that log-frame analysis be introduced to the participants for improved proposal development.

If a science conference were to be organised in 2015, the SPG and CDC recommended that APN should be strategic in terms of choosing the target audience and packaging the message to be delivered. It was also recommended that (1) a talk show session be organised at the conference; (2) prominent persons be added to the outreach video; and (3) science and policy issues be highlighted.

Finally, Dr. Tupas announced the results of the SPG-SC election as well as the new CDC structure, as follows:

New SPG-SC

- Dr. Luis Tupas (USA) as continuing Co-Chair for one more year
- Dr. Jariya Boonjawat (Thailand) as new SPG Co-Chair for 2-year term
- Dr. Kensuke Fukushi (Japan) as SPG-SC Member for one more year as new SPG-SC Member for one year
- Dr. Amir Muhammad (Pakistan) as new SPG-SC Member for one year
- Dr. Goswami (India), with Dr. Hemant Borgaonkar (India) acting on his behalf, as SPG-SC Member for one year

New CDC Members

- Dr. Luis Tupas; SPG Member for USA as SPG Co-Chair (*ex officio*)
- Dr. Jariya Boonjawat; SPG Member for Thailand as new SPG Co-Chair (*ex officio*)
- Mr. Basnayake M. U. D. Basnayake, 2013-2015 SC Chair (*ex officio*)
- Participating Donor Member: Japan (*ex officio*)
- Dr. Andrew Matthews, invited expert for one year, renewable
- Prof. Roland Fuchs, invited expert for one year, renewable
- Dr. Srikantha Herath, invited expert for one year, renewable
- Nomination is open for one more person to be elected as agreed at the CDC

The Chair congratulated and appreciated the work of the SPG and CDC over the year. He opened the floor for discussion.

Prof. Fuchs expressed his appreciation for the report and asked whether the SPG and CDC had thought of any steps to ensure APN work does not overlap with that of various organisations in the region, for example when calling for proposals. In response, Dr. Tupas noted that the SPG-SC should take on a new role of evaluating activities going on outside of APN, not just within.

Mr. Brown commended the positive report and recommendations of the SPG, which had the potential to strengthen the APN science programme. He asked whether there is a time frame to implement the recommendations particularly the one related to involving external reviewers, assuming that they were adopted by the IGM. Dr. Tupas answered that the process would be more of a matter of how to use external review information more properly, and requires only shifting the way in which we utilise the scoring process. Regarding other recommendations, for example on the open science conference, the SPG feels it was ready for participation to implement the recommendations. Finally, he joined the Chair in thanking the SPG group, which as he put it, had been a very stable and hard-working group and he was proud to be part of it in the past years.

With no additional comments from the floor, the Chair thanked Dr. Tupas for his report and welcomed all new Members to the SPG-SC and CDC.

Action 28: Secretariat, SPG-SC

IGM approved by acclamation the recommendations for the 2014 SPG-SC.

Action 29: SPG-SC

SPG-SC is to evaluate what is going on outside the APN community with a view to strengthening the scientific work of the APN and assure work is complementary rather than duplicative in nature.

Action 30: SPG, Secretariat

The Secretariat and the SPG is to consider methods for evaluation such as SWOT and Log-Frame analyses for new and ongoing proposals and projects, respectively.

Action 31: Secretariat, CDC

IGM approved by acclamation the recommendations for the 2014 CDC.

► **Item 11: ARCP and CAPaBLE Recommendations**

On behalf of the SPG and CDC, Dr. Alexander Sterin, SPG member for Russian Federation and outgoing SPG Co-Chair presented on projects and proposals that the SPG and CDC recommended to the IGM for funding under the ARCP and CAPaBLE programmes.

ARCP Recommendations

Dr. Sterin reported that the SPG recommended approximately 10% reduced budget for all multiyear projects to reflect the core budget availability for ARCP activities in the upcoming year; and the mortgage for third year of US\$145,200 of the continuing multi-year (CMY) projects was also recommended to be reduced and would be carried over to the 2015/2016 Fiscal Year Budget.

Regarding CMYs, he noted that of the 2013/14 ARCP projects, thirteen (13) are multi-year projects that wish to continue project activities for a further year in 2014/15, and the total funding requested for CMY projects for 2014/15 is **US\$ 500,000**, secured from the 2012/2013 and 2013/2014 budgets.

Regarding new projects, he reported that the SPG considered proposals that received a minimum average score of 7 to be considered for the funding, and, depending on quality of the proposals, regional balance and availability of budget, the SPG had recommended conditions for each proposal.

The recommended allocation is outlined in the following table⁵:

Recommendations for New ARCP Proposals and Continuing Multi-Year Projects	
13 continuing multi-year projects (secured from 2013/14)	US\$ 500,000
11 new projects from 30 full proposals	US\$ 700,668
2015/16 budget allocations for continuing multi-year projects pending successful review	US\$ 145,200

Action 32: Secretariat

Undertake activities as approved.

CAPaBLE Recommendations

Dr. Sterin reported that approximately **US\$450,000** was available for new CAPaBLE projects and no funds from the 2014/15 budget were earmarked for continuing multi-year projects as the funds for 2014/15 continuing multi-year projects had been secured from the 2013/14 budget. He noted that one (1) of the 2013/14 projects wished to continue project activities for a further year in 2014/15, and total funding requested for this project for 2014/15 was **US\$8,000**, which had been secured from the budget of the previous fiscal year.

Regarding new project proposals, he reported that the CDC considered proposals that had received above a specific score and recommended to the IGM that those proposals be provided with funding at reduced budget requests.

The recommended allocation is outlined in the table below⁶:

CAPaBLE Proposals and Continuing Multi-Year Projects	
1 continuing multi-year projects Capacity Development Projects	US\$ 8,000
11 new projects from 23 full proposals	US\$ 450,000

The Chair thanked Dr. Sterin for his report and asked the IGM to consider and approve the recommendations for ARCP and CAPaBLE activities, respectively.

The new and continuing activities under the ARCP and CAPaBLE programmes were approved by the Members by acclamation and the Secretariat will proceed with arrangements to provide the results to the proponents.

Action 33: Secretariat

Undertake activities as approved.

Session V: Institutional Issues, Summary and Closing

► **Item 12: Discussion on Plans for the APN 20th Anniversary**

The Chair suggested that the item on the Framework Document be moved to the morning session ahead of the presentation from the Mitra Awardee, to which Mr. Brown stated that more time was needed in order to incorporate the comments raised by sub-regional members and for circulation to all members. He requested that the original scheduled be kept. The Chair noted Mr. Brown's suggestion and proposed that the original Item 13, Discussion on Plans for the APN 20th Anniversary, and Item 14, Host Countries for Future IGMs be discussed in the morning session, which was agreed by the IGM.

Dr. Stevenson presented on the background rationale for this item and indicated that the SPG had had an active discussion during the SPG Pre-Meeting prior to the IGM and encouraged SPG members to share their ideas under this item. She noted the achievement of APN over the past years funding over 330 projects since its establishment, and that APN might wish to consider how to celebrate these achievements. She reminded members of proposed communication products put forward under Item 5 and stated that additional science-related activities were considered by SPG members, which could include a science conference with oral presentations, poster sessions and talks from eminent scientists, with award ceremonies to those who have dedicated much time and effort to the APN. She stressed that new ideas and comments are much welcomed, noting the budget implication for the next fiscal year (2015/16), which was also included in the needs assessment.

Dr. Matthews expressed concern about budget implications and target audience of the proposed science conference. He said that a formal science conference would require significant amount of work in relation to preparation, abstract review, logistics, and identification of additional funding sources. He noted that the target audience should be clear, that is, whether the celebration was to target existing partners, to attract new partners, or to appeal to the donor community. He suggested that electronic communication would be preferable as opposed to a formal conference.

Chairperson's Summary

In relation to this, Ms. Hoshino stated that for cost-effectiveness, such an anniversary event could be held back-to-back with the next IGM, as there might not be sufficient budget for an extra event for the 20th anniversary.

Mr. Sirinaporn put forward a similar suggestion noting that the event should have clear targets, for example, to build capacity of scientists and to enhance future collaboration. A roadmap is also needed to build up more interesting activities. Dr. Stevenson clarified that this is a recommendation for fiscal year 2015 or even 2016 and agreed that a road map towards its implementation requires at least 18 months.

Dr. Boonjawat suggested that if a poster session were to be organised, it should be longer for more interaction. Mr. Sem, in his capacity as the nFP for Cambodia, pointed out that such a conference would best be held in the host country. Dr. Sunil H. Kariyawasam, SPG member for Sri Lanka commented that the event should highlight achievements and its benefits to societies in the region.

Ms. Tshering suggested that members might want to do something within their own country as a celebration, which would not have big financial implications. She added that the events could celebrate the outcomes and achievements and at the same time harness more partnerships. On the same line, Dr. Portia G. Lapitan, SPG Member for the Philippines agreed that each member country could contribute to this celebration by putting up small celebrations, which could be a poster session in other conferences, with distribution of general information about the APN. Dr. Lapitan officially signified the intention of the Philippines to be involved in this activity. The ideas expressed were also supported by Dr. Matthews, Dr. Boonjawat and Dr. Adiningsih. Dr. Matthews called for a process to be developed and the Secretariat to collect information on member countries' willingness of involvement; and to this end, he called for engagement from nFP and SPG members and volunteers to make this happen. Dr. Adiningsih stated that she would discuss with the Minister of Environment, Indonesia for the possibility of a seminar or science meeting.

Responding to Dr. Stevenson's inquiry regarding actions and timeline, Dr. Matthews suggested that, at a minimum, a call on the Secretariat to coordinate a call on members to prepare events over the coming year, and interested member countries should communicate with the Secretariat to request necessary information. Additionally, he suggested that a small side event using an evening at the 20th IGM could be organised without significant resource implications.

The Chair thanked everyone for their input and requested the Secretariat to take note and facilitate the implementation of suggested actions.

Action 34: Secretariat, SPG Members for Philippines and Indonesia, IGM

- (i) Communication Division of the APN Secretariat is to undertake an exercise to identify a number of events in the next few months where APN can celebrate its 20th anniversary and to circulate a questionnaire to generate ideas from the APN members before developing a roadmap.*
- (ii) Engage a small committee of volunteers. Philippines and Indonesia will be engaged.*
- (iii) The SRC committees are to discuss celebrations at their respective sub-regional cooperation meeting, with a view to looking to the future.*
- (iv) The Secretariat will provide all countries with specific project-based information for each country so that they may, if they so wish, plan potential national-based in-country celebrations.*

► **Item 13: Host Countries for Future IGMs**

Dr. Takemoto recalled the call for host countries of the 20th and future IGMs sent to member countries in early 2014, and noted that Nepal had submitted an official letter of intention. In term of the 21st IGM he reported no offer had been made so far.

Mr. Gokarna Mani Duwadee, nFP for Nepal thanked Dr. Takemoto for the introduction. He stated that Nepal is a country rich in natural and cultural beauties on the other hand, but one of the most vulnerable countries in terms of human health, biodiversity, and threats from a changing climate, on the other. As the Nepalese government has been actively engaged in the international community to address the adverse effects of global change, it sees the next IGM event is an important opportunity to strengthen such activities, although it is not in a position to hold a full anniversary event. As the nFP for Nepal and Joint Secretary of Ministry of Science, Technology and Environment, Nepal, he requested the IGM to approve Nepal's offer to host the next IGM Meeting in 2015.

The offer from Mr. Duwadee to host the 20th IGM/SPG Meeting in Nepal was accepted by acclamation.

Concerning the 21st IGM/SPG Meeting in 2016, Member Countries were asked to contact the Secretariat if they are interested in being the host country.

Action 35: nFP for Nepal, APN Secretariat

The offer from Mr. Gokarna Mani Duwadee, nFP for Nepal, to host the 20th IGM/SPG Meeting in Nepal was accepted by acclamation.

Action 36: IGM, Secretariat

Concerning the 21st IGM/SPG Meeting in 2016, Member Countries were asked to contact the Secretariat if they are interested in being the host country.

► **Item 14: Amendments to the Framework Document (Part II)**

The Chair invited Mr. Brown and Ms. Peldon to present the final proposed amendments to the Framework Document for IGM approval. Mr. Brown drew members attention to the paper before them noting that the most updated set of amendments had been drafted taking into account the comments received at the small ad hoc meeting on Day 2 and from the reports of the two SRCs given earlier in the morning session.

In addition to what had been presented under Item 3, the following text was presented:

Comment/suggestion	Discussion/proposed wording
<u>6.A.2.i on nFP and SPG Participation to IGM (Raised by Mr. Ginting and the SEA-SRC)</u>	<p>It was proposed that the current text of 6.A.2.i be split into two separate subparagraphs to read as follows:</p> <ul style="list-style-type: none"> i. <i>National Focal Points of each Member Country may participate; A member country may designate an alternate national Focal Point to participate in an IGM if the national Focal Point is unable to attend;</i> ii. <i>SPG members may participate.</i>
<u>6.B.2.i.a on elected nFPs membership to the SC (Raised by Prof. Miah and later by SA-SRC)</u>	<p>The following text was proposed in place of the original text:</p> <ul style="list-style-type: none"> i. <i>Five national Focal Points elected by the IGM, each to serve for a two-year term, taking into account the need to assure representation from the various sub-regions and the need to assure the rotation of membership;</i>
<u>Appendix 4, Guidance for CDC Members. vi. (Suggested by Dr. Stevenson)</u>	<p>The following text was proposed in place of the original text:</p> <ul style="list-style-type: none"> i. <i>Assist with the development of strategies for the growth of investment in APN's capacity building activities. This will include developing a strategy to provide the basis for an evolving agenda for APN capacity building that can, in turn, lead to developing a strategy for building the financial support, diversity, continuity and reporting for the programme, including:</i> <ul style="list-style-type: none"> » <i>more inclusive financial participation from across the members nations</i> » <i>higher profile of CAPaBLE within members nations (government) and appreciation of the value of capacity development</i> » <i>engagement with alternative funding sources</i>

Discussion on the above points is documented as follows:

6.A.2.i on nFP and SPG Participation to IGM

There had been some concerns, raised by Amir Muhammed, SPG Member for Pakistan and shared by Dr. Lapitan, on the clarity of the proposed text on SPG participation, particularly regarding nomination/participation of alternate members to the SPG. They suggested including some parallel text to ensure an alternate could attend the IGM in the absence of an SPG member. Dr. Matthews stressed that relevant provisions had been covered in Section 6.C.2 of the Framework Document, hence suggested that the proposed text remain as it was.

In response to two additional points of clarification raised by Dr. Tupas about the accuracy of the provision and by Mr. Sem about the official nomination procedure for alternate members, Mr. Brown reminded members that

the original thinking behind such wording, as it was for other provisions in the Framework Document, was to maintain the level of flexibility to keep the APN at a level that is sufficiently informal to avoid awkward issues regarding what is the exact formal status of the APN.

The IGM agreed by consensus that the proposed text listed above on the present section be kept as is.

6.B.2.i.a on elected nFPs membership to the SC

Referring to Ms. Peldon's comment on sub-regional representation in the SC, Dr. Matthews reminded that Pacific countries should be more actively engaged in APN activities. To this, Dr. Amir Muhammed pointed out that the proposed text, as it was presented, had covered any and all APN sub-regions and, therefore, suggested that the proposed changed be maintained as was presented. This was agreed by the IGM.

Finally, Mr. Brown noted that, in addition to the above, a number of important points had been raised, and the task team considered such improvements useful and appropriate but the time did not allow them to be thoughtfully considered at the present meeting. Such potential areas include voting, fund raising and secretariat responsibilities. Therefore, he suggested that if the IGM felt that such issues should be considered for possible additional changes to the Framework Document, it might refer this matter to the SC for consideration during the intersessional period, so that the SC would report back to the succeeding IGM with proposed amendments as appropriate.

The IGM formally approved by acclamation the proposed amendments to the APN Framework Document presented under Item 3, incorporating all additional modifications presented under the present Item.

The Chair requested the Secretariat to record the discussions and facilitate intersessional work on this matter as agreed by the IGM.

Action 37:

The framework document as presented on Day One, with additional modifications proposed by the IGM, was approved.

Action 38:

In accordance with the procedures outlined in the Framework Document, the Members are to assure that the Document remains dynamic in nature, with a view to updating as and when necessary, and as the APN develops.

► Item 15: 19th IGM/SPG Action Points

A draft list of action points from the present Meeting was presented for discussion and approval. Members were asked to check the accuracy and completeness of information. Facilitated by the Chair, members reviewed the document page by page, with a number of revisions raised and documented by the Secretariat. Regarding the format of the action list, a general comment was that the persons/groups responsible should be more clearly identified.

Action 39: IGM, Secretariat

The programme of work and budget was re-affirmed and approved as presented.

Chairperson's Summary

It was noted that a final summary would be prepared in close consultation with the Chair, Mr. Sem and the Vice-Chair, Mr. Basnayake, of the 19th Joint IGM/SPG Meeting and circulated among all participants for comments before publication in the Proceedings. The final summary will also include a list of action points (Appendix 6) and abbreviations (Appendix 7).

Action 40: Secretariat

Secretariat is to provide a full Chairperson's Summary to be circulated to all participants for comments.

► Item 16: Other Business

Status of SC Membership

The Chair invited Mr. Basnayake, in his capacity as the SC Chair, to report on the membership status of the SC. Mr. Basnayake stated that all five elected nFPs will be serving for one more year and, following a closed meeting held among the elected nFP members that were present at the IGM (nFPs for Bhutan, Indonesia, Nepal and Sri Lanka), agreement was made to invite the following experts to serve in the SC as co-opted members, for a one-year term starting from the 27th SC Meeting to take place immediately after the IGM.

- Mr. Louis Brown
- Prof. Roland Fuchs
- Dr. Andrew Matthews
- Dr. Kazuhiko Takemoto

Mr. Basnayake expressed his appreciation the work they have done for the Steering Committee and expressed his gratitude that Mr. Brown, Prof. Fuchs and Dr. Matthews had kindly accepted the invitation. He requested the Secretariat to confirm with Dr. Kazuhiko Takemoto regarding his willingness to serve in the SC for one more year⁷.

Action 41: Secretariat

Secretariat is to contact Dr. Kazuhiko Takemoto for his willingness to serve for the SC for one more year.

The Chair thanked Mr. Basnayake for his update and welcomed the co-opted members for their commitment for another year to the SC. He expressed the hope that their guidance and expertise will continue to help APN develop in the year to come.

► Item 17: Final Remarks and Closing

Dr. Takemoto, speaking on behalf of the Secretariat and all participants, expressed his sincere thanks to the Royal Government of Cambodia and to Mr. Sem personally to host the important meeting in Cambodia.

Mr. Sem expressed his appreciation to all participants for their hard work and valuable contribution leading to the important outcomes of the Meeting. He thanked the Mr Basnayake for his co-chairmanship and, and thanked all APN staff for their preparations and support. With that he formally declared conclusion of the 19th IGM/SPG Meeting.

APPENDIX 1: PARTICIPANTS LIST

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APPENDIX 2A: NEEDS ASSESSMENT AND RESOURCES PLANNING, FINANCIAL YEAR 2014/15

NEW RESOURCES CONFIRMED	Country	Amount Confirmed
	Japan (MOEJ and New Zealand)	2,373,000
	Republic of Korea	25,000
	Other Stakeholders	50,000
		0
		2,448,000

Needs Assessment and Resources Planning: Summary for APN 2014 and future						
Science, Policy and Institutional Activities		Needs Assessment for 2014 (US\$)	Resources Planning		Comments from Member Countries	
			Committed & Secured Resources in present fiscal year (A)	New Resources as of 19/02/2014 (B)		Total Resources (A +B)
1	Core Programmes	ARCP New Projects from 2013 Call for Proposals	1,500,000	9,600	Pledges from Members Countries received to date total US\$2,448,000	Please place your comments in this column.
		ARCP Continuing Projects with Mortgage (mortgage refers to funds needed but not reserved yet)	287,000	0		
		ARCP Continuing Projects with Committed Funds from previous fiscal years (committed funds means we have reserved the funds from previous years)	565,000	565,000		
		Subtotal	2,352,000	574,600		
		CAPaBLE New Projects from 2013 Call for Proposals	660,000	110,000		
		CAPaBLE Continuing Projects with Committed Funds from previous fiscal years	8,000	8,000		
		Subtotal	668,000	118,000		
2	Frameworks	Low Carbon Initiatives Framework	40,000	10,500		
		Biodiversity and Ecosystems Services Framework	100,000	43,946		
		Climate Adaptation Framework	715,000	0		
		Subtotal	855,000	54,446		
3	Science-Policy Linkages and Capacity Development	One Annual Sub-Regional Proposal Development Training Workshop	25,000	20,000		
		Science-Policy Linkages	100,000	50,000		
		PARR (Urbanisation) Programme Fellowships	30,000	30,000		
		Subtotal	155,000	100,000		
4	APN Institutional Meetings and Activities	20th Intergovernmental Meeting	198,000	0		
		28th Steering Committee Meeting				
		APN 4th Strategic Planning (Retreat) Workshop, 3Rs Scoping Workshop	51,000	44,000		
		Hyogo Activities	60,000	0		
		South Asia	20,000	20,000		
		Southeast Asia	20,000			
		Temperate East Asia	20,000			
		Planned travel for Secretariat to APN meetings	42,000	0		
Subtotal	411,000	64,000				
5	Institutional and Scientific Networking, Communications, Publications	3 Framework Publications	5,000	0		
		CAPaBLE 10 Years Publication	2,000	0		
		Annual Science Bulletin, Annual report, general brochures, evaluation and strategic planning reports	20,000	0		
		Climate in AP: Book review & IPCC connections	2,500	2,500		
		20th Anniversary Science Conference in 2016	3,000	0		
		Ad hoc travel for scientific and institutional activities	35,000	0		
Subtotal	67,500	2500				
6	Secretariat Staffing	Science, communication, development and institutional affairs staff (including coordinator)	455,000	86,500		
		Administrative staff	159,000	58,000		
		Programme Fellowships	35,000	0		
		Subtotal	649,000	144,500		
7	Maintenance and operation costs	General Maintenance and Operational cost	85,000	0		
		Upgrading the equipment of APN	7,500	0		
		IGES Overhead (Based on Contributions from MOEJ, Japan)	65,500	0		
		Subtotal	158,000	0		
		5,310,500	1,058,046	2,448,000	3,506,046	Difference: US\$1,8054,454

APPENDIX 2B: APPROVED WORK PROGRAMME AND BUDGET PLAN, FINANCIAL YEAR 2014/15

Resources Available¹⁾

Japan (MOEJ and Hyogo)	2,373,000
New Zealand (MfE)	25,000
Republic of Korea (MOEV)	50,000
Other Stakeholders	2,448,000
Amount Confirmed	

Use of Resources:

		Science, Policy and Institutional Activities ²⁾		Resources Planning ³⁾			In-Kind (monetary and other) Contributions
				Committed and Secured Resources as of 31/12/2013 (A)	Draft Budget Allocation from Resources Available (B)	Total Resources (A + B)	
1	Core Programmes	ARCP New Projects from 2013 Call for Proposals and to Supplement Funds to 2013 Awards (subject to availability) ⁴⁾	85,668	615,000	700,668		
		ARCP Continuing Projects with Committed Funds from Previous Fiscal Years (committed funds means we have reserved the funds from previous years) ⁵⁾	500,000	0	500,000		
		CAPABLE Continuing Projects with Committed Funds from Previous Fiscal Year	1,25,500	325,000	450,500		
2	Frameworks	Low Carbon Initiatives Framework ⁷⁾	10,000	10,000	20,000		
		Biodiversity and Ecosystems Services Framework ⁸⁾	43,000	0	43,000		
		Climate Adaptation Framework⁹⁾	728,000	585,000	1,313,000		
3	Science-Policy Linkages and Capacity Development	One Annual Sub-Regional PDTW ¹⁰⁾	20,000	5,000	25,000		
		Science-Policy Linkages ¹¹⁾	50,000	16,000	66,000		
		PARR (Urbanisation) Programme Fellowships¹²⁾	30,000	0	30,000		
4	APN Institutional Meetings and Activities	20th Intergovernmental Meeting	0	120,000	120,000		
		28th Steering Committee Meeting	33,000	23,000	56,000		
		APN 4th Strategic Planning Workshop ¹³⁾	0	60,000	60,000	45,000	
		Hvooa Activities ¹⁴⁾	20,000	25,000	45,000		
		SRC South Asia ¹⁵⁾	0	15,000	15,000		
		SRC Southeast Asia	0	15,000	15,000		
5	Institutional and Scientific Networking, Communications, Publications ¹⁷⁾	SRC Temperate East Asia	0	35,000	35,000		
		Planned Travel for Secretariat to APN Meetings ¹⁶⁾	0	3,000	3,000		
		20th Anniversary Science Conference in 2016	0	4,000	4,000		
		3 Framework Publications	0	1,500	1,500		
		CAPABLE 10 Years Publication	0	20,000	20,000		
		Annual Science Bulletin, Annual report, General Brochures, Evaluation and Strategic Planning Reports	2,500	0	2,500		
		Climate in AP: Book Review & IPCC Connections	0	25,000	25,000		
		Ad Hoc Travel for Scientific and Institutional Activities	0	328,000	328,000	86,500	
6	Secretariat Staffing ¹⁸⁾	Science, Communication, Development and Institutional Affairs Staff (including Coordinator)	0	86,000	86,000	58,000	
		Administrative Staff	0	32,000	32,000		
		Programme Fellow	0	59,000	59,000		
7	Maintenance and Operation Costs	General Maintenance and Operational Cost ¹⁹⁾	0	5,000	5,000		
		Upgrading the Equipment of APN IGES Overhead ²⁰⁾	0	65,500	65,500		
		1,655,668	2,448,000	4,103,668	189,500		

²¹⁾

Approved Work Programme and Budget Plan, FY 2014 (01 April 2014 ~ 31 March 2015) Explanatory Notes

Resources Available:

1. The total revenue of APN in FY 2014, confirmed as of 07 March 2014, amounts to US\$ 2,448,000.

Use of Resources:

2. Under the title “Science, Policy and Institutional Activities,” all areas of APN’s activities are introduced with numbers from #1 to # 7: “Core Programmes”, “Frameworks”, etc. Additionally, they are split into cost items with some more detailed descriptions and individually allocated funds.
3. Under “Resources Planning,” four columns are created: Marked as (A) are resources listed that are committed and secured from previous fiscal years. Indicated as (B) are the allocations of funds from the Resources Available for FY 2014/2015. Under column “Total Resources (A + B)” is the sum amounts that are listed available to each of the cost items. The fourth column shows in-kind contributions (monetary or otherwise) that the Member Countries (and/or other entities) make to the APN.
4. The resources shown available for the ARCP are considerably less compared with the previous fiscal year. The main reason for this is that, for ARCP in APN’s FY 2014, it is not yet confirmed whether USGCRP/NSF (USA) funds could be made available during APN’s fiscal year 2014. This said, in order to ensure that the ARCP remains the strongest pillar of the APN, US\$ 135,000 has been moved from CAPaBLE to supplement the ARCP programme. Committed and secured resources has been changed to US\$ 85,668 due to reallocation of ARCP continuing project grants. Therefore, the total available resources is US\$ 700,668. A total of US\$ 684,000 was allocated to new ARCP projects and US\$ 16,668 as contingency.
5. US\$ 500,000 is committed for ARCP continuing multi-year (or not finalised) projects from previous Fiscal Years.
6. As mentioned under #4 above, US\$ 135,000 has been re-allocated to ARCP from FY 2014/2015 available funds for CAPaBLE activities. Together with the secured resources from completed projects, etc., US\$ 450,500 is available for new CAPaBLE projects from the 2013 Calls for Proposals. A total of US\$ 450,000 was allocated for new CAPaBLE projects and US\$ 500 as contingency.
7. US\$ 10,000 that is secured from a closed CRP project and added to US\$ 10,000 from the New Resources allocation for synthesis of Low Carbon Initiative (LCI) Framework projects and networking activities with LCI Project Leaders and ISAP.
8. US\$ 43,000 was allocated from AOF, US\$ 40,000 for a toolkit on the impacts of climate change on biodiversity and ecosystem services, as well as US\$ 3,000 for networking activities.
9. Committed and secured resources for CAF from 2013 budget was added to Resources Planning. The total available is US\$ 1,313,000 for Climate Adaptation Framework activities and this includes US\$ 35,000 funds for dissemination of research outcomes and their promotion, as well as for networking with APAN, GAN, etc.
10. This is a new idea of a more effective and strategic Proposal Development Training Workshop (PDTW) via open and competitive call, managed by the Secretariat. The PDTW will be organised on a rotation-principle among the sub-regions; in 2014, it will be held in Southeast Asia

(in Lao PDR). Proposed investment totals US\$ 25,000 (US\$ 20,000 from the secured resources; US\$ 5,000 from Resources Available).

11. For activities to strengthen the science-policy linkages, a total allocation of US\$ 66,000 is proposed for: US\$ 8,000 is for SBSTA/COP 20; US\$ 8,000 for IPBES. US\$ 50,000 (secured from AOF) will be used for a Science-Policy Dialogue in South Asia. It should be noted that in FY 2015, such a dialogue is planned to be held for and in the Temperate East Asian sub-region, and in FY 2016, a synthesis activity will be organised as a Hyogo event.
12. US\$ 30,000 is secured from AOF for Pan Asia Risk Reduction (PARR) Programme Fellowship.
13. US\$ 33,000 is secured from last year's budget allocation for the Third Strategic Phase (3SP) Evaluation Report & Fourth Strategic Plan (4SP). From the Resources Available, i.e. US\$ 56,000, a Scoping Workshop on 3R is proposed (the results of this workshop are to be fed into the Fourth Strategic Plan; requested resources is US\$ 30,000), and US\$ 26,000 would be invested into two 3SP Evaluation and 4SP Writing Workshops of the Task Committee, one in early August 2014 in Kobe, another one prior to the 27th SC Meeting.
14. Two major activities are proposed as Hyogo activities: an Expert Meeting on Air Pollution Control in Urban Asia-Pacific, to be held in the latter half of FY 2014 in Zhuhai, Guangdong Province in South China (US\$ 50,000), and a Hyogo Prefecture/APN/IGES-organised international symposium on Satoyama ecosystems, their sustainable development and business opportunities, to be held around December 2014 (US\$ 10,000). The Hyogo Prefectural Government will contribute to the international symposium about US\$ 45,000 (Yen 5,000,000) as matching funds.
15. With US\$ 45,000 (some secured resources of US\$ 20,000 and US\$ 25,000 from the Resources Available), three Sub-Regional Cooperation Meetings are proposed (US\$ 15,000 each). The Sub-Regions are requested to match US\$ 5,000 per committee as in-kind contributions.
16. APN Secretariat's institutional mission trips has an allocation of: US\$ 35,000 for APN meetings (IGM/SPG Meeting, SC Meeting, SRC Meetings and PDTW). As fewer numbers of the Secretariat staff will travel according to the allocated budget, increased host country staff support will be required and requested accordingly.
17. US\$ 53,000 is proposed for "Institutional and Scientific Networking, Communications and Publications". This amount does not only cover APN's various publications (e.g. Science Bulletin, Annual Report, publications on the three Frameworks, etc.) but also costs for ad hoc travel of APN Members and/or secretariat staff. Strategic visits with Member Countries, potential donors, etc., may also be financed with these funds.
18. Of the US\$ 590,500 that is needed for personnel, costs of the Secretariat staff of US\$ 144,500 will be borne by the in-kind monetary contribution from Hyogo Prefecture. Thus, US\$ 446,000 is proposed to be covered from the Resources Available.
19. US\$ 64,000 is proposed as general operational costs of the Secretariat office (including costs for upgrading of APN Secretariat equipment).
20. 3% of MOEJ's contribution goes as an overhead to IGES for their administrative support.
21. Total committed and secured resources amounts to US\$ 1,655,668 and total budget allocated for FY 2014 is US\$ 2,448,000. Total distributed resources for FY 2014/2015 is US\$ 4,103,668. Apart from that, in-kind contribution (monetary and other contributions) amounts to US\$ 189,500.

APPENDIX 3(A): CONTINUING MULTI-YEAR ARCP PROJECTS, FINANCIAL YEAR 2014/15

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-04CMY-Meinke	Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia	Professor Holger Meinke, University of Tasmania, AUSTRALIA	The demand for rice is expected to double, a challenging target in the midst of competing demands for land and water, and a changing and variable climate. The project uses in-country RD&E combined with modelling to design more efficient rice systems. Collaboration and training meetings increase the capacity of scientists and organisations, and strengthen a network of researchers.	Australia, Philippines, Thailand, Indonesia, Pakistan	3 years	50,000 (Retained from 2012/2013 fund)
ARCP2013-05CMY-Li	Development of an integrated climate change impact assessment tool for urban policy makers (UrbanCLIM)	Dr. Yinpeng Li, International Global Change Institute, Waikato University, NEW ZEALAND	This project proposes to develop a co-evolutionary urban climate change decision support tool (UrbanCLIM), to support climate change impact and risk assessment for the major sectors: health, transport, water. A participatory assessment approach will be applied through working with local urban policy makers and planners.	New Zealand, China, Viet Nam, Philippines.	3 years	40,000 (Retained from 2012/2013 fund)
ARCP2013-06CMY-Quynh	Carbon fluxes and emission from the Red River (Viet Nam and China): human activities and climate change	Dr LE Thi Phuong Quynh, Institute of Natural Product Chemistry (INPC), Viet Nam Academy of Science and Technology (VAST), VIET NAM	This work aims to calculate the carbon fluxes and carbon emission from the Red River, which concern to the global warming. The SENEQUE/Riverstrahler model which allows to relate the water quality and carbon transfers in the drainage network to the constraints resulting from human activity and natural conditions in the watershed will be applied for different scenarios of the past, present situations and possible future changes in 2050s horizon for the whole Red River basin.	Viet Nam, Singapore, China, France	3 years	36,000 (Retained from 2012/2013 fund)
ARCP2013-14NMY-Miyata	Toward CarboAsia: integration and syntheses of terrestrial ecosystem flux data in tropics/subtropics and croplands in Asia by activating regional tower-based observation networks	Dr. Akira Miyata, National Institute for Agro-Environmental Sciences, JAPAN	Toward CarboAsia, the carbon budget assessment covering the whole Asian terrestrial ecosystems, it is required to fill data gaps in tropical/subtropical forest and croplands. By utilising the framework of Asia Flux (http://www.asiaflux.net/), we will hold workshops and training courses to encourage and activate tower-based flux observation networks in south-eastern and southern Asia, thereby promoting data integration and syntheses of carbon and water cycles in tropical/subtropical forest and croplands in Asia.	Japan, Republic of Korea, China, Philippines, Viet Nam, Thailand, Malaysia, Indonesia Bangladesh, India	3 years	40,000 (Retained from 2013/2014 fund)
ARCP2013-15NMY-Manton	Coordinated Regional Climate Downscaling Experiment (CORDEX) in Monsoon Asia	Professor Michael Manton, Chair Scientific Steering Committee for Monsoon Asia Integrated Regional Study (MAIRS), Monash University, AUSTRALIA	A series of three CORDEX workshops will be held in 2013, 2014 and 2015 in South Asia, East Asia and South East Asia. The workshops will foster synergies and coherence between the various climate downscaling and vulnerability, impact and adaptation (VIA) communities in the Asia Pacific region through direct engagement. The workshops will be scientific in nature and will cover state-of-the-art climate downscaling research, training and capacity building.	Australia, India, China, Republic of Korea, Nepal	3 years	40,000 (Retained from 2013/2014 fund)

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-16NMY-Li	Assessing Spatiotemporal Variability off NPP, NEP and Carbon Sinks off Global Grassland Ecosystem in response to Climate Change in 1911-2011	Professor Jianlong Li, Nanjing University, CHINA	This project will be realised to provide an integrated technical method and report of the assessing variability of NPP, NEP and carbon sinks of global grassland ecosystem in respond of climate change and human activity in the global scale and long -term under the different temporal and spatial from three developing countries to worldwide for farmers, policy makers and international community and disseminate the findings	China, Mongolia, Uzbekistan and technical support from USA and Australia	3 years	36,000 (Retained from 2013/2014 fund)
ARCP2013-17NMY-Tangang	Southeast Asia Regional Climate Downscaling Project (SEACLID)	Prof. Fredolin Tangang, University Kebangsaan Malaysia, MALAYSIA	1. Carry out joint regional climate downscaling for a common SEA domain with RegCM4 using 5 CMIP5 GCMs and 3 RCPs under the SEARCI on the basis of shared workloads. 2. Collectively analyze model performances, create ensemble regional climate projection for the SEA region, and establish SEARCI web portal and data center for efficient data dissemination freely to users in the region	Malaysia, Philippines, Indonesia, Thailand, Cambodia, Lao PDR, Viet Nam	3 years	40,000 (Retained from 2013/2014 fund)
ARCP2013-18NMY-Prabhakar	Assessing community risk insurance initiatives and identifying enabling policy and institutional factors for maximising climate change adaptation and disaster risk reduction benefits from risk insurance	Dr. S.V.R.K. Prabhakar, Institute for Global Environmental Strategies, JAPAN	This project aims to assess the benefits accrued through community level risk insurance experiences in the region, evaluate barriers limiting its penetration, and identify interventions for greater risk insurance penetration leading to climate change adaptation and disaster risk reduction.	Japan, Malaysia, India, Bangladesh, Philippines, Viet Nam	2 Years	36,000 (Retained from 2013/2014 fund)
ARCP2013-19NMY-Gomboev	Boreal and tropical (monsoonal) forests and forest-steppes in Asian-Pacific region in territory of Russia, Mongolia and China: a comparative estimation of the contribution to softening of global climatic changes and working out of measures on adaptation to them	Prof. Bair O. Gomboev, Baikal Institute of Nature Management of Russian Academy of Sciences, RUSSIAN FEDERATION	Comparative evaluation of the contribution of different forest ecosystems (boreal, tropical, forest-steppe) in the Asia-Pacific region in Russia (Buryatia), Mongolia and China in climate change mitigation and development strategies to increase this contribution: a) assessment of forest condition; b) assessing the carbon budget; c) study of good practice in sustainable forest management aimed at reducing emissions from deforestation and forest degradation, conservation and development (storage) of carbon stocks; d) develop a mechanism for fair distribution of costs and benefits (including the sale of carbon, ecosystem services) on the mitigation of climate change among stakeholders in accordance with national institutional capabilities.	Russia, Mongolia, China	2 Years	40,000 (Retained from 2013/2014 fund)
ARCP2013-20NMY-Shrestha	Discharge Scenario and Water Based Adaptation Strategies in South Asia	Dr. Madan Lall Shrestha, The small Earth Nepal, NEPAL	The project aims to understand the climate and changing climate of the region and its water resources consequences affecting people. Observed hydro-meteorological data and IPCC climate scenarios will be used for simulation of river flows using distributed/physical-based hydrological models for development of future water scenarios.	Nepal, Pakistan, Bangladesh, USA	2 Years	36,000 (Retained from 2013/2014 fund)

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-21NMY-Yamada	Adaptation of Solid Waste Management to Frequent Floods in Vulnerable Mid-Scale Asian Cities	Dr. Masato Yamada, National Institute for Environmental Studies (NIES), JAPAN	This study aims to propose a model of resilient and adaptable solid waste management (SWM) against flood in Asian tropical/pluvial countries, in order to adapt to frequent flood events that would be influenced by climate change. State of arts of urban SWM during and aftermath of flood will be evaluated, and restyling and re-planning of SWM will be supported by novel tool to assess resiliency & vulnerability of SWM against flood. Cooperative assistance in emergency case between municipalities or between municipality, industries and NPOs will be promoted thorough strategic efficiency evaluation.	Japan, Thailand, Viet Nam	2 Years	33,000 (Retained from 2013/2014 fund)
ARCP2013-22NMY-Sellers	Mega-Regional Development and Environmental Change in China and India	Assoc. Prof. Jefferey M. Sellers, University of Southern California, USA	This research applies remote sensing and GIS to compare urbanisation patterns and their effects on land use and ecosystems in four matched cases of Chinese and Indian mega-regions. Models of alternative trajectories will be developed to assess alternative policies and institutions to address the regional dimensions of urbanisation. Regional stakeholder workshops and participation in stakeholder and academic forums will further reinforce capacity building.	USA, India, China	2 Years	37,000 (Retained from 2013/2014 fund)
ARCP2013-23NMY-Sthiannopkao	Developing Scientific and Management Tools to Address Impacts of Changing Climate and Land Use Patterns on Water Quality in East Asia's River Basins	Assistant Prof. Suthipong Sthiannopkao, Dong-A University, REPUBLIC OF KOREA	The project aims to address, "what possible effects of climate and land use pattern changes have on water quality and ecology in East Asia's river basins?" A model showing interactions among climate, hydrology, land use, water quality, and ecosystems will be built for the temperate climate of Korea and tropical climate of Southeast Asia. Specifically, the expected impact of climate change related to extreme events on loading of nutrients and microorganisms under land use pattern changes will be determined. The project's outreach components will allow us to educate high school students and farmers with knowledge produced from this study.	Republic of Korea, USA, Indonesia, Thailand, Philippines, Lao PDR	2 Years	36,000 (Retained from 2013/2014 fund)
ARCP2013-FP18-Salmo	Influence of Mangrove Biodiversity on Accumulation of Carbon and Resilience to Sea Level Rise: A Comparative Assessment Among Disturbed, Restored and Intact Mangrove Systems	Dr. Severino G. Salmo III, Ateneo de Manila University, Quezon City, PHILIPPINES	Mangroves provide vital ecological and socio-economic services such as supporting fisheries and forestry products, stabilising shorelines, sequestering carbon and improving water quality. Mangrove sediments can also store massive amounts of carbon that may increase mangrove forest resilience to climate change by maintaining forest floor elevations relative to sea level rise. Mangrove deforestation threatens biodiversity and carbon pools in mangroves and ultimately their resilience to sea level rise. Using a standardised method, the project aims to create a regional research network to evaluate the role of mangrove biodiversity in carbon storage and resilience to sea-level rise among disturbed, restored and intact mangroves.	Philippines, Malaysia, Singapore, Australia, USA, Indonesia	3 Years	40,000 (Retained from 2014/2015 fund)

APPENDIX 3(B): NEW ARCP PROJECTS, FINANCIAL YEAR 2014/15

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-FP25-Wu	Comparative Analysis of Pollution Sources at the Hangzhou Bay & Mekong River Mouths	Professor Jiaping Wu, Institute of Islands and Coastal Ecosystems, Zhejiang, CHINA	At the interface between land and ocean there exist continuous material exchanges where the terrestrial ecosystems discharge nutrients into oceans to provide food sources for oceanic organisms but also causes red tides that are detrimental to fisheries. As climate change continues and human alteration of terrestrial ecosystems intensifies, ecological impacts on river deltas and fisheries have become a major environmental concern. The proposed work is to deploy a process-based model to quantitatively examine how recent changes in land use, including rural restructuring of towns, villages, and farmlands, affect nutrient transport from terrestrial ecosystems to two very important deltas in Asia: Mekong River and Qiantang River watersheds	Thailand, Viet Nam, Lao PDR, Japan, USA	3 Years	45,000 (Retained from 2014/2015 fund)
ARCP2013-FP01-Babel	Developing an operational water security index, and its application in selected diverse regions of Asia	Professor Mukand S. Babel, Asian Institute of Technology (Water Engineering and Management), Pathumthani, THAILAND	The project will: (a) establish a practical framework to develop a water security index (WSI), using appropriate dimensions, sub-indices and indicators at local and basin scales; (b) implement the index diverse study areas in Asia; and (c) assess the status of water security at different time scales: past, present, and future. Through interactions/feedback with/from relevant stakeholders throughout the duration of the project, policy guidelines for actual operationalisation of the index will be developed	Thailand, Viet Nam, India	2 Years	40,000 (Retained from 2014/2015 fund)
ARCP2013-FP05-Dey	Impacts of Crop Residue Removal for Biomass Energy on Soil Function; Studies to recommend Climate Adaptive Agricultural Waste Management	Dr. Dipayan Dey, South Asian Forum for Environment [SAFE], Kolkata, INDIA	The project aims to investigate the impacts of biomass burning to soil through a series of activities that includes: (i) site selection; (ii) data gathering on seasonal variations of soil characteristics; (iii) estimation of crop residue characteristics, analysis of residual ash and assessment of GHG & SPM release; (iv) Impacts assessment of residue-burning and residue-keeping on biomass growth, yield & crop performance, disease occurrence, post-ante analysis on soil functions, soil carbon & soil bio-chemistry, etc; and (v) develop strategy and dissemination	India, Bhutan, Philippines	2 Years	40,000 (Retained from 2014/2015 fund)
ARCP2013-FP07-Heath	Development of an evidence-based climate change adaptation toolkit to help improve community resilience to climate change impacts in Uttarakhand, India	Dr Lance Heath, Australian National University Climate Change Institute, Canberra, AUSTRALIA	The state of Uttarakhand in India has recently experienced unprecedented flooding and loss of life on account of a serious climate-related extreme event. This activity will use Participatory Integrated Approaches (PIAs) to identify the risks, vulnerabilities and opportunities resulting from climate change impacts on communities in the Nainital region, Uttarakhand, India. The results will be used to develop a climate change adaptation toolkit, which is based on a set of scientific and evidence based methodologies or tools to guide policy makers during the adaptive response planning process and to help communities cope better with those risks and vulnerabilities identified	Australia, India, China, Nepal, Bangladesh	2 Years	40,000 (Retained from 2014/2015 fund)

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-FP10-Liang	Coastal forest management in the face of global change based on case studies in Japan, Myanmar and the Philippines	Liang Luohui, United Nations University Institute for Sustainability and Peace (UNU-ISP), Tokyo, Japan	The proposed research will examine community-based forest management, including local knowledge in vulnerable communities to identify best practices and their integration with planning of human settlement and facilities to strengthen community resilience to climate change impacts as well as evaluate effectiveness and needs of policy interventions through a bottom-up process. The project will assess potential benefits of coastal forests in adaptation to and mitigation of climate change. Three project sites, one each in the Philippines, Myanmar and Japan, suffer frequent typhoons or tropical cyclones. The comparative perspective will explore how different countries and local communities manage coastal forests to cope with coastal hazards under similar bio-physical conditions, but different socio-economic contexts and draw on their experiences for developing context-based solutions	Philippines, Myanmar, Japan	2 Years	40,000 (Retained from 2014/2015 fund)
ARCP2013-FP13-Mishra	Climate Change Adaptation through Optimal Stormwater Capture Measures: Towards a New Paradigm for Urban Water Security	Dr. Binaya Kumar Mishra, United Nations University - Institute for Sustainability and Peace (UNU-ISP), Tokyo, Japan	Climate change is expected to deteriorate urban water security by altering rainfall pattern into more intense events with longer dry days. The resulting impact is more floods in rainy season and water scarcities in dry season due to increasing surface runoff and decreasing groundwater recharge respectively. Both of these manifestations are similar to that of urbanisation, and therefore these impacts can be largely minimised by introducing modified on-site stormwater captures measures which have been successfully tested for the urbanisation. This research aims to improve urban water security in the Asia-pacific region by optimisation of on-site stormwater infiltration and storage measures.	Japan, Thailand, Viet Nam, Lao PDR	2 Years	35,000 (Retained from 2014/2015 fund)
ARCP2013-FP20-Sharp	Integrated solid waste management system leading to zero waste for sustainable resource utilisation in rapid urbanised areas in developing countries	Dr. Alice Sharp, Sirindhorn International Institute of Technology (SIIT), Thammasat University, Pathumthani, THAILAND	The project will contribute to preparation of guidelines for integrated solid waste management based on the nature of waste and learning from the showcase examples in Thailand. The project will analyse existing waste management system in partner countries, find the success and failures in the current waste management practices. Once the gaps are identified, the appropriate integrated waste management system can be identified. It will also build scientific capacity of local authorities in terms of integrated solid waste management via national workshops and develop collaborative network in solid waste management in the region	Thailand, Bhutan, Viet Nam	2 Years	45,000 (Retained from 2014/2015 fund)
ARCP2013-FP28-Zhou	Assessment of Climate-Induced Long-term Water Availability in Ganges Basin and Impacts on Energy Security in South Asia	Dr. Xin Zhou, Institute for Global Environmental Strategies (IGES), Hayama, Kanagawa, JAPAN	Ganges river has important role for India, Bangladesh and Nepal *through its tributary. However, it is very vulnerable towards water availability in the long run especially under climate variability which requires regionally coordinated water and energy and policies for water and energy security and sustainable development. The research aims to: project the water supply condition under different climate change scenarios based on hydrological modelling using satellite as well as survey data at the river basin level; ii) estimate the water use intensity of available power generation technologies based on firm-level survey data in three countries; and iii) assess long-term energy supply scenarios under projected water supply constraints at river-basin level using bottom-up energy optimisation modelling	Bangladesh, India, Nepal	2 Years	40,000 (Retained from 2014/2015 fund)

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
ARCP2013-FP08-Huang	Assessing the health effects of extreme temperatures and the development of adaptation strategies to climate change in the Asia Pacific region	Dr. Cunrui Huang, Griffith University, Brisbane, AUSTRALIA	This project will:(1) examine temperature-health relationships for major cities in Bangladesh, China and Viet Nam, then (2) project future temperature-related health effects under different climate change scenarios, and (3) formulate adaptation strategies to deal with temperature-related health risks and reduce vulnerability. The project has the potential to make a significant contribution to protecting the health of present and future generations in the Asia Pacific region	Bangladesh, China, Viet Nam, Australia	1 Year	12,000 (Retained from 2014/2015 fund)
ARCP2013-FP11-Lokupitiya	Identification of the best agricultural management practices with better greenhouse gas benefits in salinity affected areas of South Asia	Dr. Lokupitiya Erandathie, Department of Zoology, Faculty of Science, University of Colombo, Colombo, SRILANKA	The agriculture in low-lying South Asian countries has already been affected by salt water intrusion due to climate change, sea level rise and other anthropogenic activities. This study will focus on level of salinity intrusion and the agricultural management practices being used in the respective areas in the South Asian region. We will select the best management practices for the region considering their net greenhouse gas (GHG) emissions and other climate benefits. The outcome of the study will be used to raise awareness among the farmers for up-scaling those good practices and make recommendations for the climate change adaptation policy and strategy of respective countries	Sri Lanka, Bangladesh, Pakistan, India, USA	1 Year	12,000 (Retained from 2014/2015 fund)

APPENDIX 4(A): CONTINUING MULTI-YEAR CAPABLE PROJECTS, FINANCIAL YEAR 2014/15

Original Project Reference No.	Project Title	Project Leader	Summary of Project	Regional Collaboration Countries Involved	Project Duration	2014/2015 APN recommended award (US\$)
CBA2013-03NMY-D'Arrigo	ACRE SE Asia – towards new weather and climate baselines for assessing weather and climate extremes, impacts and risks over SE Asia	Prof. Roseanne D'Arrigo, Lamont-Doherty Earth Observatory, Columbia University, USA	Our primary goal is to build capacity within SE Asian institutions, agencies and NMS to improve and extend historical instrumental, documentary and palaeo databases of SE Asian weather/climate, in order to contribute to the generation of high-quality, high-resolution historical weather reconstructions (reanalyses). These new baselines will allow scientists and policy makers across the region to address weather/climate extremes, impacts and risks in ways and over time spans not previously possible.	USA, New Zealand, Indonesia, Malaysia, China, Philippines, Viet Nam, Japan	2 Years	8,000

APPENDIX 4(B): NEW CAPABLE PROJECTS, FINANCIAL YEAR 2014/15

Full Proposal Reference No.	Proposal Title	Proponent	Summary of Project	Regional Collaboration Countries Involved	2014/2015 APN recommended award (US\$)
CBA2013-FP18-Singhruck	Strengthening the adaptive capacity of local agricultural communities through the development of seasonal climate prediction system	Dr. Patama Singhruck, Center of Excellence for Climate Change Knowledge Management (CCKKM), Chulalongkorn University, Bangkok, THAILAND	The main objective of this project is to build scientific capacity for seasonal climate prediction. Although seasonal climate prediction products have been available, their usefulness to agricultural sectors has not been fully realised. This is especially true for local farming communities in non-irrigated zones which rely solely on rain. Early or late monsoon onset, flash floods, prolonged droughts affect their livelihood directly. To enhance their capacity to make adaptive response to natural variability, climate information in the form which is accessible and relevant to them at local scale is most needed. This project aims to respond to this challenge.	Thailand	40,000
CBA2013-FP06-Cruz	Collaborative Monitoring System for Enhanced Watershed Management Services in The Philippines	Dr. Rex Victor O. Cruz, University of the Philippines Los Baños, Laguna, PHILIPPINES	The project intends to develop best practices for developing the capacity for collaborative and participatory watershed monitoring that is anticipated to help promote science-based watershed management decision making. Largely capacity building will be done through a combination of lectures, demonstrations, field visits, online learning methods, and experiential learning. Capacity building will focus on technical personnel of local government units, local communities, teachers and students, NGOs and technical personnel of private corporations. Best practices for capability building for varied stakeholders and watershed contexts will be distilled for potential application nationwide. For each stakeholder group development of appropriate levels of competence for designing, planning, implementing, and maintaining monitoring systems will be targeted.	Philippines	45,000
CBA2013-FP07-Divya Sharma	A comprehensive capacity building program on Urban climate resilience in India	Dr. Divya Sharma, The Energy and Resources Institute (TERI), New Delhi, INDIA	With the aim of introducing concepts and tools for initiating urban climate resilience planning at city level institutions, a customised capacity building package will be built with the help of key experts, academia and practitioners.	India	35,000
CBA2013-FP09-Gopal	Capacity Building for Conservation of Biodiversity and Ecosystem Services of Wetlands in Relation to Global Change	Prof. Brij Gopal, National Institute of Ecology, Delhi, INDIA	Wetlands, the 'hotspots' of biodiversity, are threatened by changes in land use/land cover, inappropriate water resources management and climate change. Despite increasing awareness of their ecosystem services, wetlands are not accounted into the development projects. This stems from the lack of capacity and the complexities in assessing the total biodiversity of wetlands and linking it to various ecosystem services. The project focuses on capacity building of policy makers and relevant stakeholders for rapid assessment of biodiversity of wetlands in the Freshwater Ecoregions of Ganga-Brahmaputra basin and monitoring the impacts of global change on it and the ecosystem services.	Bhutan, India, Nepal	40,000

Full Proposal Reference No.	Proposal Title	Proponent	Summary of Project	Regional Collaboration Countries Involved	2014/2015 APN recommended award (US\$)
CBA2013-FP10-Hien	Scientific Capacity Building in Climate Change Research Techniques for Non-Governmental Organisations (NGOs) in Vietnam	Ms. Than Thi Hien, Centre for Marinelife Conservation and Community Development (MCD), Hanoi, VIET NAM	The project will build scientific capacity of NGOs in Vietnam in climate change research techniques. This will be achieved by conducting a short course in climate change research techniques for 25 relevant staff of NGOs in Vietnam, followed by implementation of the course methodologies by the attendees, in the form of a course project. A workshop will then be held where lessons learned by the participants will be shared via presentation of course project findings and facilitated discussions. Ten presentations will then be selected as the basis of a dissemination seminar for policy makers, decision makers and other stakeholders.	Viet Nam	35,000
CBA2013-FP11-Jia	International training on regional ecosystem-climate interactions	Jia Gensuo, Director, 40 Huayanli, Beijing 100029, CHINA	This proposed training is very relevant to APN goal of scientific capacity development and Biodiversity and Ecosystem Services programme. The training on regional ecosystem-climate interactions will provide relevant researchers and practitioners from monsoon Asia countries with advanced knowledge and skills in this fast-moving field. It will also contribute to enhancing the environmental capacity building of young scientists in the region for the regional sustainable development. It addresses various scientific aspects of regional ecosystem and climate changes, including multi-platform observation, trends and impacts analysis, and ecosystem-climate modeling. The curriculum comprises lectures, seminars, along with site visits and excursions in research facilities and field stations. Participants are expected to systematically learn scientific principles and methods on regional climate change, ecosystem-climate interactions and sustainability.	China, Australia, Japan, USA, Developing countries in Monsoon Asia Sub-regions	45,000
CBA2013-FP12-Koshy	WCRP-ICTP Summer School on Climate Extremes	Prof. Kanayathu Chacko Koshy, Centre for Global Sustainability Studies, Penang, MALAYSIA	This proposed summer school is the first of a series of capacity development activities focusing on WCRP Grand Science Challenges (http://www.wcrp-climate.org/index.php/grand-challenges). The proposed school is to train students in observing, understanding and predicting changes in extreme climate events. The duration of the school is two weeks and includes lectures mainly in the mornings and practical application of the material covered in the lectures in the afternoons. This will be accomplished both through the use of structured tutorials, and a set of research problems that will form the core of the school and serve to produce an important part of its long-term legacy.	Australia, Canada, France, Malaysia, Spain, Switzerland, USA	30,000
CBA2013-FP14-Mathai	Training workshop and edited volume on "Green Growth: Political Ideology, Political Economy and Policy Alternatives"	Dr. Manu V. Mathai, United Nations University Institute of Advanced Studies (UNU-IAS), JAPAN	At Rio+20, the green economy realised through green growth was announced as the foundation of the "future we want." This project will contribute to capacity building of young researchers in developing countries on this topic. It will invite them to a two-day training symposium discussing the ideological commitments that rationalise green growth, its political economy and related policy options from the vantage of realising greater fairness on a shared and finite planet. The symposium invites senior experts in the field as resource persons to present their research. Selected contributions from the symposium will be included in an edited volume from a reputed international publisher for worldwide dissemination.	Brazil, Germany, India, Japan, Republic of Korea	40,000

Full Proposal Reference No.	Proposal Title	Proponent	Summary of Project	Regional Collaboration Countries Involved	2014/2015 APN recommended award (US\$)
CBA2013-FP20-Vilayphone	Capacity Development of Local Climate Change Communicators in Southeast Asia	Anoulom Vilayphone, Southeast Asian Network for Agroforestry Education (SEANAFE), CFNR-UPLB, PHILIPPINES	The proposed regional collaboration intends to develop community assets who would serve as the communicators and “community links” in the area of climate change research and development programs.	Indonesia, Lao PDR, Philippines, Viet Nam	40,000
CBA2013-FP22-Zhang	IMBER ClimEco4 Summer School - Delineating the Issues of Climate Change and Impacts to Marine Ecosystems: Bridging the Gap Between Research, Assessment, Policy and Management	Prof. Jing Zhang, East China Normal University, CHINA	ClimEco4 will focus on indices for evaluating marine ecosystems - what they are, how to construct them (for process/observation scientists), how to use them (modellers from natural and social sciences), and combining them to inform policy and decision-making. Lectures will include a climate change primer, general information on databases (acquiring and managing large data sets), data analysis methods for indicators (statistical methods), using indicators with models (ecosystem, socio-economic models), and criteria and use of indicators for informing marine management and policy. Daily “hands-on” sessions with example databases, indices, and models will provide applications of the concepts covered in the lectures.	Australia, China, USA	35,000
CBA2013-SGP01-Bora	Capacity Building for Mitigation of Climate Change by use of Precision Agriculture	Dr. Ganesh C. Bora, North Dakota State University, Fargo, USA	The proposed project intends to organise workshop and training programs for senior and mid-level policy makers, scientists and progressive farmers in Thailand, India, Bangladesh and Vietnam on Precision Agriculture (PA) to mitigate climate change and reduce greenhouse gas (GHG) emission (APN-Goal 1). PA is a system approach to reduce the use of chemicals, fertilizer and water through variable rate technology with help of GPS, GIS and Remote Sensing; recognising the variable potential of the field. PA not only reduces the input cost but also reduces GHG. The project plans to transfer knowledge and technology, adapted in the developed countries to customise for developing countries by the scientists and policy makers of both developed and developing regions (APN-Goal 2 and 3).	Indonesia, Japan, Singapore	35,000

APPENDIX 5: LIST OF ACTION POINTS

Election of Chair and Vice-Chair

Mr. Sundara Sem assumed his seat as Chair of the 19th IGM/SPG Meeting and nominated Mr. BMUD Basnayake, as his Vice-Chair. This was accepted by acclamation.

Item 1: Adoption of the Draft Agenda

The agenda was approved as presented.

Action 1: 19th IGM/SPG Meeting

Item 2: Report from the Steering Committee

The IGM accepted and acknowledged with appreciation the report from the Steering Committee Chair on the activities undertaken in fiscal year 2013.

Action 2: Report was approved by the IGM.

Item 2 (a): Final Financial Report (fiscal year 2012)

The IGM approved the Final Financial Report for 2012, noting that the total amount carried over (be it negative or positive) should be included in the Report and the final 19th IGM proceedings.

Action 3: The secretariat, with guidance from the Steering Committee, will consider further improving the format of financial reporting to better inform the IGM.

Item 2 (b): Status Report of the Work Programme and Budget Plan (Fiscal Year 2013)

The IGM approved the Status Report of the Work Programme and Budget Plan (Fiscal Year 2013), reiterating that any carried-over amount should be duly reported.

Action 4: The report was approved and the final report is to clearly indicate any carry-over funds.

Item 3: Framework Document

The IGM suggested additional amendments for final approval on Day 3 of the present IGM. These include (on the basis of suggested amendments presented as Version 2):

- Page 10, Line 1 to read: The SPG may invite observers to participate in its meetings and other activities as appropriate.
- Page 5, Line 45: To clarify the roles of nFPs and SPG members at IGM meetings, by including a separate clause for SPG participation.

List of Action Points

- Page 23, Line 16: To update the Guidance for the CDC, as it's mandates have evolved since it became a core programme of the APN.

The IGM suggested, in future meetings, to carefully consider further revisions to the Framework Document with regard to the following points:

- To specify IGM decision making procedures;
- To clarify secretariat responsibilities;
- To clarify resource development responsibilities;
- To clarify the membership of SRCs in line with the membership provisions for IGM/SPG

For Action on Day 3 under Item 12

Item 4: Third Strategic Phase Evaluation and 4th Strategic Phase Planning

Mr. Takemoto approved the amendments and announced that the "amended Framework Document" as presented is now in effect.

The IGM could discuss and clarify related issues later under Item 17 on day 3 of the present IGM/SPG Meeting.

Action 5: The report was approved and the Task Committee is to continue its activities.

Item 5: Ongoing and New Activities

Item 5(1): Core Programmes

- The IGM approved the recommendation from SPG regarding deferral of the ARCP call for proposals for one year.
- The IGM agreed that additional funds, should they become available, in Fiscal Year 2014 should be allocated first to continuing multi-year projects; second to new awardees (considered as back-up proposals); and last to be given back to what was borrowed from the budget for the CAPaBLE programme.

Action 6: Secretariat is to implement with close guidance from the Steering Committee. The budget is to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 5(2): Science Frameworks: LCI, CAF and B&ES

- The IGM welcomed the progress report and noted the plan for future activities. The IGM agreed that the budget for such future activities will be considered and approved under Item 6.
- The IGM noted US suggestion to consider opportunities to work with other international efforts and initiatives that supports fund-matching between developed and developing states through linking research proposals to existing research projects.

Action 7: The budget is to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Action 8: For B&ES, as a pilot study, consider any new B&ES-related projects involvement, potentially, in the new call for proposals on B&ES that will be launched around May 2014 under the Belmont Forum This might be an opportunity to have a pilot case to see if such partnership mechanisms work. More information on the call will be provided by the national Focal Point of the USA.

Steering Committee and Secretariat is to investigate opportunities to work with other international efforts.**Item 5(3): Science-Policy Engagement: Science-Policy Dialogues, UNFCCC, IPCC & IPEBES, etc.**

The IGM welcomed the progress report and noted the plan for future activities. The IGM agreed that the budget for such future activities will be considered and approved on Day 3.

The Members approved the B&ES Framework and related activities as indicated in the Opportunity Paper. They later approved the budget allocation for potential activities.

Action 9: Undertake planned activities.**Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.****Item 5(4): Reduce, Reuse and Recycle: Scoping Activity**

The IGM welcomed the proposal to conduct a scoping activity on 3R (Reduce, Reuse, Recycle) that will support development of a new framework and attract additional resources from stakeholders. Budget for such a scoping activity will be considered and approved on Day 3.

Action 10: Undertake planned activities.**Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.****Item 5(5): Communication, Outreach and Networking**

The IGM acknowledged the status report on communications, outreach and networking, and approved the work plan for Fiscal Year 2014.

Action 11: Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.**In addition, the Secretariat is to categorise themes sub-regionally as there is little information at the Temperate East Asia level. Secretariat is to work with Dr. Konstanin Lutaenko, nFP alternate for Russia, on this.****Item 5(6): Hyogo Activities**

The IGM welcomed the proposal to organise, with co-funding support from the Hyogo Prefecture, (1) a Expert Meeting on Air Pollution Control on Urban Asia-Pacific, and (2) a Symposium on Satoyama and Sustainable Development. Budget for such activities will be considered and approved on Day 3.

Action 12: Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.**Item 5(7): Capacity Development**

The IGM acknowledged the proposed partnership for a Pan-Asia Risk Reduction (PARR) Fellowship Programme to strengthen capacity and nurture partnership.

The IGM welcomed the outcomes of Proposal Development Training Workshops, and agreed that a sub-regional-rotational PDTW be held annually for effective use of available financial resources.

List of Action Points

Action 13: Undertake planned activities. Budget to be considered for approval under item 6 and then reaffirmed on Day 3 under Item 15.1.

Item 6: Proposed Work Programme and Budget Plan

Item 6(1): Needs Assessment

The IGM noted with appreciation the Needs Assessment Report acknowledging the Secretariat's and SC's effort in providing a realistic estimation of needs based on APN's aspirations.

The IGM took note of the emerging opportunities for further developing funding mechanisms that will benefit both developing countries and developed countries in terms of cost-sharing and knowledge exchange.

Action 14: Secretariat is to assure that future funds allocation from the USA are for developing countries.

Action 15: Need assessments are to continue to be undertaken with close guidance from the Steering Committee.

Action 16: All members are asked to consider the financial future of the APN with a view to strengthening its financial position.

Item 6(2): Proposed Work Programme and Budget Plan

Action 17: The IGM approved the Work Programme and Budget Plan for FY2014, which is to be reaffirmed under Item 15.1 on Day 3.

Item 7: Sub-regional Cooperation Committee Meetings

Agendas and summaries are available separately.

Action 18: SRC Committees shall report to the IGM under Item 9 ction: SC, APN Secretariat.

Item 8: Meeting of SRC Chairs and Rapporteurs

A separate summary is available.

No action identified.

Item 9: Sub-regional Cooperation Committee Reports

- **Southeast Asia:** A separate summary is available.

Action 19: Secretariat and SEA members are to consider how to work with the USA and other countries regarding additional, potential support for PDTWs

Action 20: SEA-SRC CAPaBLE proposal is to be submitted according to the discussions under the 2014 Call for CAPaBLE proposals

Action 21: Organise and hold the 7th Southeast SRC Meeting with the APN's first, revised annual PDTW.

South Asia: A separate summary is available.

Action 22: Organise and hold the 6th South Asia SRC Meeting with the APN's second, sub-regional Science-Policy Dialogue in January 2015.

Action 23: Request the APN Secretariat to work with the members and consider and proceed to coordinate with international partners for the science-policy dialogue, particularly CDKN and START.

Action 24: Members shall provide further input via email to prepare the Summary Proposals for submission under the next call for proposals for the ARCP programme.

Action 25: Members shall provide further input via email on useful contacts for the region, particularly the country contact points for SAARC.

Temperate East Asia:

Action 26: The TEA SRC will communicate electronically to identify issues of common interest and report to the Secretariat about the progress.

Item 10: SPG Co-Chairs' Report to the IGM

New SPG-SC Members

- Dr. Luis Tupas (SPG Member, USA) as continuing Co-Chair for one more year
- Dr. Jariya Boonjawat (SPG Member, Thailand) as new SPG Co-Chair for 2-year term
- Dr. Kensuke Fukushi (SPG Member, Japan) as SPG-SC Member for one more year as new SPG-SC Member for one year, renewable
- Dr. Amir Muhammad (SPG Member, Pakistan) as new SPG-SC Member for one year, renewable
- Dr. Hemant Borgaonkar, on behalf of Dr. Goswami (SPG Member, India)

Action 27: IGM approved by acclamation the recommendations for the 2014 SPG-SC.

Action 28: SPG-SC is to evaluate what is going on outside the APN community with a view to strengthening the scientific work of the APN and assure work is complementary rather than duplicative in nature.

Action 29: The Secretariat and the SPG is to consider methods for evaluation such as SWOT and Log-Frame analyses for new and ongoing proposals and projects, respectively.

Action: SEA-SRCom, Secretariat

New CDC Members
<ul style="list-style-type: none"> • Dr. Jariya Boonjawat (SPG Member, Thailand) SPG Co-Chair (ex-officio) • Dr. Luis Tupas; SPG Member for USA as new SPG Co-Chair (ex-officio) • 2013-15 SC Chair (ex-officio) • Donor Member Japan (ex-officio) • Dr. Andrew Matthews, invited expert for one year, renewable • Professor Roland Fuchs, invited expert for one year, renewable • Dr. Srikantha Herath, invited expert for one year, renewable • Another expert to be identified (for) one year, renewable

Action 30: IGM approved by acclamation the recommendations for the 2014 CDC.

Item 11: Recommendations from the SPG to the IGM for new and continued funds under the ARCP and CAPaBLE Programme

ARCP Recommendations

Recommendations for New ARCP Proposals and Continuing Multi-Year Projects	
13 continuing multi-year projects (secured from 2013/14)	US\$ 500,000
11 new projects from 30 full proposals	US\$ 700,668
2015/16 budget allocations for continuing multi-year projects pending successful review	US\$ 145,200

ARCP continued multi-year projects and new proposals were approved by acclamation.

Action: Undertake activities as approved.

CAPaBLE Recommendations

CAPaBLE Proposals and Continuing Multi-Year Projects	
1 continuing multi-year projects Capacity Development Projects	US\$ 8,000
11 new projects from 23 full proposals	US\$ 450,000

CAPaBLE continued multi-year project and new proposals were approved by acclamation.

Action: Undertake activities as approved.

Item 12: Amendments to the Framework Document (Part II)

The members readdressed the revised Framework Document and considered the new additions and revisions.

Action 33: The framework document as presented on Day One, with additional modifications proposed by the IGM, was approved.

Action 34: In accordance with the procedures outlined in the Framework Document, the Members are to assure that the Document remains dynamic in nature, with a view to updating as and when necessary, and as the APN develops.

Item 13: Discussion on Plans for the APN 20th Anniversary

Carefully considering budget, roadmaps, timeframe and contents, all members discussed potential plans and opportunities for celebrating two decades of existence of the APN.

Action 35:

(i) Communication Division of the APN Secretariat is to undertake an exercise to identify a number of events in the next few months where APN can celebrate its 20th anniversary and to circulate a questionnaire to generate ideas from the APN members before developing a roadmap.

(ii) Engage a small committee of volunteers. Philippines will be engaged as will be

(iii) The SRC committees are to discuss celebrations at their respective sub-regional cooperation meeting, with a view to looking to the future.

(iv) The Secretariat will provide all countries with specific project-based information for each country so that they may, if they so wish, plan potential national-based in-country celebrations.

Item 14: Host Countries for Future IGMs

Nepal offered to host the 20th IGM.

Action 36: The offer from Mr. Gokarna Mani Duwadee, nFP for Nepal, to host the 20th IGM/SPG Meeting in Nepal was accepted by acclamation.

Action 37: Concerning the 21st IGM/SPG Meeting in 2016, Member Countries were asked to contact the Secretariat if they are interested in being the host country.

Item 15: 19th IGM/SPG Action Points

Reaffirmation of the budget.

Action:

Item 19: Host Countries of 19th IGM and beyond

The offer from Mr. Sem to host the 19th IGM/SPG Meeting in Cambodia was accepted by acclamation.

Concerning the 20th IGM/SPG Meeting in 2015, Member Countries were asked to contact the Secretariat if they are interested in being the host country.

Action: Cambodia, Member Countries and Secretariat

Item 21 (a): Any Other Business (AOB)

The following experts will serve as co-opted Members of the SC for a term of one year (2013-2014): **Mr. Lou Brown, Professor Roland Fuchs, Dr. Andrew Matthews, and Dr. Kazuhiko Takemoto.**

Cambodia will serve on the SC for the next year as the host Country of the 19th IGM/SPG Meeting. The members welcomed this information by acclamation.

Action: Steering Committee

Item 20: Chairperson's Summary

A final summary would be prepared in close consultation with the Chair, Mr. Takemoto and the Vice-Chair, Mr. Sem, of the 18th Joint IGM/SPG Meeting and revisions could be submitted by delegates until the middle of May, 2013. The final summary will also include a list of action points (see Appendix 5) and abbreviations (see Appendix 6).

Action: 18th IGM Chair, Vice-Chair and Secretariat

APPENDIX 6: GLOSSARY

ACRONYM	FULL NAME	DESCRIPTION	More Information (URL)
3R	Reduce, Reuse, Recycle Science Agenda	3R refers to the concept of <i>reduce, reuse, recycle</i> . The APN is now developing its 3R Science Agenda by promoting, engaging and integrating 3R in the promotion of regional research and capacity building activities in the region.	
4SP	Fourth Strategic Phase	The fourth 5-year strategic phase of APN will start in April 2015.	
ARCP	Annual Regional Call for Research Proposals	The ARCP is a core programme of the APN that supports regional-based global change research.	www.apn-gcr.org/programmes-and-activities/arcp
B&ES	Biodiversity and Ecosystem Services	B&ES refers to biological diversity and the goods and services that it provides, including supporting, provisioning, regulating and cultural services, which are crucial to human wellbeing. APN is promoting B&ES through the launch of its new Framework in 2013	www.apn-gcr.org/bes
CAF	Climate Adaptation Framework	The CAF is a new framework, launched in 2013, to support activities related to climate change adaptation, disaster risk reduction and loss & damage.	www.apn-gcr.org/caf
CAPaBLE	Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries	CAPaBLE is a core programme of the APN that supports capacity building activities in the Asia-Pacific region.	www.apn-gcr.org/programmes-and-activities/capable
CDC	Capacity Development Committee	The CDC reviews and recommends capacity building activities for funding support.	www.apn-gcr.org/about-apn/apn-structure/cdc-capacity-development-committee/

ACRONYM	FULL NAME	DESCRIPTION	More Information (URL)
CDKN	Climate and Development Knowledge Network	The CDKN supports climate compatible development policies through combining research, advisory services and knowledge management. It is funded by the Department for International Development, Government of UK and the Dutch Ministry of Foreign Affairs.	www.cdkn.org
CORDEX	Coordinated Regional Climate Downscaling Experiment	CORDEX is a WCRP project that provides global coordination of Regional Climate Downscaling for improved regional climate change adaptation and impact assessment.	wcrp-cordex.ipsl.jussieu.fr/
IAI	Inter-American Institute for Global Change Research	The IAI is an international organisation of 19 countries in the Americas with a mission to increase the understanding of global change phenomena and their socio-economic implications.	www.iai.int
IGES	Institute for Global Environmental Strategies	IGES is a public interest organisation headquartered in Hayama, Japan, that conducts innovative policy development and strategic research for environmental sustainability.	www.iges.or.jp
IGM	Inter-Governmental Meeting	The IGM is APN's decision-making body and approves APN's strategies and activities, including the annual work programme and budget.	www.apn-gcr.org/about-apn/apn-structure/igm-members/
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services	IPBES is an intergovernmental body established in April 2012 by 94 governments to strengthen the science-policy interface for biodiversity and ecosystem services.	www.ipbes.net
LCI	Low Carbon Initiatives	LCI is one of APN's Frameworks launched in 2012 and supported by earmarked contribution by the Ministry of Environment, Japan	www.apn-gcr.org/lci
MEOJ	Ministry of the Environment, Japan	MOEJ is responsible for environmental conservation, pollution control, and nature conservation.	www.env.go.jp

ACRONYM	FULL NAME	DESCRIPTION	More Information (URL)
nFP	National Focal Point	An nFP is a member of the Inter-Governmental Meeting, appointed by respective APN member countries.	www.apn-gcr.org/about-apn/apn-structure/jgm-members/
NSF	National Science Foundation	NSF is a United States agency that supports research and education in all the non-medical fields of science and engineering.	www.nsf.gov
PARR	Pan-Asia Risk Reduction fellowship programme	PARR is a fellowship programme initiated by START International that aims at providing training and educational opportunities in the Asia-Pacific. APN is supporting PARR through providing fellowship funds.	www.start.org/download/2013/af-research-for-action.pdf
PDTW	Proposal Development Training Workshop	A workshop series offered by the APN to enhance research proposal development capacity of young scientists in the Asia-Pacific region	www.apn-gcr.org/programmes-and-activities/pdtw/
SA	South Asia	APN's SA membership includes Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka	www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/
SBSTA	Subsidiary Body for Scientific and Technological Advice	SBSTA is an organ of UNFCCC mandated to provide the Conference of Parties with advice on scientific, technological and methodological matters	unfccc.int/bodies/body/6399.php
SC	Steering Committee	The SC provides strategic advice to the APN, particularly to the Secretariat's annual Programme of Work, and acts on behalf of the IGM during intersessional periods.	www.apn-gcr.org/about-apn/apn-structure/sc-steering-committee/
SEA	Southeast Asia	APN's SEA membership includes Cambodia, Indonesia, Lao PDR, Malaysia, Thailand, Philippines and Viet Nam	www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/
SPD	Science-Policy Dialogue	SPDs are a series of events organized by the APN in collaboration with regional partners to provide a forum for science-policy interaction regarding GC issues	www.apn-gcr.org/resources/items/show/1880

ACRONYM	FULL NAME	DESCRIPTION	More Information (URL)
SPG	Scientific Planning Group	The SPG reviews and recommends proposals received to the IGM for approval of funding, among other mandates	www.apn-gcr.org/about-apn/apn-structure/spg-scientific-planning-group/
SPG-SC	SPG Sub-Committee	The SPG-SC is a sub-organ of the SPG, elected by SPG members.	www.apn-gcr.org/about-apn/apn-structure/spg-sc-spg-sub-committee/
SRC	Sub-Regional Committee	The SRCs discuss and identify issues and research/capacity development needs that are common to respective subregions	www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/
START	SysTem for Analysis Research and Training	START is a non-profit organisation based in Washington DC, USA that promotes research-driven capacity building to advance knowledge on global environmental change in Africa and Asia-Pacific.	www.start.org
TEA	Temperate East Asia	APN's TEA membership includes China, Japan, Mongolia, Republic of Korea and Russian Federation.	www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/
USGCRP	United States Global Change Research Program	USGCRP is a US federal programme that coordinates and integrates global change research across 13 government agencies. APN receives financial contribution from USGCRP through NSF.	www.globalchange.gov
WCRP	World Climate Research Programme	The WCRP is jointly sponsored by International Council for Science and the World Meteorological Organization, and has also been sponsored by the Intergovernmental Oceanographic Commission of UNESCO to determine the predictability of climate, and to determine the effect of human activities on climate.	www.wcrp-climate.org

APPENDIX 7: SUMMARY OF INTERACTIVE SESSIONS

Interactive Session I Tonle Sap Ecosystem

This poster session provided young scientists with an opportunity to display and present their research work to invited esteemed members of the scientific and policy communities from within and outside the Asia-Pacific region. Five young scientists delivered their poster presentations, all of which are related to the Great Tonle Sap Lake and its surrounding waters.

The list of poster presenters is as follows:

► **Mr. Heng Sokrith – Community Resilience and Adaptation Responses to Climate Change: Tonle Sap Lake Cambodia**

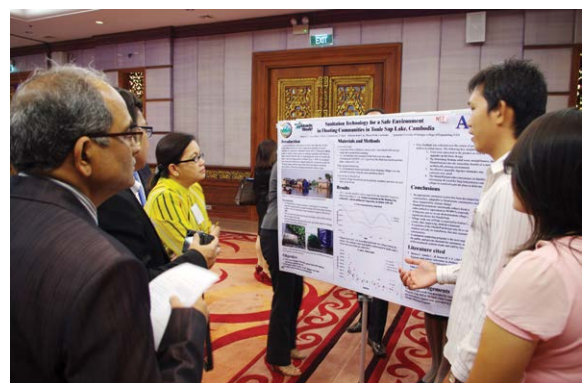
The Tonle Sap is a big freshwater wetland covering an area of 250,000-300,000 ha in the dry season which grows 5-6 times larger in the rainy season. This ecosystem is important to support 296 fish species (third highest in the world after the Lake of Malawi) and produces 60% of Cambodia's total fish. The fishery is valued at US\$ 1.2-1.6 million/year and accounts for about 9-12% of Cambodian GDP. Tonle Sap provides 70% of the protein for those 2.9 million people who live around the lake.



Impacts on fisheries are predicted on the Tonle Sap from climate change and hydropower development. As a result, people will be forced to change how they utilise fish and other resources, changing their livelihoods. This study presented the results of a 2011 survey of households in the Kampong Prak area of the lake, asking them to report their awareness on climate change and what strategies people use to adapt to it. It was found out that people were highly dependent on flooded forests for fish, fuel and construction materials, and that they are highly susceptible to income shocks, driving cycles of indebtedness, among other vulnerabilities to climate change.

► **Mr. Khon Puthea – Sanitation technology for a safe environment in floating communities in Tonle Sap Lake, Cambodia**

Almost 100,000 people live in dense floating communities of Cambodia's Tonle Sap Lake and during the low water dry season, many experience poor health as their local ambient water becomes contaminated and often septic. This is an extremely challenging environment where no wastewater treatment has ever been sustainably provided



Summary of Interactive Sessions

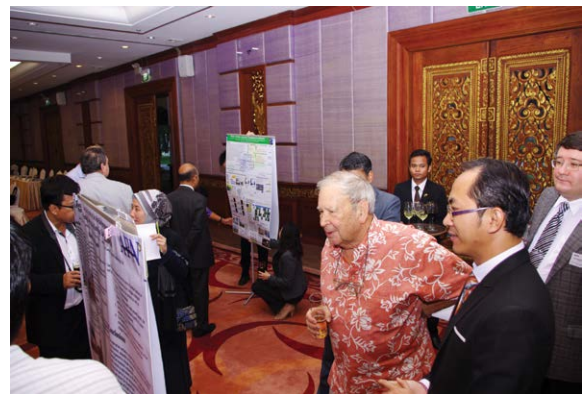
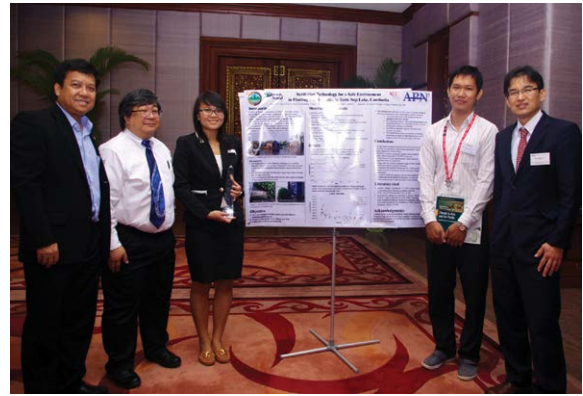
for such communities. In this study, the researchers have demonstrated that by using Handy Pod treatment system developed by Wetland Works! (WW!), a floating household's wastewater can be contained and treated to a high grey water standard, allowing ambient water outside the Pod to be significantly more healthful.

► Mr. Nget Sina – Introducing System Dynamics Approach into Nutrients Studying in Tonle Sap Lake: A Dynamic Phosphorus Flow

The Tonle Sap Lake in Cambodia is the biggest permanent water body in Cambodia and Southeast Asia. The lake provides about 60% of Cambodia's total supply of protein. The Tonle Sap ecosystem is believed to be one of the most productive inland waters and one of the most fish abundant lakes in the world. The productivity of the lake depends on the available nutrient in the lake, and phosphorus is considered the limiting nutrient. Therefore, this research examined the flow of phosphorus in the Tonle Sap Lake with the concept of system dynamics approach. Understanding the movement of phosphorus will be helpful in decision making and planning. High phosphorus in the lake will lead to high phytoplankton, which is the primary source of food in an aquatic ecosystem. However, excessive phosphorus concentration in the lake will reduce water quality. The researcher raised all related factors that contribute phosphorus into the Tonle Sap Lake, and used system dynamics concept with the help of the software Vensim. The result shows that the phosphorus concentration curve in the model does not well fit to the curve of direct phosphorus concentration measurement. The difference of the curve can be caused by the phosphorus sedimentation and re-suspension, which are not included into the model.

► Dr. Veasna Kum – Modeling Phosphorus Dynamics of Tonle Sap Lake

Concerns have recently been expressed that development, such as dam construction, in the Mekong River Basin will affect the flow of the river and the nutrient flow to the Tonle Sap (TS) Lake in Cambodia. This paper presented a dynamic phosphorus (P) model that was built to investigate the response of the lake's phosphorus cycle to changes in P loads under different development scenarios for the Mekong Basin including a high development (HD) scenario as well as current conditions. Understanding the P cycle is important as it is considered the limiting nutrient for organic productivity of the lake. The dynamic characteristics of the lake and the deficiency of data require a careful design of the P model structure. The authors developed a simple phosphorus budget model and demonstrated its application to the Tonle Sap Lake. The P model was based on System Dynamics (SD) methodology and the model was constructed in Vensim, a software used in building dynamic models. Results showed that the P peak concentration of the lake under the HD scenario would be lower than that of under the baseline scenario by about 30%. However, the basic cyclic behaviour of P of the Lake under the two scenarios did not change significantly. Both actual data and the model output indicates two peaks per year in P concentrations in the lake, likely a reflection of different sources during different stages of the annual flood/withdrawal cycle.



► **Mr. Heng Chiveon – Climate change impact on rice production and evaluating adaptation at Preah Sre village Cambodia**

Climate change will severely set back agriculture and livelihoods of farmers in developing countries such as Cambodia. This research paper described how farmers are impacted by climate change and evaluated the way in which they adapt with it in terms of rice production at Preah Sre Village, Talom Commune, Mongkolborey District, Banteaymeanchey Province. As a consequence of climate change, this village has been flooded for three years (2011, 2012 and 2013). The flooding resulted in hundreds of hectares of rice fields destroyed. It was found out that farmers adapt to this kind of climate change impact by changing the schedule of growing rice for their second cropping, and by changing the type of rice variety to be planted. They specifically used the rice that takes only 85 days for growth.

To evaluate further how much farmers were impacted by climate change, farmers were divided into four categories and benefit-cost analysis was used to evaluate how much each category is impacted by climate change. The results were presented in US\$/hectare. By comparing benefit-cost between prior and after flood events, and comparing benefit-cost between prior and after adaptation, the researcher was able to find out the impacts of climate change (US\$/per hectare) in each farmer category, and how much loss (US\$/per hectare) were minimised by each farmer category by adapting to climate change.

Documentary Film Screening

Immediately after the poster session and interaction with the young scientists, a film screening was held. The title of the film is “River Changes Course” – a 2013 documentary by Kalyanee Mam. The film explores the environmental and socio-economic impacts of rapid development in Cambodia. It tells the story of three families living in contemporary Cambodia, and how their traditional ways of life are changing. The film won the Grand Jury Prize at Sundance Film Festival and Golden Gate Award for Best Documentary Feature at the 2013 San Francisco International Film Festival.



Interactive Session II

The International Global Change Research: Future Strategic Engagement with the APN

Interactive Session II provided an opportunity for representatives of a number of international global change research programmes to make presentations and to discuss with IGM participants how their programmes and the APN might best interact in the future. Focusing on their respective institutions, representatives of IPBES, IAI, LoCARNet, MAIRS, NRCT, USGCRP and APAN addressed the question: “How can the international research community be engaged strategically with the APN?”

► Mr. Junichiro Kuji – Global Biodiversity Strategy Office on IPBES

IPBES provides a mechanism recognised by both the scientific and policy communities to synthesise, review, assess and critically evaluate relevant information and knowledge generated worldwide by governments, the academia, scientific organisations, non-governmental organisations and indigenous communities. This involves a credible group of experts in conducting assessments of such information and knowledge in a transparent way. IPBES is unique in that it will aim to strengthen capacity for the effective use of science in decision-making at all levels. IPBES will also aim to address the needs of Multilateral Environmental Agreements that are related to biodiversity and ecosystem services, and build on existing processes ensuring synergy and complementarities in each other’s work.

Mr. Kuji explained that IPBES work towards science and policy for people and nature. He emphasised strengthening science-policy interface for B&ES which is geared towards conservation and sustainable use of biodiversity and ecosystem services. To achieve that, the role of IPBES is to catalyse efforts to generate new knowledge and produce assessment of existing knowledge for potential policy formulation.

In terms of the work programme, he shared that IPBES has 18 deliverables which just started in 2014. In line with this, the APN has a chance to collaborate with IPBES. This includes joining its members and participating in IPBES-related workshops.



► Mr. Lou Brown – Inter-American Institute for Global Change Research (IAI)

The IAI is an intergovernmental organisation supported by 19 countries in the Americas dedicated to pursuing the principles of scientific excellence, international cooperation, and the full and open exchange of scientific information to increase the understanding of global change phenomena and their socio-economic implications.

With the recognition for the need to better understand the natural and social processes which drive large scale environmental change, the IAI encourages interactive exchanges between scientists and policy makers. The goal of the IAI is to augment the scientific capacity of the region and to provide information in a useful and timely manner to policy makers. Its primary objective is to encourage research beyond the scope of national programmes by advancing comparative and focused studies based on scientific issues important to the region as a whole.

Mr. Brown added that IAI insists on interdisciplinary research and user-oriented science. The major goal of IAI is to expand building the capacity of the region it covers.



► Ms. Tomoko Ishikawa – LoCARNet

The International Research Network for Low Carbon Societies (LCS-RNet) proposed the establishment of a network called the “Low Carbon Asia Research Network (LoCARNet)” at ASEAN+3 Environmental Minister Meeting (EMM) held in October 2011 in Cambodia. The creation of the LoCARNet was declared at the side-event of the “East Asia Low Carbon Growth Partnership Dialogue” held in April 2012 in Japan. In close cooperation with NIES, IGES formally launched LoCARNet promoting research to support the development of policies for low-carbon growth by enabling dialogue between scientists and policy makers. In addition, it facilitates Asian region to move forward with low-carbon growth, with a number of ongoing favourable conditions to turn challenges into opportunities.



Ms. Ishikawa emphasised that LoCARNet provides opportunities to bring together research results, promote knowledge sharing and work for policy dialogue linking science with implementation. She also stressed that capacity development is one area where APN and LoCARNet can work together by means of organising joint workshops.

► Dr. Ailikun – Monsoon Asia Integrated Regional Study (MAIRS)

MAIRS is an international research organisation implemented by START, the START TEA-RC and Chinese donors. Different from other monsoon research projects, MAIRS will not address the monsoon climate itself, but focus on human monsoon system interaction. It attempts to understand to what extent the human activities modulate the Asia monsoon climate and how the changing monsoon climate impacts further the social and economic development of Asia. MAIRS also studies the extent to which societies adapt to or mitigate such impacts through regulating policies, law and institutions leading to sustainable development.



Established in 2006, MAIRS focused on expanding and working on integrated studies in the region. The MAIRS has been a recipient of APN grant since then and acknowledges small projects such as what APN is implementing as it can create very interactive and healthy activities. She then cited these APN projects (ARCP-Wang and ARCP-Asanuma and a CBA-MAIRS) and highlighted a capacity building project which studies and addresses climate-change induced extremes in northern Asia.

APN plays a very important role in regional coordination and cooperation with MAIRS as it provides efficient “glue” resources to link ongoing activities.

► Dr. Soothiporn Chittmittrapap – National Research Council of Thailand (NRCT)

One of the main functions of NRCT is to formulate national research policy and strategy, and to set the direction for national research main plan. The National Research Policy and Strategy covering five years period has been formulated since 1977 as a research implementation guideline for research agencies and a framework for the analysis of research proposals submitted by government agencies for annual budget allocation. It also provides a policy basis that is in line with the National Economic and Social Development Plan.



He explained that green economy and climate change are two among Thailand’s strategies. They favour national strategic climate change and environment research. NRCT cannot work alone and is seeking international research cooperation. The role and support of international research collaborations allow NRCT to share knowledge and experiences and solve problems across border on the regional and global scales.

The NRCT has experience in knowledge sharing and open access for information, data and research results, and would like to start with a pilot on global change in collaboration with ICSU and be engaged in some activities with Future Earth.

► Dr. Luis Tupas – United States Global Change Research Program (USGCRP)

The U.S. Global Change Research Program (USGCRP) is a confederation of the research components of 13 Federal departments and agencies. These 13 departments and agencies carry out research and maintain and develop capabilities that support the Nation's response to global change, in coordination with the Subcommittee on Global Change Research (SGCR).



Dr. Tupas, on behalf of Dr. Maria Uhle, explained the four main activities that the USGCRP focuses on. He also emphasised USGCRP's work on advancing science, making decisions and conducting annual assessments. He pointed out the approach to education is the key element and that science does not become useful unless it reaches the people who needs them.

Science indeed matters, as it sits as one of the many undertakings that USGCRP does. Moving forward, a new approach over the next 10 years will be more applicable and useable to those who need the information.

► Dr. Daisuke Sano – Asia Pacific Adaptation Network (APAN)

The mission of APAN is to build climate change resilient and sustainable human systems, ecosystems and economies through the mobilisation of knowledge, enhanced institutional capacity and informed decision making processes, and facilitated access to finance and technologies. Its purpose is to equip key actors in Asia and the Pacific Region with adequate knowledge for designing and implementing climate change adaptation measures, building capacity to access technologies and finance in support of climate change adaptation, and integrating climate change adaptation into policies, strategies and plans.

Dr. Sano talked about APAN and its main thrusts, and cited that the APAN will serve as a co-organiser or session organiser in the upcoming Climate Change Adaptation Forum which will be held on October 2014. The organisation will also take a role in the International Forum for Sustainable Asia and the Pacific (ISAP) on July 2014, to be held in Yokohama, Japan. One of the important roles that APAN hold is implementing capacity development and training workshops. He stated that APAN welcomes APN's participation in its networking meeting, Steering Committee meeting, and others. In addition, Dr. Sano enumerated ways in which APN and APAN can collaborate together such as: (1) knowledge sharing; (2) database development; (3) collaborative research on CCA; and (4) identifying experts for APN's capacity building activities.

Interactive Panel Discussion

After all the presentations were delivered, an interactive discussion was opened to the floor.

Mr. Sabar Ginting asked Mr. Soothiporn to elaborate more on the CAF and renewable energy. Dr. Soothiporn mentioned that it is a cooperation program between NRCT and the Chinese Academy of Sciences (CAS). He added that CAS is a consortium of many universities and supports collaborative projects among researchers.

Summary of Interactive Sessions

Together with CAS professors, he explained that the Thai researchers created a research proposal and posted it to CAS as it will be difficult to be implemented in Thailand.

A question on how the Future Earth and APN can be engaged was raised and directed to Dr. Ailikun. She answered that APN should actively apply for a regional hub status and work in partnership with Future Earth so that a competitive relationship does not develop but rather a complementary one.

Dr. Roland Fuchs commented that Future Earth (FE) is an important potential link and asked how APN is dealing with this and why is the status of APN in this initiative. He added that for Asia, there are several organisations submitting proposals and presumed that APN is one of the regional hub (as for the last years, APN is playing a crucial role).

Dr. Matthews hoped for more interaction between Future Earth and APN, and further expressed that there has been actions related to Future Asia and relevant workshops in the region but duplication or competition should be avoided. Instead, there should be a very active partnership and role from the Future Earth committee.

A question addressed to Mr. Kuji was raised by Dr. Lutaenko. He asked about biodiversity assessment data available from Japan in English language which can be shared in the international community. He said that Japan is a very close country to Russia that's why he is interested in the information. Mr. Kuji showed the IPBES deliverable 2 timeline on sub-regional and global research (2014) and stated that Japan and other governments are yet to have detailed information on assessment. He added that a scoping document is being prepared by IPBES and that the IPBES Secretariat is now seeking nominations of experts to be involved in regional and sub-regional assessments and suggested that participants contact the government they belong to or stakeholders like the APN if they wish to nominate. Dr. Monthip commented that the International Union for Conservation of Nature (IUCN) should be one of the stakeholders of IPBES as the IUCN has done a lot, especially in terms of database management, gender and biodiversity and development of training materials in different language.

Talking about IPBES nominations, Dr. Takemoto supplemented that the announcement for the Call for Experts is usually disseminated by APN through email basis and as a result of the Call, the APN received three nominations which he sent to IPBES Secretariat. On another topic, he answered Dr. Lutaenko's query on assessment data available in Japan and said that Japan delivered an assessment report in September 2013 and it has comprehensive information on ecosystems in Japan and that it can be viewed online.

Dr. Linda Anne Stevenson delivered a brief summary of the presentations done.



Interactive Session III

Strengthening the APN Network: Co-Financing/Co-Benefit Strategies in Global Change Research and Capacity Development

► 1. Introduction

The session focused on strengthening the APN network. Four member countries presented on country level experience and best practices in global change and co-benefit strategies that could be aligned with the APN, and shared their insights on strengthening financing and building partnerships for action-oriented research.

► 2. Country Level Presentation: Bhutan

Ms. Peldon Tshering, national Focal Point, Bhutan

Bhutan's development is highly dependent on climate-sensitive sectors such as agriculture, hydropower and forestry. Flooding is a major natural disaster aggravating poverty in the Indus and Ganges-Brahmaputra-Meghna (GBM) basins – home to over 600 million people and almost half of the world's poor.

Ms. Tshering talked about Bhutan's national experience across borders and climate change efforts done in the country such as establishment of a regional flood information system in the Hindu Kush Himalayan Region. She also enumerated both the advantages and challenges associated in undertaking cross border activities. The advantages include being able to have a networking setup, receive technical support/expertise, and information exchange and awareness of the regional issues. While the challenges include aligning objectives in view of vastly different countries, strong coordination, accountability and responsibility are required.



In terms of co-benefit strategies that can be participated in by Bhutan and the APN, Ms. Tshering acknowledges this kind of approach as strategic management. She stated that a co-benefit approach is a win-win strategy aimed at capturing both development and environment benefits in a single policy or measure. It is quite important especially in developing countries as they lack sufficient resources and face various development priorities.

Discussion

Dr. Maria Uhle stated that commerce and development technology usually sit outside of research. Hence, there should be a mechanism to take what we are doing in research and put forward to policies and technology changes. In this regard, she suggested that the APN could start linking sustainable consumption and production to knowledge produced from its research funded. She added that SWITCH-Asia could be a good partnership for the APN.

► 3. Country Level Presentation: Nepal

Mr. Gokarna Mani Duwadee, national Focal Point, Nepal

Located in the Himalayas, Nepal is a landlocked country in South Asia. The country is naturally highly vulnerable to different kinds of hazards – especially those induced by climate change. While the maximum temperatures in Nepal is increasing at an alarming rate and causing glacier melting rate to be faster than the global average, extreme precipitation events, on the other hand, is increasing at an alarming level. The government of Nepal has started efforts identifying key areas in which the impacts of climate change need to be addressed. The country, now, is focusing on the following themes: (1) adaptation; (2) capacity building; (3) scientific research; and (4) institutional development.



Mr. Duwadee cited some major national projects, best practices and examples of success areas. Asked as to which global change and co-benefit strategies could be aligned with the APN, he enumerated public awareness and training, low carbon economic development, and clean development mechanism and REDD+, among others.

Discussion

Dr. Roland Fuchs asked Mr. Duwadee on the most needed (least addressed) issue in capacity building in Nepal. The latter responded that there is a need to work on public health and urban settlement and poverty alleviation.

A set of questions was raised by Mr. Savannora Ieng, Deputy General Inspector of Cambodia's Ministry of Environment, on how successful the enforcement of environmental protection act is and on lessons learned from the projects. He also inquired on the number of stakeholders involved and whether the projects are being implemented at the local level. Mr. Duwadee answered that in enforcing rules and regulations, environment pollution control, for example, has formulated regulations. In terms of the stakeholders involved, he answered that the interministerial research and academic institutions are involved.

Dr. Uhle stated that a lot of the priorities outlined in Nepal's presentation overlap nicely with Belmont Forum current work. She suggested enforcing the APN to become a much more active member in the Belmont family.

4. Country Level Presentation: Sri Lanka

Mr. BMUD Basnayake, national Focal Point, Sri Lanka

Common problem in terms of climate change include intense precipitation and temperature increase. Given the country's capacity to adapt to climate change by implementing small-scale foreign-funded projects, the country is trying to address climate in an integrated manner.



In his presentation, Mr. Basnayake discussed similar best practices in global change that Sri Lanka has and co-benefit strategies that could be aligned with the APN. He cited future plans such as promoting dialogue among stakeholders on an integrated effort to address global change, development of National Climate Change Adaptation and Mitigation Action Plans, and strengthening capacity of national institutions for realising a more effective research agenda.

5. Country Level Presentation: Thailand

Dr. Monthip Sriratana Tabucanon, National Research Council of Thailand

Akin to its neighbouring Southeast Asian nations, Thailand is vulnerable to climate change and in terms of responding to climate change, uncertainties exist over who should do what in response. Nevertheless, the country has significant research funding from the Royal Thai Government which can be used in implementing climate change research and adaptation activities. Dr. Tabucanon, in her presentation, discussed that in the country, there is no means in assessing relevance and impacts of research currently. Hence, there is a need to stimulate greater coherence and synergy between research groups.

Climate change research in Thailand first appeared in mid 1990s and the initial focus was on mitigation. To date, there is a range of topics involved expanding to cover impact assessment, mitigation and adaptation. The country places climate change research in a wider development context – however, challenges in coordination and weak links between research and policy development is existing.

In terms of international experiences, Dr. Tabucanon stated that the NRCT see climate change more than a threat but as a driver of change and source of uncertainty. The NRCT aims to establishing links between mitigation, adaptation and impacts.

Discussion

Dr. Kim Chi Ngo expressed that NRCT seems to have a well-established network, and suggested that Viet Nam, Lao PDR and Cambodia be included. In response, Dr. Monthip said that the donor wants to expand the network further and that there is an idea to engage countries like Viet Nam, Lao PDR and Cambodia within the watershed.

Interactive Panel Discussion

Dr. Takemoto led the interactive session and asked all the presenters about the availability and status of domestic funds for global change research for domestic researchers.

Dr. Monthip answered that Thailand has six funding agencies at the government level, and thus, she urged similar organisations to come up with a strategic plan and encourage other funding agencies to use the same plan. She suggested that the APN should look into its legal status as a formal international organisation, and that Thai Government has to support APN member countries in terms of providing funding, an approval has to be secured from the government and legal implications will be asked. In reply, Dr. Takemoto said that APN operates under the framework document, rather than a government ratified treaty, however, its financial matters are handled independently of the local host organisation that provides administrative arrangements.

Summary of Interactive Sessions

Responding to a question by Dr. Takemoto, Mr. Duwadee answered that donors (from GEF, UNFCCC) have funds directed to supporting research. What the APN fund can make is to give support to young researchers by training and encouraging them to submit proposals. In relation, he raised a concern regarding the PDTW being an open call since young scientists of least developing countries might not have equal access to APN opportunities.

Ms. Tshering stated that Bhutan does not have any funds at present to support domestic researchers due to economic problems as well as other development priorities. However, there are a number of agencies that have been supportive of research in Bhutan. The major difference is that the time to access funds is different and GEF, as one of the funding agencies supporting the country, has projects with very long periods and funds are allocated to a specific team usually.

Mr. BMUD Basnayake answered that there are small funds and it depends on the treasury. He furthered that a very small amount of money is not substantial and thus an invitation for others to contribute and collaborate is important.

Dr. Fukushi showed interest in possible research partnerships and responded that partnering universities can be a way to support domestic research. Mr. Sem supported the idea noting that Cambodia has some donor funds.

After hearing the responses from each country presenters/representatives, Dr. Takemoto explained his thoughts on how the collaborative funding mechanism can work. He stated that the APN call for proposal process can be utilised. He stressed that if the project proposal is coming from proponents of partnering countries, then SPG members or a review committee from the partnering countries can evaluate it. Then it will undergo a series of call process up to IGM approval. If partnering organisations agreed, a contract can be drawn among the involved, he noted.

Dr. Uhle suggested that the APN should have a clear idea of potential funding sources. On the other hand, Dr. Matthews, looking at the case of Japan (where the Ministry of Education of Japan is a partner of Belmont Forum), urged the members to consider which other institutions can partner with APN. Dr. Takemoto responded that there has been communication ongoing between the Secretariat and the MOEJ discussing the topic of partnering with the Belmont Forum as well as other international funding organisations.



Section II

Opening and Welcome Remarks



WELCOME REMARKS BY MR. SUNDARA SEM, nFP FOR CAMBODIA

H.E. SAY Samal, Minister of Environment of the Kingdom of Cambodia, H.E. SABO Ojano, Secretary of State, MOE, H.E. Khim Bun Song, Provincial Governor of Siem Reap, Mr. Basnayake, APN Steering Committee Chair, Dr. Akio TAKEMOTO, Director of APN Secretariat, honourable delegates, distinguished guests, ladies and gentlemen.

In my capacity as the nFP of Cambodia to the Asia-Pacific Network for Global Change Research and on behalf of the host country, I have the great honour and pleasure to deliver the welcome remarks, and to warmly welcome the Honourable Delegates, Distinguished Guests, Ladies and Gentlemen, especially His Excellency Minister of Environment, Secretary of State of the Ministry of Environment, Provincial Governor of Siem Reap, APN SC Chair, APN Director, nFPs and SPG members of APN member countries, Invited Experts, Observers, and colleagues from the APN Secretariat to the APN 19th Inter-Governmental Meeting and Scientific Planning Group Meeting in Siem Reap where the heart of Cambodia is, and where Angkor Wat, a World Heritage Site, can be found.

I would like to take this opportunity to express my deep thanks to the Royal Government of Cambodia for allowing us and the Ministry of Environment to organise this important meeting. I would like to especially express my thanks and profound appreciation for His Excellency, the Minister of Environment of the Kingdom of Cambodia for spending his valuable time to be here as a chair to offer the opening speech on the APN 19th IGM/SPG Meeting today.

I also would like to take this opportunity to sincerely thank and offer my profoundest appreciation for His Excellencies, honorable delegates, distinguished guests, and all participants of the APN 19th IGM/SPG meeting. Your presence and participation

in this meeting is very important and valuable to supporting regional cooperation in global change research; strengthening interactions among scientists and policymakers; improving the scientific and technical capabilities of nations in the region; and cooperating with other global change networks and organisations.

Excellencies, honourable delegates, distinguished guests, ladies and gentlemen.

We are well aware that global change in terms of social, economic and the environment has great consequences to mankind, particularly to the people living in the Asia-Pacific region which is considered a very diverse region. Currently, problems related to global warming or climate change are the most serious threats to people around the world. Cambodia is also one of the most vulnerable countries to the impacts of climate change, and we have little means to prepare and adapt to changes. We have already witnessed serious impacts of climate change on the livelihoods and ability of people to survive with recent unprecedented droughts and floods. For us, climate change is real and has caused increasing losses to our economy: adaptation to climate change has to be part of our country's future planning and action. These serious concerns have been taken in order to formulate the national policy to tackle the problems, both in terms of mitigation and adaptation. Adaptation is only one aspect of human response to climate change: mitigation is equally important.

Cambodia clearly acknowledges the need to mainstream climate change into socio-economic development policies and plans at the nation, sub-nation as well as the sectoral level since climate change is a cross-sectoral issue that directly relates to mandates of many ministries and agencies in charge of development. On the other hand, proactive and wise response measures to climate change can allow us

to turn this challenge into a new opportunity that can support sustainable development under climate change conditions. As a matter of fact, during the inauguration of the National Forum on Climate Change, Prime Minister Samdech Hun Sen stressed about the need to develop a national climate change strategy and action plan, to integrate climate change into sectoral policies and plans, to establish a climate change trust fund, to mobilise resources capacity, to promote cooperation, coordination and research, and to strengthen the role of the private sector.

In connection with this issue, I think that the APN is one of the well-known networks that encourages and promotes research in global change in the Asia-Pacific region. Numerous research projects (ARCP) and capacity development projects (CAPaBLE) on global change have been supported and funded by the APN since 1996. It has been proven that networking is one of the efficient mechanisms that significantly contribute to the achievement of combating global warming in the region.

Therefore, it is an honour for Cambodia to host the APN 19th IGM/SPG Meeting which serves as a venue to exchange views on the linkage between project activities and progress and project research outcomes and policy formulation at the region, and to enhance cooperation among scientists and policy makers in the region on capacity development and research in climate impacts, biodiversity threats, water management, land use, and resource utilisation and pathways for sustainable development.

I hope that the APN 19th IGM/SPG Meeting will serve as an enlightened bridge for the practical collaboration and coordination of APN performance and activities to move forward with the attainment of the next APN strategic plan and for appropriating the resolution of climate issue in the region and in the world as well. I am confident that these events will provide us an opportunity to exchange knowledge, skills, information and useful experiences on how to address regional climate change issues related to adaptation, mitigation, technology development and transfer, and of course, to pave the way for better cooperation among APN member countries.

On behalf of the Ministry of Environment of the Kingdom of Cambodia, I would like to express my sincere and profound thanks to your valuable presence in this meeting. May I take this opportunity to thank the APN for its kind coordination and support to this important meeting in Siem Reap, Cambodia, and my colleagues from various department of the Ministry of Environment for their hard work and good arrangement of the meeting. Of course, I would not forget to express my sincere thanks to the APN Secretariat for the kind coordination and support in the meeting preparation – without APN's support, it would not be possible to organise such an important meeting as this.

May I take this opportunity to wish you all great success and fruitful discussions in the upcoming days and may you all all have a very pleasant and joyful stay in Siem Reap City where you can find interesting cultural places around the City and the Angkor Compound.

Once again, I would like to express my deep thanks to H.E. Say Samal, Minister of Environment of the Kingdom of Cambodia for strongly supporting the APN 19th IGM/SPG meeting, especially for the valuable time he has given to be here with us today at the APN 19th IGM/SPG Meeting. I wish Your Excellency Minister of Environment a success for his mission, good health, good stay and safe trip back home. Thank you.

WELCOME REMARKS BY MR. B.M.U.D. BASNAYAKE, nFP FOR SRI LANKA, CHAIR OF THE STEERING COMMITTEE

H.E. Say Samal, Minister of Ministry of Environment, Kingdom of Cambodia; H.E. Sabo Ojano Secretary of State, Ministry of Environment, Kingdom of Cambodia; H.E. Khim Bun Song, Provincial Governor, Siem Reap Province, Kingdom of Cambodia; Dr. Akio TAKEMOTO, Director of APN Secretariat; honorary APN delegates, distinguished guests, ladies and gentlemen.

It is a great honour and privilege in my capacity as the National Focal Point (nFP) of the Asia-Pacific Network for Global Change Research (APN) for Sri Lanka, and as the Chair of the Steering Committee, to offer the welcome remarks at this opening session of the APN 19th Inter-Government Meeting (IGM) and Scientific Planning Group Meeting (SPG) Meeting today in Siem Reap, Kingdom of Cambodia. I would like to express my heartfelt admiration to all the Excellencies, Ladies and Gentlemen, nFPs, SPG, Experts, SC Members, CDC members, and APN Secretariat Director and Staff as well as to the local organising committee for their efforts in fulfilling their duties and aiming for fruitful results of the meeting. I especially thank H.E. Say Samal, Minister of Ministry of Environment of Kingdom of Cambodia, and H.E. Khim Bun Song, Provincial Governor of Siem Reap Province for their excellent support and for hosting the 19th IGM/SPG Meeting.

During this three-day meeting, the APN will be considering on approving the annual work plan and budget for the fiscal year 2014/2015. Also, as the decision-making body of the APN, the IGM will approve project proposals relevant to global change research issues within the Asia-Pacific region. Through the interactive sessions, the APN will engage the international global change research programmes and discuss how the international research community can engage strategically with the APN. Further, four members of the IGM will share their national experiences in global change and co-ben-

efit strategies that could be aligned with the APN particularly in strengthening financing mechanisms and building partnerships.

As the chair of the APN Steering Committee, I would also like to express my deep gratitude to donor countries such as the Government of Japan (Ministry of Environment and Hyogo Prefectural Government), USA (National Science Foundation/ United States Global Change Research Program), Government of New Zealand (Ministry of Environment), and Republic of Korea (Ministry of Environment) for their monetary and in-kind contribution to APN. In addition, I would like to sincerely thank the APN member countries for their kind contribution and assistance through the nFP and SPG members to the APN Secretariat.

I am pleased to welcome all of you, on behalf of the APN Steering Committee, to the 19th IGM. We sincerely appreciate your presence and expertise which are crucial to the APN, and we eagerly look forward to working closely with you and creating positive impacts in the science and policy community at the national, sub regional and international levels.

OPENING REMARKS BY DR. AKIO TAKEMOTO, APN SECRETARIAT DIRECTOR

H.E. SAY Samal, Minister of Environment of the Kingdom of Cambodia;

Distinguished Mr. Sundara Sem, APN national Focal Point for Cambodia;

Distinguished Mr. Basnayake, APN national Focal Point for Sri Lanka and the Chair of Steering Committee;

Distinguished national Focal Points, and members of Scientific Planning and Capacity Development Groups of the APN;

Invited Experts, Ladies and Gentlemen,

Good morning.

At the opening of the APN's 19th Joint Inter-Governmental Meeting and Scientific Planning Group Meeting, I would like to express my special thanks to all participants who have travelled far and wide to visit Siem Reap.

Second, I would like to express my sincerest appreciation to Ministry of the Environment, Kingdom of Cambodia for hosting this important meeting. This is the first Joint IGM and SPG meeting here in Cambodia. I would like to congratulate for the successful opening of this memorial meeting.

APN is an Inter-Governmental network of 22 member countries in the Asia-Pacific region. It was established in 1996 as a result of Japan-US initiative to promote global change research, which started with White House Conference on Science and Economic Research related to Global Change in 1991, followed by the talks between President Bush and Prime Minister Miyazawa, which resulted in establishing regional networks for global change research. The research network created in Asia-Pacific region is the APN. In 1999, the permanent Secretariat was es-

tablished in Kobe Japan hosted by Hyogo Prefectural Government

On behalf of APN, I would like to extend my sincere appreciation for the strong commitment by all governments and scientists of member countries, and for the kind and continuous support by Hyogo Prefectural Government.

For 18 years, APN has been actively engaging in regional research and capacity development activities thorough competitive funding programmes; ARCP and CAPaBLE programmes. In recent years, we are also promoting focused activities under newly created frameworks on Low Carbon Initiative, Climate Change Adaptation, and Biodiversity and Ecosystem Services.

Ladies and Gentlemen, I know Cambodia is a country so much vulnerable to global change. When I visited Phnom Penh two and half years ago for participating in the APN Steering Committee meeting, the city was affected by massive flood spreading over the Mekong region. I also heard from my Cambodian colleague that this country is affected by groundwater pollution with arsenic; many rural Cambodian people are at high risk caused by arsenic pollution. Therefore, this country is much vulnerable to global environmental problem as well as local environmental pollutions. I would like to point out that this is not only the case for Cambodia, but this is the big problem in all nations, particularly developing countries in Asia-Pacific. In this regard, APN must work harder to support these member countries facing such serious environmental problems.

Ladies and Gentlemen, APN's most important mission is scientific capacity building in developing member countries. Let me introduce the statistics on project proponents of the ARCP research programme. Between 2009 and 2012, there were as

Opening and Welcome Remarks

many as 84 project leaders under ARCP. However, six member countries, all of which are developing country nations, had no project leaders under the programme. Therefore, APN should make further efforts to support developing countries to develop scientific capacity, which includes capacity for proposal writing to receive competitive funds, capacity for carrying out international research activities, capacity for writing academic papers, and for communicating with policy makers.

In order to achieve our goals, we need to scale up our activities. That comes to the question, how to scale up the budget. I much appreciate Japan, USA, Republic of Korea and New Zealand for their continuous financial contribution to the APN. I also

appreciate all member countries for their in-kind contribution. In the future, I believe it becomes very important for APN to establish partnership with other funding agencies based in developed and developing countries, in order to “co-finance” under the common programme. I believe that such new partnerships will accelerate to provide funding opportunity for researchers in the Asia-Pacific region. We must challenge to realise it.

Finally, ladies and gentlemen, I hope that this meeting will work towards a fruitful outcome, thanks again to the continuous support and ownership by member countries, which will better address global change challenges in the region. Thank you very much.

ADDRESS BY DR. SAY SAMAL, MINISTER, MINISTRY OF ENVIRONMENT, ROYAL GOVERNMENT OF CAMBODIA

H.E. Khim Bun Song, Governor of Siem Reap Province, Mr. Basnayake, Secretary-General, Environment and Renewable Energy, Ministry of Environment, Sri Lanka and Chairman of Steering Committee of APN, Dr. Akio Takemoto, Director of APN Secretariat, Honorable Delegates, APN Members, environmental experts, scientists and researchers, excellencies, distinguished guests, ladies and gentlemen.

It is indeed an honor for me to be here and open the 19th Inter-Governmental Meeting and Scientific Planning Group Meeting of the Asia-Pacific Network for Global Change Research (APN). I thank the APN Steering Committee and Secretariat, and staff of the Ministry of Environment for organizing this 19th Meeting. I strongly support the APN's objectives: (1) support regional cooperation in global change research; (2) strengthening interactions among scientists and policymakers; (3) improving the scientific and technical capabilities of nations in the region; and (4) cooperating with other global change networks and organisations.

Thus, this gathering is a great opportunity for policymakers, experts, scientists and researchers to jointly review progress of APN's activities, and setting out new objectives. I strongly believe that through this Meeting, we will develop stronger connection among policymakers, experts, scientists, researchers, friends and colleagues from APN member countries and observers.

Excellencies, ladies and gentlemen!

For Asia Pacific Region, Homo Sapiens populations have and will continue to increase at a phenomenal rate, along with the demand for materials and energy that is needed to fulfil the biomass and necessities.

Keeping our cities clean and green remains as important as ever, because today we have a bigger population, we consume a lot more energy, we generate a lot more waste materials. We are a more built up cities, and so we have to work harder to preserve our green spaces.

We also need preserve our biodiversity to benefit from ecological services and commodities that it provides, such as purification of freshwater, maintenance of the earth's climate, sustaining food supply and timber. Animals and plants have existence rights upon their creation and biodiversity has an irreplaceable aesthetic value. And because Homo sapiens is the only species that capable of preserving the integrity of biodiversity hence we have a stewardship responsibility to safeguard the unique evolutionary entities because extinction is no longer a neutral natural process.

Cambodia is committed, through the Rectangular Strategy – Phase III of the fifth mandate, to achieve our twin objectives of economic growth and good-living conditions, a sustainable environment. It was a plan drawn up not only by Government, but together with the private and people sectors. We are making steady progress towards these goals - recycling rates are increasing, more people are using energy-efficient appliances, and I think there is greater consciousness of green issues.

Excellencies, ladies and gentlemen!

This week's events are an important milestone in engaging wider global change research community to deal with consequences of global change. I hope that the knowledge and experiences to be shared in this coming threeday meeting will clearly help to better underline the value of action-oriented research and holistic approaches to global environ-

Opening and Welcome Remarks

mental change that encompasses the values of science, politics and economy.

I am delighted to join these APN annual meetings and I strongly believe that this will continue to serve as another good venue for policy makers, environmental experts, researchers, and all relevant stakeholders from Asia-Pacific region and beyond to share knowledge and experiences aiming at promoting sustainable development.

Once again, on behalf of the Royal Government of Cambodia and the Ministry of Environment, I would like to thank to the APN leadership and all

stakeholders for choosing Cambodia to host the 19th Inter-Governmental Meeting and Scientific Planning Group Meeting. My thanks also go to the APN Steering Committee, the APN Secretariat and the local organising committee for their hard work.

Finally, I wish you all a great success, good health, happiness in family and a wonderful stay in Siem Reap.

Please allow me to declare the Opening of the 19th Inter-Governmental Meeting and Scientific Planning Group Meeting. Thank you.

Section III

Main Item Papers of the 19th IGM/SPG Meeting



DRAFT AGENDA
APN Joint 19th Inter-Governmental Meeting (IGM)/
Scientific Planning Group (SPG) Meeting
Siem Reap, Cambodia, 19-21 March 2014

Day One: Wednesday 19 March 2014

08:30-09:00 **Registration for all participants**

IGM/SPG Session I: Inaugural Session

09:00-09:15
(IGM/SPG)

Welcome Remarks

Mr. Sundara Sem, national Focal Point (nFP) for Cambodia

09:15-09:30
(IGM/SPG)

Welcome Remarks

Mr. Basnayake M.U.D. Basnayake, Steering Committee (SC) SC Chair
Dr. Akio Takemoto, Secretariat Director

09:30-09:50
(IGM/SPG)

Opening Address by Guest of Honour

Guest of Honour: H.E. SAY Samal, Minister of Environment of the Kingdom of Cambodia

09:50-10:00

Group Photograph

All participants have a group photograph taken.

10:00-10:20

TEA/COFFEE BREAK (20 min)

IGM/SPG Session II: Institutional Issues

10:20-10:40
(IGM/SPG)

Participants' Self-Introduction

All participants, via a *tour de table*, will introduce themselves and their affiliation.

Facilitator:

Akio Takemoto, Secretariat Director

10:40-10:50
(SPG observes)

Election of Chair and Vice-Chair

IGM delegates will elect a Chair and a Vice-Chair.
(SPG members, experts and guests observe this session)

Facilitator:

Akio Takemoto, Secretariat Director

10:50-11:00
(IGM/SPG)

Item 1: Adoption of the Draft Agenda

The Chair will seek adoption of the agenda. Additional agenda items may be suggested. Logistic information will be provided.

IGM Chair and Yuki Imanari, Secretariat

Document Reference
(Action)

IGM-SPG/19/01
(for adoption)

11:00-12:00
(IGM/SPG)

Item 2: Reports from the Steering Committee (SC) & Secretariat

- 2.1 Report on APN Activities in 2013, especially those taken to follow up on Action Points from 18th IGM.
Presenter: B.M.U.D. Basnayake, SC Chair
(30 min)
- 2.2 Reports on the APN budgets for 2012/13 & 2013/14 and funds spent)
Presenter: Yukihiro Imanari, Secretariat
(30 min)

IGM-SPG/19/02-01
(for information)

IGM-SPG/19/02-02
(for approval)

12:00-12:20
(IGM/SPG)

Item 3: APN Framework Document (PART I)

Amendments to the Framework Document, as proposed by the SC, will be presented for initial discussion, noting that further discussion will be held and approval of final text will be sought on Friday 21 March.

Presenters: Peldon Tshering, nFP from Bhutan and SC Member, and Lou Brown, SC Member

IGM-SPG/19/03
(for approval on Friday 21 March 2014)

12:30-14:00

LUNCH (90 min)

14:00-14:40
(IGM/SPG)

Item 4: Progress Report from the Task Committee:

3rd Strategic Phase Evaluation (2010-15) &

4th Strategic Planning (2015-2020)

Presenter: Kanayathu Koshy, Task Committee Member.

The IGM will be asked to review and discuss the progress report, and to finalize plans for completing both the Evaluation of the 3rd Strategic Phase and the 4th Strategic Plan.

IGM-SPG/19/04
(for approval)

14:40-16:00
(IGM/SPG)

Item 5: Ongoing & New Activities

For each of the Sub-Items identified below, a report will be presented and the IGM will be asked to review the report and, where appropriate, approve action needed to follow-up on ongoing activities and implement new activities.

- 5.1 Core Programmes (ARCP & CAPaBLE)
Presenter: Linda Anne Stevenson, Secretariat
(15 min)

IGM-SPG/19/05-01
(for approval on Friday 21 March 2014)

- 5.2 Science Frameworks: LCI, CAF, B&ES
Presenters: Taniya Koswatta (LCI), Linda Anne Stevenson (CAF) and Akio Takemoto (B&ES); Secretariat
(15 min)

IGM-SPG/19/05-02
(for information and approval)

- 5.3 Science-Policy Engagement: Science-Policy Dialogues, UNFCCC, IPCC & IPBES, etc.
Presenter: Linda Anne Stevenson, Secretariat
(10 min)

IGM-SPG/19/05-03
(for information and approval)

- 5.4 Reduce, Reuse, Recycle: Scoping Activity
Presenter: Akio Takemoto, Secretariat
(10 min)

IGM-SPG/19/05-04
(for approval)

5.5 Communications, Outreach & Networking
 (10 min) *Presenter: Xiaojun Deng, Secretariat*

IGM-SPG/19/05-05
 (for approval)

5.6 Hyogo Activities
 (10 min) *Presenter: Akio Takemoto*

IGM-SPG/19/05-06
 (for approval)

5.7 Science Fellowships (PARR)
 (10 min) *Presenter: Linda Anne Stevenson*

IGM-SPG/19/05-06
 (for information)

16:00-16:20 **TEA/COFFEE BREAK (20 min)**

16:20-17:20 (SPG observes) **Item 6: Proposed Work Programme and Budget Plan for FY 2014**

6.1 Needs Assessment
 (20 min) *Presenter: Andrew Matthews, SC Invited Expert*
 The IGM will be asked to consider, comment on, and approve the Needs Assessment for FY 2014, keeping in mind this is the first such assessment that has been prepared for IGM use.

IGM-SPG/19/06-01
 (for approval)

6.2 The Proposed Work Programme and Budget Plan
 (40 min) *Presenter: Andrew Matthews, SC Invited Expert*
 The IGM will be asked to consider and approve the proposed Work Programme and Budget for FY 2014, including the budgets for those activities presented under Item 5.

IGM-SPG/19/06-02
 (for approval)

Interactive Session I: Networking

17:30-19:30 (IGM/SPG) **Tonle Sap Great Lake: Research and Community Perspectives**
 An informal session, with refreshments, will provide an opportunity for young scientists from Cambodia to exhibit posters on their research relating to the Tonle Sap Great Lake. There will also be a community-based, ninety-minute screening about the Tonle Sap Great Lake with an environmental impact

Facilitator Taniya Koswatta

See information provided separately

20:00-22:00 **RECEPTION DINNER** hosted by the APN

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

DRAFT AGENDA
APN Joint 19th Inter-Governmental Meeting (IGM)/
Scientific Planning Group (SPG) Meeting
Siem Reap, Cambodia, 19-21 March 2014

Day Two: Thursday 20 March 2014

IGM/SPG Session III: Sub-Regional Committee (SRC) Meetings (Parallel Sessions)		Document Reference (Action)
<i>08:30-10:00 (SRCs)</i>	<p>Item 7: Parallel Sessions: Sub-Regional Cooperation</p> <p>Parallel Sessions: The Sub-Regional Committees for Southeast Asia, South Asia, and Temperate East Asia will discuss common issues and progress. Participants from the Oceania/Pacific sub-region may also wish to meet informally during this time. <i>Chairs and Rapporteurs to be assigned among the SRC Members</i></p>	<p style="text-align: center;"><i>IGM-SPG/19/07 (for information)</i></p> <p style="text-align: center;"><i>(Agendas for the SRC Meetings will be provided separately.)</i></p>
<i>10:00-10:20 (IGM/SPG)</i>	<p>Item 8: SRC Chairs and Rapporteurs Meeting</p> <p>The Chairs and Rapporteurs will meet to identify and discuss issues, particularly those of common interest to the SRCs. <i>SRC Chairs and Rapporteurs</i></p>	<p style="text-align: center;"><i>IGM-SPG/19/08 (For information)</i></p>
<i>10:20-10:50</i>	<i>TEA/COFFEE BREAK (30 min)</i>	
Interactive Session II		
<i>10:50-12:50 (IGM/SPG)</i>	<p>Strategic Engagement with the International Global Change Research Community</p> <p><i>Moderators: IGM Chair and Linda Stevenson</i></p> <p>Responding to a common set of questions, representatives of a number of the other international global change research programmes will make presentations and will discuss with IGM participants how these programmes and the APN might best interact in the future. (Information for this session is provided separately).</p>	<p style="text-align: center;"><i>(see information provided separately)</i></p>
<i>12:50-13:00 (IGM/SPG)</i>	<p>Announcement of Best Poster</p> <p>The IGM Chair or Vice-Chair will announce the winner of the Mitra Award. The awardee will be invited to provide a 20-minute presentation on Day Three of the IGM, followed by an award ceremony to receive the Mitra award.</p>	
<i>13:00-14:00</i>	<i>LUNCH</i>	
<i>14:00-18:00</i>	<p>Field Trip organized by the Ministry of Environment of the Kingdom of Cambodia to visit the Angkor Wat Temple complex or Flooding Village/Forestry at the Tonle Sap Great Lake, Siem Reap province.</p>	

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

DRAFT AGENDA
APN Joint 19th Inter-Governmental Meeting (IGM)/
Scientific Planning Group (SPG) Meeting
Siem Reap, Cambodia, 19-21 March 2014

Day Three: Friday 21 March 2014

Session IV: Reports & Project Recommendations		Document Reference (Action)
09:00-9:40 (IGM/SPG)	<p>Item 9: Sub-Regional Committee Reports and Discussion</p> <p>The SRC's will report on the results of their meetings and the IGM will be asked to discuss how best to advance sub-regional activities. <i>Presenters: SRC Chairs</i></p>	<p><i>IGM-SPG/19/9</i> (for information, discussion; and action, where appropriate)</p>
09:40-10:20 (IGM/SPG)	<p>Item 10: SPG Co-Chairs' Report</p> <p>The SPG Co-Chairs will report on the results of the SPG Meeting (and the SPG Pre-Meeting) & will present topics of possible interest for the 2014 Annual Calls for Proposals <i>Presenters: Luis Tupas and Alex Sterin, SPG Co-Chairs</i></p>	<p><i>IGM-SPG/19/10</i> (for information, discussion, and action, where appropriate)</p>
10:20-10:50	<p><i>TEA/COFFEE BREAK (30 min)</i></p>	
10:50-11:50 (SPG Observes)	<p>Item 11: ARCP and CAPaBLE Recommendations for Funding</p> <p>The SPG Co-Chairs will present the SPG's recommendations for funding. <i>Presenters: Luis Tupas and Alex Sterin, SPG Co-Chairs</i></p>	<p><i>IGM-SPG/19/11-01</i> <i>IGM-SPG/19/11-02</i> (for discussion and approval)</p>
11:50-13:00	<p><i>LUNCH (70 min)</i></p>	
Interactive Session III		
13:00-14:30 (IGM/SPG)	<p>Strengthening the APN Network:</p> <p>Co-Financing/Co-Benefit Strategies in</p> <p>Global Change Research & Capacity Development</p> <p><i>Moderators: IGM Vice-Chair & Dr. Akio Takemoto</i></p> <p>This session will focus on strengthening the APN network and six member countries will be asked to present on best practices in global change co-benefit strategies that could be aligned with the APN; Strengthening financing and building partnerships for action-oriented research; and sharing national experiences across borders on what has already been done.</p>	<p>(see information provided separately)</p>

14:30-15:00
(IGM/SPG)

Presentation from the Mitra Awardee

The IGM will present the Mitra Award for Best Poster and the winning young scientist will deliver a presentation about his/her research/work.

15:00-15:30

TEA/COFFEE BREAK (30 min)

Session V: Institutional Issues, Summary and Closing

15:30-15:50
(SPG observes)

Item 12: Amendments to the Framework Document (PART II)

The IGM will be asked to consider again and to adopt the draft amendments to the Framework Document regards presented under Item 3.

Presenters: Peldon Tshering and Lou Brown

IGM-SPG/19/12
(for discussion and approval)

15:50-16:20
(IGM/SPG)

Item 13: Discussion on Plans for the APN 20th Anniversary

The IGM will be asked to consider and initiate planning for the 20th Anniversary

IGM Chair and Akio Takemoto

IGM-SPG/19/13
(for information and approval)

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

Item 14: Host Countries for Future IGMs

Planning for the 20th and 21st IGMs will be discussed, especially offers received to host these meetings.

IGM Chair and Akio Takemoto

IGM-SPG/19/14
(for discussion and approval)

16:30-17:10
(IGM/SPG)

Item 15: 19th IGM/SPG Action Points

Members will review and finalise the Chairperson's Action Points.

15.1: Action Points (Programme of Work)

15.2: Action Points (2014/15 Fiscal Budget)

IGM-SPG/19/15
(for discussion and adoption)

17:10-17:25
(IGM/SPG)

Item 16: Other Business

Any additional items of business raised under Item 1 will be discussed.

IGM Chair

17:25-17:30

Item 17: Final Remarks and Closing

Final logistic information will be provided. Final remarks will be made and the IGM will be closed.

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

Item 2-1: Summary of Activities Undertaken and Action Points

Addressed Since the 18th IGM/SPG Meeting

This paper summarises the work undertaken and the action points addressed since the 18th IGM/SPG Meeting held in April 2013 in Kobe, Japan.

Project Management

The Secretariat is supporting and managing the following projects in fiscal year 2013:

Core Programmes:

- **ARCP**—Annual Regional Call for Research Proposals: 27 projects (14 new and 13 continuing);
- **CAPaBLE**—Scientific Capacity Development Programme: 17 projects (15 new and 2 continuing);

Frameworks and focused activities:

- **LCI**—Low Carbon Initiatives: 7 projects (2 single year and 5 multiyear);
- **EBLU**—Ecosystems, Biodiversity and Land Use: 1 project (continuing);
- **RUSD**—Resource Utilisation and Pathways for Sustainable Development: 1 project (continuing);

Other projects, including those funded by the **AOF** (APN Opportunity Fund): 4 projects.

Annual Calls for Proposals

The 2013 APN Annual Call for Proposals under ARCP and CAPaBLE Programmes was launched in June 2013. The Secretariat received 103 Summary Proposals, which were reviewed in an improved process in which all Scientific Planning Group (SPG) or Capacity Development Committee (CDC) members are involved in the Stage 1 review.

Special Call: Climate Adaptation, Disaster Risk Reduction and Loss + Damage

A special call for expressions of interest for activities on “Climate Adaptation, Disaster Risk Reduction and Loss + Damage” was launched at the end of August 2013. The Secretariat received 85 Expressions of

Interest, 25 of which were shortlisted and are currently under review. The finalists will be announced in Spring 2014.

Frameworks

Three new frameworks have been established (one in 2012 and two in 2013):

- Biodiversity & Ecosystem Services (B&ES) Framework: After approval by the 18th IGM, the Biodiversity & Ecosystem Services (B&ES) Opportunity Paper was disseminated in various international forums and conferences, including IPBES-related meetings.
- Climate Adaptation Framework (CAF): Member governments approved activities under the CAF to enhance and link Climate Change Adaptation, Disaster Risk Reduction, and Loss & Damage (CCA-DRR-L+D). Following a scoping workshop held in August 2013 in Kobe, a special call was launched in late August 2013, as indicated above.
- Low Carbon Initiatives (LCI) Framework: All seven approved projects have started their activities from April 2013. Continuation of multiyear projects will be decided at the present IGM, based on the project progress reports.

3SP Evaluation & 4SP Planning

A Task Committee Meeting with Dr. Louie Tupas, Dr. Andrew Matthews, and some Secretariat staff was held on 26 and 27 August 2013 in Kobe, Japan.

The Task Committee reviewed and revised the draft outline of the 3SP Report, and in accordance with the revised outline, developed an updated work plan for preparing the 3SP Report and 4th Strategic Plan.

The Task Committee also identified a number of potential external reviewers for the 3SP report, using a set of criteria developed at the meeting.

Climate Book

The APN-commissioned book *Climate in Asia and the Pacific: Society, Security and Sustainability* was open for pre-order from Springer in September 2013, and officially published on 10 October 2013.

Printed and eBook formats are now available on Springer's website at

<http://www.springer.com/environment/global+change++climate+change/book/978-94-007-7337-0?detailsPage=chapter>

Sub-Regional Cooperation

The Fifth South Asia (SA) SRC Meeting was held in October 2013 in Wattala, Sri Lanka. The meeting discussed sub-regional cooperation issues, including the initial scoping for a Science-Policy Dialogue in South Asia, and the way forward and future plans for SA-SRC.

The Sixth Southeast Asia Sub-Regional Cooperation (SEA-SRC) Meeting was held in November 2013 in Kuala Lumpur, Malaysia. Among other things, the SEA-SRC discussed 1) the institutionalisation of sub-regional committees, 2) proposed activities for a summer school on climate change adaptation in urban planning, 3) improving communications between member countries 4) engagement of Myanmar in sub-regional cooperation; and 5) future SRC activities.

Proposal Development Training Workshops (PDTWs)

APN organised two PDTWs in 2013, back-to-back with the 5th South Asia Sub-Regional Meeting in Sri Lanka and the 6th Southeast Asia Sub-Regional Meeting in Malaysia, respectively.

As the tenth and eleventh PDTW organised by the APN, the two events provided hands-on training to 29 young/early-career scientists (15 from South Asia and 14 from Southeast Asia), expanding the PDTW alumni to 186 persons.

Hyogo Activities

The workshop on “Climate Change Adaptation, Disaster Risk Reduction and Loss and Damage”, mentioned in the *Frameworks* section above, was organised in August 2013. The workshop successfully gathered a pool of experts who helped identify priority areas for research on loss and damage adaptation due to climate change.

At the time of writing, the Secretariat is organising a symposium titled “Application of Low Carbon Technology for Sustainable Development in Emerging Countries,” in collaboration with the Hyogo Prefectural Government and the Institute for Global Environmental Strategies – Kansai Research Centre (IGES-KRC). The symposium will be held on 4 March 2014 in Kobe.

Communications and Outreach

Major new publications:

- Annual Report 2011-2012 (May 2013)
- APN Newsletter 19(1) (June 2013)
- Proceedings of the 18th IGM/SPG Meeting (September 2013)
- Science Bulletin 2013 Supplement (September 2013)
- Annual Report 2012-2013 (March 2014)

- Science Bulletin 2014 (e-version: March 2014; print – scheduled in April 2014)
- Brochures, leaflets and posters

Newsletter and EML:

The quarterly electronic *APN Newsletter* series was discontinued in June 2013. The Secretariat shifted its focus to electronic distribution of “*APN Updates*,” which are sent regularly to a large community of about 2200 active subscribers. Targeted email messages can also and are being sent on an ad hoc basis to various subsets of users selected on the basis of their known areas of interest, country, organisation, etc.

Internal mailing lists:

The Secretariat launched a number of mailing list accounts to facilitate internal communication for the IGM, SC, SPG and CDC. In contrast to the original EML (a one-way broadcasting system), these new internal mailing lists support two-way interaction, making it easy for members to communicate using email.

Major Events

Below is a summary of major events organised by the APN or in which the APN was represented:

Date	Description of Event	Comments
27-31 May	WMO/IOC/ICSU Joint Scientific Committee for the World Climate Research Programme (WCRO-JSC 34), Brasilia, BRAZIL	APN showcased and strengthened the CAF
3-14 Jun	The 38th Session of the Subsidiary Body for Implementation (SBI), the Subsidiary Body for Scientific and Technological Advice (SBSTA), Bonn, GERMANY	Presentation on APN programmes and activities at the SBSTA Research Dialogue
12 Jun	ICCCAD Loss and Damage Workshop, Bonn, GERMANY	Introduced APN’s new activities on Climate Change Adaptation, Disaster Risk Reduction and L&D
11-14 Jun	IAI 21st Conference of the Parties and Executive Council Meetings, Montevideo, URUGUAY	Presentation on APN programs and activities
18-20 Jun	AWCI Training Course on Improved Bias Correction and Downscaling Techniques for Climate Change Assessment including Drought Indices, Tokyo, JAPAN	Event supported by APN under 2 ARCP and 1 CBA projects
23-25 Jul	5th International Forum for Sustainable Asia and the Pacific (ISAP2013) and LoCARNet Second Annual Meeting, Yokohama, JAPAN	Booth exhibition and APN special session on LCI.
30 Jul - 1 Aug	MAIRS/Future Earth /APN strategic planning activity, Hong Kong, CHINA	Planning for a strategic science plan for Future Asia
21-23 Aug	APN Climate Adaptation Workshop on Loss and Damage, Kobe, JAPAN	Output incorporated into APN’s focused call 2013
26-27 Aug	Scoping Meeting for 3SP Evaluation and 4SP Planning, Kobe, JAPAN	Revised the draft plan and schedule for strategic evaluation and planning
30-31	APAN Conference on Adaptation and Loss and	Promoted APN’s CAF Framework

Aug	Damage; APN-IGBP Workshop for Least Developing Countries, Bangkok, Thailand	and shared information about the CAF focused call
2-4 Sep	Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES Conceptual Framework and Knowledge Sharing (AOF Activity), Seoul, REPUBLIC OF KOREA	Showcased the B&ES framework; courtesy visit to the new nFP of ROK.
12-14 Sep	APAN/UNFCCC Loss and Damage Workshop, FIJI	Promoted CAF framework and focused call
30 Sep – 5 Oct	25th SC Meeting, Wattala, SRI LANKA 5th SA-SRC Meeting and PDTW, Wattala, SRI LANKA	SC discussed work programmes, finance and needs assessment, evaluation and planning, etc.
13-18 Oct	PICES annual Science Meeting, CANADA	Poster, booth, and presentations
30 Oct-3 Nov	APN-HYOGO event: EMECS 10 – MEDCOAST 2013 Joint Conference, Marmaris, TURKEY	Booth exhibition and meeting with young scientists supported by APN funds.
4-7 Nov	International Conference on Regional Climate – CORDEX 2013, Brussels, BELGIUM	Promoted APN's activities through booth, poster and book launch.
11-22 Nov	COP19, United Nations Framework Convention on Climate Change, Warsaw POLAND	Promoted CAF, Climate Book and new activities; organised a side event in the Japan Pavilion.
25-29 Nov	6th SEA-SRC Meeting and PDTW, Kuala Lumpur, MALAYSIA	Discussed sub-regional activities and future plans; trained 14 young scientists.
2-3 Dec	IGFA Annual Meeting 2013, Cape Town, SOUTH AFRICA	Presented and discussed with IGFA member agencies information on APN activities and future plans.
9-14 Dec	Second Meeting of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), Antalya, TURKEY	APN participated as a major stakeholder and actively contributed to the Stakeholder Consultations

New Representation in the APN

National Focal Points:

Former nFP for Bhutan	New nFP for Bhutan
Mr. G. Karma CHHOPEL	Ms. Peldon TSERING (officially appointed 14 May 2013)

Former nFP for Indonesia	New nFP for Indonesia
Mr. Hendra SETIAWAN	Mr. Sabar GINTING (officially appointed 04 September 2013)

Former nFP for Thailand	New nFP for Thailand
Mr. Chote TRACHU	Secretary General, Office of Natural Resources and Environmental Policy and Planning, Ministry of

	Natural Resources and Environment (ONEP/MoNRE)
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Scientific Planning Group (SPG) Members:

Former SPG Member for ROK Dr. Changsub SHIM	New SPG Member for ROK Dr. Soojeong MYEONG (officially appointed 02 April 2013)
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Former SPG Member for Malaysia Dr. Subramaniam MOTEN	New SPG Member for Malaysia Ms. Fariza YUNUS (officially appointed 05 September 2013)
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Former SPG Member for the Philippines Dr. Macial C. AMARO Jr.	New SPG Member for the Philippines Dr. Portia G. LAPITAN (officially appointed 11 October 2013)
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Former SPG Member for Lao PDR Dr. Bounyaseng SENGKHAMMY	New SPG Member for Lao PDR Mr. Virasack CHUNDARA (officially appointed 13 October 2013)
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New Invited Expert to the SPG

Dr. Subramaniam MOTEN , former SPG Member for Malaysia (5 November 2013)

Changes in the Secretariat

Former Programme Fellow for Science and Institutional Affairs Ms. Ratisya RADZI	New Programme Fellow for Communication and Scientific Affairs Ms. Christmas DE GUZMAN
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Former Programme Officer for Science and Institutional Affairs Mr. Erdenesaikhan NYAMJAV	New Programme Officer for Science and Institutional Affairs Ms. Dyota CONDRORINI
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Resources Available:

Operational Cash Balance from FY 2011	85,500
Japan	2,276,500
MOEJ	Yen 182,115,000 /80
Hyogo	319,000
NSF/USGCRP	Yen 25,500,000 /80
U.S.A.	488,000
ROK	50,000
Ministry of Environment	
New Zealand	25,000
Ministry for the Environment	NZ \$ 30,000 /1.20
Total	3,244,000

Use of Resources:

	Approved Budget	Approved Resources	Disbursed Resources	Committed Resources	Uncommitted Resources
ARCP	1,240,000	1,240,000	488,400	751,600	0
CAPaBLE	720,000	720,000	408,811	311,189	0
CBA					
Climate Synthesis	20,000	0	1,000	19,000	0
Proposal/Devlpt Training WS: 3 Sub-Region x 20,000	60,000	0	58,000	0	2,000
SBSTA36 + UNFCCC18/SBSTA37	30,000	30,000	12,600	10,000	7,400
Science-Policy Dialogue (from FY 2011 budget)	30,000	0	24,000	6,000	0
Rio+20: PROVIA	60,000	20,000	52,300	0	7,700
Hyogo Activities	50,000	50,000	46,200	0	3,800
New Commons	130,000	110,000	86,760	10,000	33,240
Climate Adaptation	40,000	40,000	33,120	0	6,880
Hyogo/APN/IGES-KRC	300,000	300,000	40,000	276,000	0
Low Carbon Initiative	24,000	0	24,000	0	0
Future Earth Sub-Regional Workshop Asia-Pacific	80,000	40,000	60,000	0	20,000
Sub-Regional Cooperation: 4 Sub-Region x 20,000	120,000	0	197,150	0	-77,150
IGM/SPG, incl. SC	370,000	370,000	357,700	0	12,300
Posts SC, Inst.	66,000	0	40,000	0	26,000
New Coordinator	65,000	65,000	61,700	0	3,300
Programme Fellowship	70,000	70,000	83,400	0	-13,400
Travel	40,000	40,000	40,000	0	0
Publications					
Posts Adm.	76,500	76,500	88,100	0	-11,600
Yen 6,118,000 /80					
Accounting Consultant, outsourced	7,900	0	0	0	7,900
Yen 630,000 /80					
General Operational Cost	55,000	55,000	99,450	0	-44,450
IGES Adm Overhead	68,000	68,000	68,300	0	-300
Yen 5,463,450 /80					

(as of 31 December 2013)

Resources Available:

Unspent Funds of Projects from FY 2011 and earlier, finalised in FY 2012	
Japan	Yen 243,243,000 /100
	Yen 23,558,000 /100
ROK	Ministry of Environment
New Zealand	Ministry for the Environment
	NZ \$ 30,000 /1.20
Total	

Core Budget	
	83,000
	2,430,000
	236,000
	50,000
	25,000
Total	2,824,000

Exchange Rates in FY 2013:
 US\$ 1 = JPYen 100 (FY 2012: US\$ 1 = JPYen 80)
 US\$ 1 = NZ\$ 1.20

Use of Resources:

	Approved Allocation of Resources	Disbursed Resources	Committed Resources	
Allocation of Resources under Core Budget	ARCP	1,000,000	1,000,000	808,000
	CAPABLE CBA	567,000	567,000	127,000
	Climate Adaptation Framework (incl. Disaster Risk Reduction - Loss & Damage)	780,000	780,000	728,000
	Low Carbon Initiative Framework (LCI CMYs + LoCARNet Networking)	460,000	200,000	256,400
	SBSTA38 + UNFCCC19/SBSTA39	20,000	10,000	-2,000
	Hyogo Activities	30,000	30,000	24,000
		30,000	30,000	0
	IGM/SPG, incl. SC	120,000	120,000	92,000
	Posts SC, Inst.	335,000	335,000	65,000
	Programme Fellow	31,000	24,000	7,000
	Travel	65,000	56,000	9,000
	Publications	40,000	33,000	7,000
	Posts Adm.	81,000	72,000	9,000
	General Operational Cost	45,000	54,000	-9,000
	IGES Adm Overhead	73,000	73,000	73,000
	Allocation of Resources under AOF	Coordinator	41,000	35,000
Climate Synthesis		24,000	13,000	11,000
Sub-Regional Strategic Development/Planning		120,000	80,000	40,000
3SP Evaluation Report & 4th Strategic Plan		15,000	7,000	8,000
Re-allocation of Resources	Biodiversity and Ecosystem Services Framework	43,000	0	43,000
	Sub Regional Science-Policy Dialogue and Synthesis	50,000	0	50,000
	3R Scoping Workshop	25,000	0	25,000
	PARR Fellowship Programme	30,000	0	30,000

Item 3: Suggested Amendments to the Framework Document

Background

In view of the increasingly active engagement of Sub-Regional Committees in APN activities, the SC, at its 25th meeting in September 2013 in Sri Lanka considered it timely to institutionalise these committees by including them in the APN Framework Document. In addition, the SC agreed to review the Framework Document, including its appendices, to ensure consistency and clarity.

To this end, the SC asked Mr. Lou Brown, invited expert to the SC, and Ms. Peldon Tshering, nFP from Bhutan, to lead the review and amendment process and to prepare draft amendments for review by the SC and then review and approval at the present meeting.

As a result, a number of suggested amendments to the Framework Document were drafted and circulated on 17 January 2014 (*version 1*) to national Focal Points for their review, comment and input. As of 4 March 2014, the secretariat received some additional comments (from Bhutan), which were subsequently incorporated into version 1 and presented to the present IGM as *version 2*.

Action Requested

The IGM is invited, under Item 3 on Day 1, to discuss the changes proposed and to raise any additional modifications considered appropriate. National Focal Points and other IGM participants interested in this matter will then have time to discuss the proposed changes further off-line until Day 3 when the IGM is invited, under Item 12, to formally endorse the proposed amendments to the Framework Document.

Related Documents

Version 2: available both in printed copy and electronically under Item 3 as IGM-SPG-19-03-App.1.

Version 1: available electronically only as IGM-SPG-19-03-App.2.

The currently effective version: available electronically only as IGM-SPG-19-03-App.3.

IGM-SPG/19/04: Third Strategic Phase Evaluation and Fourth Strategic Plan

The IGM is asked to discuss and review the work to date and approve the work plan for the year ahead that will culminate in a draft Third Strategic Phase Report (2010-2015) and a Fourth Strategic Plan(2015-2020)

A short summary of the work to date is provided below:

1. **Task Committee**

The Task Committee for the present work comprises the following members:

- SPG Co-Chair: Dr. Luis Tupas
- SPG Co-Chair: Dr. Alexander Sterin
- Invited Expert to the Steering Committee: Dr. W. Andrew Matthews
- Invited Expert to the SPG: Dr. Kanayathu Koshy

2. **Scoping Meeting**

A Task Committee Scoping Meeting was held from 26-27 August, 2013 in Kobe, Japan. The main goal of the meeting was to devise and implement a *Plan of Work for the Third Strategic Phase (3SP) Evaluation (2010-2015) and the Fourth Strategic Plan 2015-2020 (4SP)*. In so doing, the objectives of the meeting were to:

- (a) Identify the range of work ahead and revise the outline of the 3SP Report; and
- (b) Revise the work plan for and writing of the 3SP Report and the 4SP.

3. **Results of the Scoping Meeting**

In line with 2(a) and 2(b) above, the following key points were noted:

- (a) Adopt the same outline as the 2SP Evaluation Report, although incorporate some changes to the order of the sections as indicated in *IGM-SPG/19/04-Appendix 1*, which is the draft outline of the evaluation report.
- (b) The report is to be renamed the “3rd Strategic Phase Report” by deleting the word “Evaluation” as the most important goal of this report is to provide readers with a status report of the APN and how far it has come against the 3rd Strategic Plan. The contents as outlined in the *IGM-SPG/19/04-Appendix 1* under the “Institutional Status Report” and “Science, Policy and Capacity Development Report” derived from the brainstorming session. They are not final but subject of changes, and may be merged, replaced, or deleted. New points may be added, too.
- (c) Invite external reviewers to evaluate the work of the APN in its 3rd Strategic Phase. This will be undertaken in a two-pronged approach: Review of the “Institutional Status Report” and a review of the “Science, Policy and Capacity Development Report.”

- (d) Criteria for selecting potential candidates included: (a) familiar with the APN; (b) familiar with the global change research community; (c) familiar with governmental funding mechanisms of international programmes; and (d) experienced in scientific capacity development activities in the Asia-Pacific region. Taking the criteria into consideration, the following candidates are being considered:
- Dr. Graeme Pearman (former SPG Member for Australia)
 - Mr. Sovannora Ieng (former national Focal Point for Cambodia)
 - Dr. Eileen Shea (former Project Leader)
 - Dr. Nancy Lewis (former Project Leader)
 - Dr. Michael Stoddart (former national Focal Point for Australia)
 - Dr. Sharifah Mastura Syed Abdullah (former Project Leader)
 - Dr. Ed Gomez
 - Dr. Isao Koike
- (e) External reviewers are to be invited according to the revised timeline keeping in mind that the external reviewers will need to be provided with sufficient time to carry out the task required. As indicated in the revised timeline on Page 3, two months has been considered a reasonable timeframe in which to conduct the review.
- (f) The draft report, with external reviewer input, will be circulated among the APN members for further input, improvements, changes, and additions.
- (g) Regarding the drafting work of the 4th Strategic Plan the Task Committee plans that the work must start as soon as the reviews from the external experts have been received (around June 2014. Please refer to the revised attached work plan).

4. Revised Timeline (Page 3)

Task	2013/14												2014/15							2015/16						
	A	M	J	J	A	S	O	N	D	J	F	M	A	S	O	N	D	J	F	M	A	M	J			
Timeline for 3rd Strategic Phase Reporting & 4th Strategic Plan Drafting																										
1. Form Task Committee			↑																							
2. Scoping Meeting with Task Committee & Secretariat (teleconference or face to face) (identify lead, committee responsibilities, workplan, external experts, etc.)					■																					
3. Institutional Status Report																										
4. Science, Policy and Capacity Development Status Report																										
5. Progress reports at inter-sessional Steering Committee Mtgs & 19 th IGM						■																				
6. Review of both the Institutional and Science, Policy and Capacity Development Status Reports & Task Comm. drafting of 4SP																										
7. Task Committee Writing Workshop: to summarise external reviewers' comments, write the Conclusion part, start drafting the 4 th Strategic Plan																										
8. Task Committee will meet prior to the 28 th SC Meeting to finalise Institutional & Science, Policy and Capacity Development Status Reports and draft 4 th Strategic Plan for presentation to the SC.																										
9. Incorporate SC feedback into reports																										
10. Circulate 8 above for members/ stakeholders review and feedback																										
11. Incorporate member/stakeholder feedback and finalise manuscripts																										
12. Present final versions of the Institutional and Science, Policy and Capacity Development Status Reports to 20 th IGM for approval																										

EXECUTIVE SUMMARY (including greetings from SC Chair, APN secretariat director)

OVERVIEW

(Written by SC) with short APN background information and some comments from Ghassem Asrar (science perspective), Rocio Lichte (policy perspective) and Helen Clark (development perspective) about APN.

CHAPTER ONE: INSTITUTIONAL STATUS REPORT

- I. APN Programmes (ARCP, CAPaBLE, Framework and other focused activities)
- II. APN Opportunity Fund (AOF) and completed AOF activities
- III. Award demographics
- IV. APN organs (role, function)
- V. Mitra Award (as an APN institution)
- VI. Membership development (member countries/approved countries, APN members (nFPs, SPG Members, invited experts), Sub-Regional Cooperation (SRC) Meetings
- VII. Communication tools/products, meta data portal (information sharing/distribution, PR & marketing)
- VIII. Social networking
- IX. Donors/stakeholders
- X. Financial management, resources development
- XI. Changes in the GC community
- XII. Increased APN involvement in GC international programmes (IPBES, Future Earth, UNFCCC/SBSTA.....)

CHAPTER TWO: SCIENCE, POLICY AND CAPACITY DEVELOPMENT STATUS REPORT

- I. Summary of the scientific activities conducted (with, possibly 4, Science Bulletins as appendices)
- II. Outstanding projects (activity reports, featured articles in the science bulletins, peer-reviewed publications (list of all of them)
- III. Climate Synthesis Report
- IV. Climate Book: Climate in Asia and the Pacific: Security, Society and Sustainability
- V. Science-Policy Dialogues and Synthesis
- VI. APN's contributions to 5th IPCC-report (citations)
- VII. Communication (project-based communications)
- VIII. Proposals Development Training WSs (PDTW)/Young scientists career development

CHAPTER THREE: EXTERNAL REVIEW RESULTS

(3 external reviewers will be engaged and the outputs written in 2,000 – 3,000 words summarising the report)

- I. Executive summary
- II. Recommendations

CHAPTER FOUR: CONCLUSION

(Clearly describe trends that will be used for the Fourth Strategic Phase Report)

- I. Member countries involvement
- II. Funding position
- III. Engagement with the Global Change International Community
- IV. Future of Global Change Research for the APN

Item 05-01: Core Programmes of the APN ARCP and CAPaBLE

The IGM is asked to consider and discuss the Core Programmes of the APN, particularly Programme Management. Note that recommendations for funding new and continuing projects under the ARCP and CAPaBLE Programmes will be considered on Day 3 under Item 11. The budget available for the Core Programmes will be discussed in the following item, Item 6.

Annual Regional Call for Research Proposals (ARCP) Programme

(a) 2013 Awards Process and Programme Management

At the 18th IGM in Kobe, Japan, the APN approved 27 projects under the ARCP programme; 13 of which are continuing multi-year projects and 14 of which are new projects. The status of these activities, and the awards allocated to them is attached as [IGMSPG/19/05-01-Appendix1](#). All of the USA funds from NSF/USGCRP are allocated to ARCP projects. Since 2012, the APN applied for this first time directly to the NSF for its funds (in previous years, these were routed through the START International Secretariat). The process to check APN's financial situation and management strategies, took approximately 17 months. APN received its first award amounting to US\$488,000 on 1st November 2013 for 2012 project funds.

At the time of writing the present paper, an award of approx. US\$362,000 has been recommended by the nFP for the USA. This award is in the NSF Fastlane system pending formal approval following a successful Cost Analysis by the NSF. All but two of the new projects funded under the 2013/14 fiscal year running from 01 April 2013 to 31 March 2014 began their activities in November 2013.

The delayed start of the project has inevitably delayed the process of Progress, as the APN requests progress reports when a project has progressed by at least 6 months. Based on regular communication between the APN Secretariat and the project leaders, 7 multiyear projects (3 CMY and 4 NMY) were deemed to have made sufficient progress according to their timelines and hence, were requested to submit progress reports. Four NMY projects have just begun and 2 have not yet started. As a result, they will be requested for a progress report by mid-July 2014 and reviewed by the SPG Sub-Committee (SPG-SC) for discussion and recommendation for approval at the intersessional Steering Committee Meeting. The progress reports are being reviewed by the SPG-SC and the SPG, and recommendations for continued funding will be made on day 3 under Item 11 of the 19th IGM/SPG Meeting.

(b) 2013 Annual Call for Regional Research Proposals

The APN formally launched its 2013 Annual Call for Regional Research Proposals on 14 June 2014. The general procedure and overall process of the Call for Proposals is as shown in Figure 1. At the 25th Steering Committee Meeting held in Sri Lanka in October 2013, it was considered and agreed, following discussions undertaken by the SPG that the Advisory Service will not be part of the proposals submission and review stages, but rather it will be a continuous service provided by APN on a year-round basis. This will be implemented from April 01 2014.

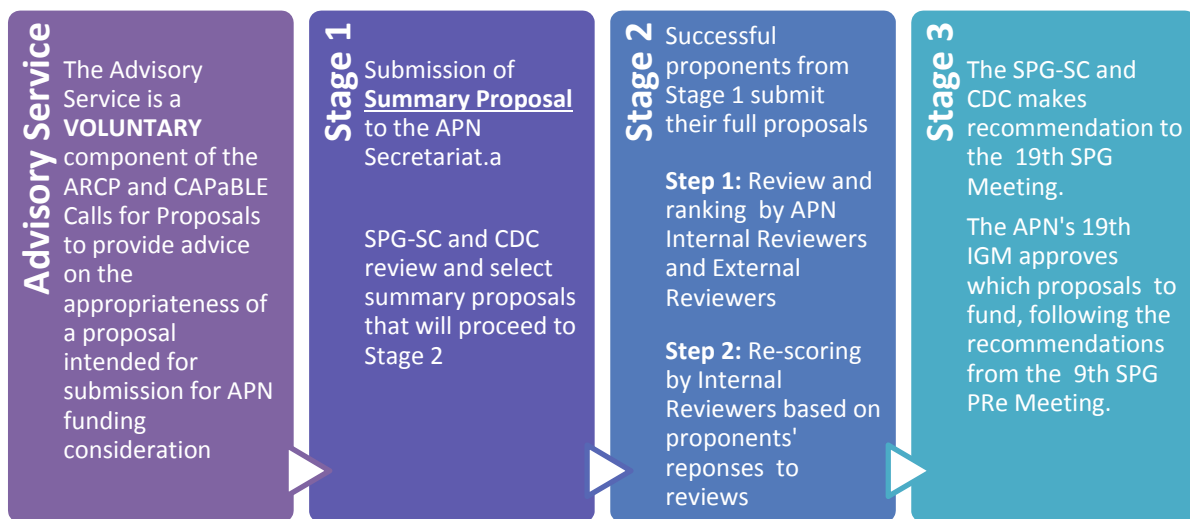


Figure 1. Annual Call for Proposals Submission and Review Stages

(c) Report on the Implementation of the Calls for Proposals

In the 2013 Calls for Proposals, APN received 27 Letters of Intent under the ARCP Programme. The Letters of Intent were sent to respective nFPs and SPG Members for their information and feedback, as necessary, to the proponents. Feedback was sent to all potential proponents together with the Secretariat's response on 18th July 2013, in order to provide one month for the proponents to submit their proposals based on the feedbacks.

Under the ARCP Programme, the APN Secretariat received **53 Summary Proposals, 50 of which were considered to have met the basic eligibility criteria for submission.** Following a review by the entire SPG, **28 proponents were requested to submit full proposals.** In addition to that, 2 seed grant proposals were also included. SPG recommendations for funding will be discussed separately on Day 3 under Item 11 of the 19th IGM/SPG Meeting Agenda. Please also refer to [IGM-SPG/19/11-01 \(ARCP\)](#) under Item 11 in your folders for a summary spreadsheet of the full proposals.

Similar to the 2012 Calls for Proposals, full proposals were re-reviewed by SPG Members¹ this year. All proposals also underwent reviews by the external reviewers. The aim of the external reviewer comments is to provide additional information on proposals. As of May 2013, the APN External Mail Review System has been updated to ensure we have an active pool of reviewers, as well as an up to date record of their areas of expertise. Currently, APN has 48 active external reviewers in its External Mail Review System; 31 reviewers contributed to the 2013 APN Proposals Review Process.

¹ SPG comprises 22 Member countries and 5 invited experts. Dr. Subramaniam Moten, former SPG Member for Malaysia was invited to join the SPG in the capacity as invited expert. This was recommended by the Secretariat, approved by the Steering Committee at the intercessional 25th Steering Committee Meeting and accepted by Dr. Moten, effective immediately. The term for invited experts is "one-year renewable."

CAPaBLE Programme

(a) CAPaBLE Programme Management

At the 18th IGM in Kobe, Japan, the APN approved 16 projects under the CAPaBLE programme, 2 of which are continuing multi-year projects and 14 of which are new projects. One additional project was added in the middle of the fiscal year due to the time-sensitivity nature of the project. The status of these activities and the awards allocated to them, including a status of where the funds were allocated from, is attached as [IGMSPG/19/05-01-Appendix2](#).

(b) 2013 Annual Call for Capacity Building Proposals under CAPaBLE Programme

The Call for CAPaBLE proposals was launched at the same time with the ARCP Call for Proposals, with similar stages for proposals submission and review process. This year, 26 Letter of Intents were received by APN Secretariat for CAPaBLE proposal submission. The Letters of Intent were sent to respective nFPs and SPG Members for their information and should they wish to provide feedback to the proponents. Feedbacks were sent to the potential proponents together with the Secretariat's response on 18 July 2013, in order to provide one month for the proponents to submit their proposals based on the feedbacks.

At stage 1, APN received **50 Summary Proposals under CAPaBLE Call for Proposals**. After review by the CDC, **22 proponents were asked to submit their full proposals** and one additional proposal from a seed grant project was included. SPG recommendations for funding will be discussed separately on Day 3 under Item 11 of the 19th IGM/SPG Meeting Agenda. Please also refer to [IGM-SPG/19/11-02 \(CAPaBLE\)](#) under Item 11 in your folders for a summary spreadsheet of the full proposals.

Similar to the 2012 Call for Proposals, all full proposals were re-reviewed by the reviewers this year. All proposals also underwent reviews by the external reviewers.

(c) 10th Anniversary

In 2013, CAPaBLE celebrates its 10th anniversary. Having once been considered a programme with a five-year shelf life, it was considered to be so successful to warrant its integration into the APN's core activities. As such, CAPaBLE sits as the second pillar next to the ARCP Programme and has become a programme. In terms of the 10th anniversary, the success of the CAPaBLE programme is to be celebrated at the 20th anniversary of the APN (see separately, under Item 13).

Project Reference Number	Title	Project summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM Recommended	Deduction from the first year grant amount	2013 Awarded	2014 Committed	2015 Committed	Remarks
ARCP2013-01CMY-Patra	Greenhouse Gas Budgets of South and Southeast Asia	Aims to undertake the most ambitious synthesis effort to date using global and regional datasets and model outputs to constrain the regional GHG budgets of South and Southeast Asia, where the source/sink balance of GHGs have large uncertainty.	Dr. Prabir K. PATRA and Research Institute for Global Change (IGMSTEC), JAPAN	prabir@iamstec.go.jp prabir@astro.au	3 years	28-Apr-13	19-Feb-14	45,000.00	no	45000 (retained from 2011/12 funds)	0	0	The project has just entered its 3rd year activity.
ARCP2013-02CMY-Fortes	Seagrass-Mangrove Ecosystems: Bio Shields Against Biodiversity Loss and Impacts of Local and Global Change Along Indo-Pacific Coasts (The Seagrass-Mangrove Bio Shield Project, SIMBP)	Investigates and promotes the important role of seagrass and mangroves as natural bio-shields in mitigating and adapting to the impacts of local and global change along Indo-Pacific coasts. Using an 'ecosystem approach', its main products is a science-based tool in decision making to manage the resources in the face of such environmental changes.	Prof. Miguel FORTES, Marine Science Institute, University of the Philippines PHILIPPINES	miquel@fortes@msi.uic.edu miguel.fortes@uic.edu	3 years	28-Apr-13	N/A	30,000.00	no	30000 (retained from 2012/13 funds)	0	0	Project still in its second year. No cost extension up to March 2014. Award is for 3rd year or final year of multiyear project.
ARCP2013-03CMY-Herath	Developing Ecosystem based Adaptation Strategies for Enhancing Resilience of Rice Terrace Farming Systems against Climate Change	This research will address dual challenges of both extensive runoff and water scarcity by providing eco-system based adaptation measures to strengthen resilience of rice terrace farming system in Hani and Ifugao to cope with climate change.	Prof. Anura Srikantha HERATH, Institute for Sustainability and Peace, United Nation University, JAPAN	Herath@unu.edu	3 years	28-Apr-13	N/A	40,000.00	no	40000 (retained from 2012/13 funds)	0	0	Project still in its second year. No cost extension up to April 2014. Award is for 3rd year or final year of multiyear project
ARCP2013-04CMY-Meinke	Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia	The demand for rice is expected to double, a challenging target in the midst of competing demands for land and water, and a changing and variable climate. The project uses in-country RDBE combined with modeling to design more efficient rice systems. Collaboration and training meetings increase the capacity of scientists and organisations, and strengthen a network of researchers.	Professor Holger MEINKE, University of Tasmania, AUSTRALIA	holger.meinke@utas.edu.au holger.meinke@utas.edu.au	3 Years	28-Apr-13	N/A	54,000.00	1,950.00	52050 (from 2012/13 funds)	6000 (retained from 2012/13 funds)	0	Project still in its first year. No cost extension up to 30th June 2014. Award is for 2nd year.
ARCP2013-05CMY-Li	Development of an integrated climate change impact assessment tool for urban policy makers (UrbanCLIM)	This project proposes to develop a co-evolutionary urban climate change decision support tool (UrbanCLIM), to support climate change impact and risk assessment for the major sectors: health, transport, water. A participatory assessment approach will be applied through working with local urban policy makers and planners.	Dr. Yinying LI, International Global Change Institute, Waikeio University, NEW ZEALAND	yinyingli@climatechange.org yinyingli@climatechange.org	3 Year	28-Apr-13	18-Nov-13	40,250.00	4,500.00	35750 (retained from 2012/13 funds)	0	0	Project ongoing
ARCP2013-06CMY-Quynh	Carbon fluxes and emission from the Red River (Viet Nam and China): human activities and climate change	This work aims to calculate the carbon fluxes and carbon emission from the Red River, which concern to the global warming. The SENEQUE/Riverstrahler model which allows to relate the water quality and carbon transfers in the drainage network to the constraints resulting from human activity and natural conditions in the watershed will be applied for different scenarios of the past, present situations and possible future changes in 2050s horizon for the whole Red River basin.	Dr. LE Thi Phuong, Quynh Institute of Natural Product Chemistry (INPC), Vietnam Academy of Science and Technology (VAST), VIETNAM.	quynh@vnhp.com quynh@vnhp.com	3 Years	28-Apr-13	06-Nov-13	36,000.00	4,000.00	32000 (retained from 2012/13 funds)	0	0	Project ongoing
ARCP2013-07CMY-Roy	Coastal Ecosystem and Changing Economic Activities: Challenges for Sustainability Transition	Proposal is for collaborative research, workshops, guidelines development. Coastal ecosystems' unique ecological functions provide high valued economic and non economic goods and services. Goal is to inventories the changing pattern of economic activities in South, Asian and China coast.	PROF. Joyashree ROY, Global Change Programme, Jadavpur University, INDIA	joyashree@jgu.ac.in joyashree@jgu.ac.in	2 Years	28-Apr-13	21-Jan-14	37,000.00	4,400.00	32600 (retained from 2012/13 funds)	0	0	Project ongoing
ARCP2013-08CMY-DeCosta	A study on, loss of land surface and changes to water resources, resulting from sea level rise and climate change	Sea water level variation in the Asia Pacific region caused due to global / climate change would be analyzed using a global circulation (Climate) Model (GCM). The results of which would be then used in conjunction with digital elevation maps, GIS information to predict loss of land surface in coastal zones in the Asia Pacific Region.	Dr. G.S.D.Coata, Uintec University, NEW ZEALAND	rcostes@uic.ac.nz rcostes@uic.ac.nz	2 years	28-Apr-13	N/A	40,250.00	4,350.00	31150 (retained from 2012/13 funds)	0	0	Project's first year just ended. Financial report is currently being reviewed.
ARCP2013-09CMY-Carter	Coral reef and water quality status and community understanding of threats in the eastern Gulf of Thailand	The project will assess the status and threats to marine natural resources in the contiguous coastal zones of Thailand, Cambodia and Vietnam through: 1. quantitative measurement of coral, algae and fish assemblages; 2. quantitative measurement of marine and in-flow water quality; 3. use of available secondary data for assessment of commercial and subsistence take; 4. qualitative study of community understanding of threats (including climate change) to the coastal zone and marine resources.	Assoc. Prof. RW (Bill) CARTER, Sustainability Research Centre, University of the Sunshine Coast, AUSTRALIA	billcarter@usc.edu.au billcarter@usc.edu.au	2 years	28-Apr-13	N/A	11,000.00	4,800.00	6200 (retained from 2012/13 funds)	0	0	Contract has ended, currently requesting for financial report and progress report. Contract for year 2 has not been drawn.
ARCP2013-10CMY-Yoo	Toward a Fire and Haze Early Warning System for Southeast Asia	The project concrete to understanding of the human and climatic causes to forest fires. And it will determine (1) how seasonal forecasts can be used to predict drought conditions triggering forest fires and (2) how this information can be incorporated into the standard operating procedures of local land and fire managers.	Dr. Jin Hoo YOO, AFPC Climate center, REPUBLIC OF KOREA	jhyoo@afpc21.net jhyoo@afpc21.net	2 years	28-Apr-13	N/A	32,000.00	3,700.00	28300 (retained from 2012/13 funds)	0	0	Project still in its first year. No cost extension up to 6 August 2014.
ARCP2013-11CMY-Yabe (Ochiai)	GEOS/Asian Water Cycle Initiative/Water Cycle Integrator (GEOS/AWC/WCI)	Based upon the well coordinated regional cooperative challenge, GEOS/Asian Water Cycle Initiative (AWCI), and the long term supports by AWI, this project aims at implementing convergence and integration of data from earth observation satellites, fields, model cases at Asian major river basins, and researching on the impact assessment and adaptation measures for climate change using these data.	Mr. Osamu Ochiai, Associate Senior Administrator, Japan Aerospace Exploration Agency (JAXA), JAPAN	ochiai.osamu@jaxa.jp ochiai.osamu@jaxa.jp	2 years	28-Apr-13	25-Oct-13	40,250.00	4,500.00	35750 (retained from 2012/13 funds)	0	0	Project ongoing
ARCP2013-12CMY-Burnett	Assessing the Impact of Climate Change and Development Pressures on Nutrient Inputs into the Mekong River and Tonle Sap	Investigate the relationships between Mekong River hydrology, the dissolved and particulate phosphorus (P) cycle and aquatic productivity in Thailand, Laos, and Cambodia. Assess and model nutrient and fishery impacts in response to climate change, dam construction or other development activities in the Mekong River basin.	Prof. William C. Burnett, Florida State University, USA	wburnett@fsu.edu wburnett@fsu.edu	2 years	28-Apr-13	17-Nov-13	30,000.00	4,100.00	25900 (retained from 2012/13 funds)	0	0	Project ongoing
ARCP2013-13CMY-Sase	Dynamics of sulphur derived from atmospheric deposition and its possible impacts on the East Asian forests	Sulphur dynamics in forest ecosystems will be studied using sulphur isotope analysis in different climates, in Malaysia, Thailand and Japan.	Dr Hiroyuki Sase, Asia Centre for Air Pollution Research, JAPAN	sase@capc.asia sase@capc.asia	2 years	28-Apr-13	22-Jan-14	40,000.00	4,400.00	35600 (retained from 2012/13 funds)	0	0	Project ongoing

IGM-SPG/19/05-01-App.1 Status of 2013 Approved Projects - ARCP

Project Reference Number	Title	Project summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM Recommended	Deduction from the first year grant amount	2013 Awarded	2014 Committed	2015 Committed	Remarks
ARCP2013-14NMY-Miyata	Toward CarboAsia: integration and synthesis of terrestrial ecosystem flux data in tropics/subtropics and croplands in Asia by activating regional tower-based observation networks	Toward CarboAsia, the carbon budget assessment covering the whole Asian terrestrial ecosystems, it is required to fill data gaps in tropical/subtropical forest and croplands. By utilizing the framework of Asia Flux (http://www.asiaflux.net/), we will hold workshops and training courses to encourage and activate tower-based flux observation networks in south-eastern and southern Asia, thereby promoting data integration and synthesis of carbon and water cycles in tropical/subtropical forest and croplands in Asia.	Dr. Akira Miyata National Institute for Agro-Environmental Sciences, JAPAN	amiyata@nias.affrc.go.jp	3 Years	26-Apr-13	17 May 2013	45,000.00	no	45000 (retained from 2013/14 funds)	45000 (retained from 2013/14 funds)	45000 (mortgage)	Project ongoing
ARCP2013-15NMY-Manton	Coordinated Regional Climate Downscaling Experiment (CORDEX) in Monsoon Asia	A series of three CORDEX workshops will be held in 2013, 2014 and 2015 in South Asia, East Asia and South East Asia. The workshops will foster synergies and coherence between the various climate downscaling and vulnerability impact and adaptation (VIA) communities in the Asia Pacific region through direct engagement. The workshops will be scientific in nature, and will cover state-of-the-art climate downscaling research, training and capacity building.	Professor Michael Manton, Chair Scientific Steering Committee for Monsoon Asia Integrated Regional Study (MAIRS) Monash University, AUSTRALIA	michael.manton@monash.edu	3 Years	26-Apr-13	20-May-13	45,000.00	no	45000 (retained from 2013/14 funds)	45000 (retained from 2013/14 funds)	45000 (mortgage)	Project ongoing
ARCP2013-16NMY-Li	Assessing Spatiotemporal Variability of NPP, NEP and Carbon Sinks off Global Grassland Ecosystem in response to Climate Change in 1911-2011.	This project will be realized to provide an integrated technical method and report of the assessing variability of NPP, NEP and carbon sinks of global grassland ecosystem in response of climate change and human activity in the global scale and long-term under the different temporal and spatial from three developing countries to worldwide for farmers, policy makers and international community and disseminate the findings.	Professor Jianhong Li, Nanjing University, CHINA	lihz2008@njlu.edu.cn ; lianhongli@sina.com	3 Years	26-Apr-13	20-May-13	40,000.00	no	40000 (retained from 2013/14 funds)	40000 (retained from 2013/14 funds)	28000 (mortgage)	Project ongoing
ARCP2013-17NMY-Tangang	Southeast Asia Regional Climate Downscaling Project (SEARCD)	1. Carry out joint regional climate downscaling for a common SEA domain with RegCM4 using 5 CMIP5 GCMs and 3 RCPs; under the SEARCI on the basis of shared workloads. 2. Collectively analyze model performances, create ensemble regional climate projection for the SEA region, and establish SEARCI web portal and data center for efficient data dissemination freely to users in the region.	Prof. Fredolin Tangang, University Kebangsaan Malaysia, MALAYSIA	ftangano@umjil.com ; tanganfo@ukm.my	3 Years	26-Apr-13	20-May-13	45,000.00	no	45000 (retained from 2013/14 funds)	45000 (retained from 2013/14 funds)	45000 (mortgage)	Project ongoing
ARCP2013-18NMY-Prabhakar	Assessing community risk insurance initiatives and identifying enabling policy and institutional factors for maximizing climate change adaptation and disaster risk reduction benefits from risk insurance	This project aims to assess the benefits accrued through community level risk insurance experiences in the region, evaluate barriers limiting its penetration, and identify interventions for greater risk insurance penetration leading to climate change adaptation and disaster risk reduction.	Dr. S.V.R.K. Prabhakar, Institute for Global Environmental Strategies, JAPAN	prabhakar@iges.or.jp	2 Years	26-Apr-13	23-May-13	40,000.00	no	40000 (retained from 2013/14 funds)	40000 (retained from 2013/14 funds)	0	Project ongoing
ARCP2013-19NMY-Gomboov	"Boreal and tropical (monsoonal) forests and forest-steppes in Asian-Pacific region in territory of Russia, Mongolia and China: a comparative estimation of the contribution to softening of global climatic changes and working out of measures on adaptation to them"	Comparative evaluation of the contribution of different forest ecosystems (boreal, tropical, forest-steppe) in the Asia-Pacific region in Russia (Buryatia), Mongolia and China in climate change mitigation and development strategies to increase this contribution: a) assessment of forest condition; b) assessing the carbon budget; c) study of good practice in sustainable forest management aimed at reducing emissions from deforestation and forest degradation, conservation and development (storage) of carbon stocks; d) develop a mechanism for fair distribution of costs and benefits (including the sale of carbon, ecosystem services) on the mitigation of climate change among stakeholders in accordance with national institutional capabilities	Prof. Bair O. Gomboev, Baikal Institute of Nature Management of Russian Academy of Sciences, RUSSIAN FEDERATION	boom@bimn.bscnet.ru	2 Years	26-Apr-13	30-May-13	45,000.00	no	45000 (retained from 2013/14 funds)	45,000 (retained from 2013/14 funds)	0	Project ongoing
ARCP2013-20NMY-Shrestha	Discharge Scenario and Water Based Adaptation Strategies in South Asia	The project aims to understand the climate and changing climate of the region and its water resources consequences affecting people. Observed hydro-meteorological data and IPCC climate scenarios will be used for simulation of river flows using distributed/physical-based hydrological models for development of future water scenarios.	Dr. Madan Lal Shrestha, The small Earth Nepal, NEPAL	info@smallearth.or.np ; madanlal@hotmail.com	2 Years	26-Apr-13	23-May-13	41,000.00	no	41000 (retained from 2013/14 funds)	41,000 (retained from 2013/14 funds)	0	Project ongoing
ARCP2013-21NMY-Yamada	"Adaptation of Solid Waste Management to Frequent Floods in Vulnerable Mid-Scale Asian Cities"	This study aims to propose a model of resilient and adaptable solid waste management (SWM) against flood in Asian tropical/pluvial countries, in order to adapt to frequent flood events that would be influenced by climate change. State of arts of urban SWM during and aftermath of flood will be evaluated, and resting and re-planning of SWM will be supported by novel tool to assess resiliency & vulnerability of SWM against flood. Cooperative assistance in emergency case between municipalities or between municipality, industries and NPOs will be promoted through strategic efficiency evaluation.	Dr. Masato Yamada, National Institute for Environmental Studies (NIES), JAPAN	mvamada@nie.go.jp	2 Years	26-Apr-13	20-May-13	37,000.00	no	37000 (retained from 2013/14 funds)	37,000 (retained from 2013/14 funds)	0	Project ongoing
ARCP2013-22NMY-Sellers	Meja-Regional Development and Environmental Change in China and India	This research applies remote sensing and GIS to compare urbanization patterns and their effects on land use and ecosystems in four matched cases of Chinese and Indian megar regions. Models of alternative trajectories will be developed to assess alternative policies and institutions to address the regional dimensions of urbanization. Regional stakeholder workshops and participation in stakeholder and academic forums will further reinforce capacity building.	Assoc. Prof. Jeffrey M. Sellers, University of Southern California, USA	sellers@usc.edu	2 Years	26-Apr-13	30-May-13	42,000.00	no	42000 (retained from 2013/14 funds)	42,000 (retained from 2013/14 funds)	0	NSF funded project, contract has not drawn

Project Reference Number	Title	Project summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM Recommended	Deduction from the first year grant amount	2013 Awarded	2014 Committed	2015 Committed	Remarks
ARCP2013-23NMY-Shiannopkao	Developing Scientific and Management Tools to Address Impacts of Changing Climate and Land Use Patterns on Water Quality in East Asia's River Basins	The project aims to address, "what possible effects of climate and land use pattern changes have on water quality and ecology in East Asia's river basins?" A model showing interactions among climate, hydrology, land use, water quality, and ecosystems will be built for the temperate climate of Korea and tropical climate of Southeast Asia. Specifically, the expected impact of climate change related to extreme events on loading of nutrients and microorganisms under land use pattern changes will be determined. The project's outreach components will allow us to educate high school students and farmers with knowledge produced from this study.	Assistant Prof. Suthepong STHANNOPKAO, Dong-A University, REPUBLIC OF KOREA	suthep.sth@du.ac.kr	2 Years	28-Apr-13	21-May-13	40,000.00	no	40000 (retained from 2013/14 funds)	40,000 (retained from 2013/14 funds)	0	Project ongoing
ARCP2013-24NSY-Fideiman	Supporting governance institutions for adaptive capacity to environmental change	This proposal will: (1) investigate the potential of existing governance institutions to facilitate adaptation to environmental change in coastal areas of Vietnam, Cambodia and Thailand, and (2) support the design and implementation of strategies (within and across countries) to cope with current and future impacts of such change.	Dr. Pedro Fideiman, Sustainability Research Centre, University of the Sunshine Coast (USC), AUSTRALIA	pedro.fideiman@usc.edu.au	1 Year	26-Apr-13	30-May-13	46,000.00	no	46000 (retained from 2013/14 funds)	0	0	Project ongoing
ARCP2013-25NSY-Shahid	Climate Change Vulnerability and Adaptation in Groundwater-dependent Irrigation System in Asia-Pacific Region	The major objective of the propose project is to understand the influences of climate change on regional groundwater resources and irrigation requirements as well as to identify the possible adaptation measures to sustain the future growth and development of groundwater-based irrigation.	Dr. Shamsuddin Sheikh, Universiti Teknologi Malaysia, MALAYSIA	sshahid@utm.my	1 Year	26-Apr-13	23-May-13	40,000.00	no	40000 (retained from 2013/14 funds)	0	0	Project ongoing
ARCP2013-26NSY-Patanak	Characterizing Public and Private Adaptation to Climate Change and Implications for Long-Term Adaptive Capacity in Asian Megacities	This project proposes to characterize public and private adaptation in Mumbai (India), Bangkok (Thailand) and Manila (Philippines) in response to heavy precipitation events and bring out the policy implications for the long-term adaptive capacity.	Assistant Prof. Archana Patanar, K. J. Somaiya Institute of Management Studies & Research, INDIA	archana.patanar@somaiya.edu	1 Year	26-Apr-13	21 May 2013 Amended 27 Feb 2014	45,000.00	11,000.00	34000 (retained from 2013/14 funds)	0	0	NSF funded project, contract has not drawn. Award reduced.
ARCP2013-27NSY-Liu	The impact of global warming on ocean-atmosphere feedback strength at tropical Indian Ocean	This project examines the impact of global warming on this ocean-atmosphere coupled event using the CMIP5 output. Particularly the output answers the questions 1) to what degree the global warming impacts the IOD event and 2) to explain the physical mechanism on how the IOD is influenced by the global warming as well as the relevant impact from IOD event.	Dr. Liu LU, First Institute of Oceanography, State Oceanic Administration, CHINA	liulu@fio.org.cn	1 year	26-Apr-13	21-May-13	29,000.00	no	29000 (retained from 2013/14 funds)	0	0	Project ongoing
Total 18th IGM awarded funds									51,700.00	1,000,500.00	480,000.00	163,000.00	
Total deduction									51,700.00				
Awarded funds for 2013 ARCP projects* from 2011/2012, 2012/2013 and 2013/2014 budget years										1,000,500.00			
Committed funds for 2014 ARCP projects * from 2013/2014 budget year											480,000.00		
Mortgage funds for 2015 ARCP projects												163,000.00	

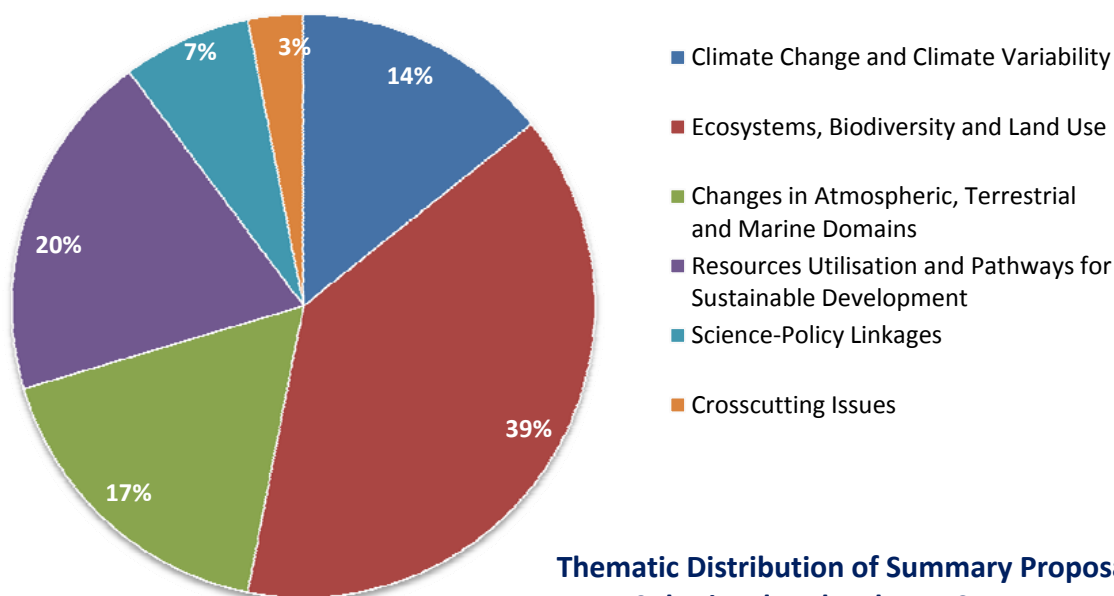
IGM-SPG/19/05-01-App.2 Status of 2013 Approved Projects - CAPaBLE

Project Reference Number	Title	Project Summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM-Approved Budget	2012 Awarded	2013 Awarded	2014 Committed	Total Project Budget	Remarks
CBA2013-01CMY-Rasul	Impact of Climate Change on Glacier Melting and Water Cycle Variability in Asian River Basins	Through this Project, drought related products will be prepared and shared, capacity building activities undertaken focusing on preparation of dry/wet climatology, indices, utility of numerical weather prediction, and drought advisories for planners and policy makers, and an interface between the users and service providers developed. Training of young scientist responsible for sustained continuity is a top priority.	Dr. Ghulam Rasul, Pakistan Meteorological Department, PAKISTAN	rsulghulam@pmda.gov.pk all.com	2 Years	26-Apr-13	07-Feb-14	36,000	40,000	36,000	-	76,000 (2012 budget)	Contract for year 2 is not drawn yet.
CBA2013-02CMY-Hashim	Global Environmental Change and Human Health: Extreme Events and Urbanization in the APN Region	The proposed UNU-GECHH-APN-EEU is a framework project fostering research and awareness of the impact of global environmental change on human health, and in particular the impact of extreme events (e.g., floods, cyclones) on human health in the urban environment (e.g., via water), within the APN region.	Dr. Jamal Hashim Hashim, UKM Medical Centre, MALAYSIA.	jamal@unimed.ac.uk U.K. jamalhash@hotmail.com	2 Years	26-Apr-13	N/A	13,000	42,495	13,000	-	55,495 (2012 budget)	Award not drawn for Year 2 yet. Progress report submitted while financial report is due March 2014
CBA2013-03NMV-D'Arrigo	ACRE SE Asia – Towards New Weather and Climate Baselines for Assessing Weather And Climate Extremes, Impacts and Risks over SE Asia.	Our primary goal is to build capacity within SE Asian institutions, agencies and NMS to improve and extend historical instrumental, documentary and palaeo databases of SE Asian weather/climate, in order to contribute to the generation of high-quality, high-resolution historical weather reconstructions (reanalyses). These new baselines will allow scientists and policy makers across the region to address weather/climate extremes, impacts and risks in ways and over time spans not previously possible.	Prof. Roseanne D'Arrigo, Lamont-Doherty Earth Observatory, Columbia University, USA.	rd@ldeo.columbia.edu	2 Years	26-Apr-13	16-May-13	65,000	-	28,000	8,000	36,000	ongoing. US\$ 29,000 surplus available for reallocation
CBA2013-04NSY-WCRP	International Conference on Regional Climate CORDEX 2013.	The International Conference on Regional Climate CORDEX 2013, organized jointly by WCRP, IPCC and the European Commission will facilitate active dialogue and discussion among the diverse international regional climate modeling, and vulnerability, impact and adaptation research communities to address crosscutting challenges and opportunities to further improve our understanding of regional climate variability and change, and to support climate adaptation and mitigation policies. The support from APN will provide the opportunity for about 20 aspiring young scientists and students from Asia-Pacific developing countries to participate in this major international conference.	Dr. R. Krishnan, Indian Institute of Tropical Meteorology, INDIA (WCRP)	krish@trmm.iitg.ac.in mukherjee@iitg.ac.in	1 year	26-Apr-13	16-May-13	50,000	-	50,000	-	50,000	on-going
CBA2013-05NSY-Sutrisno	The Implementation of Multi Sensors Remote Sensing Technology for Sustainable Disaster Management.	An international capacity building workshop is strongly needed to enhance sharing knowledge, experiences and exchanging idea for developing new technologies in remote sensing sciences among leading scientists and early careers especially those from the developing countries that are most vulnerable to the disaster related to climate change and nature variability. The support from APN will provide the opportunity for about 20 aspiring young scientists from Asia-Pacific region to participate in this workshop.	Dr. Dewayany Sutrisno, Indonesian Society For Remote Sensing/ Geospatial Information Agency, INDONESIA.	dewayany@gsi.go.id all.com	1 year	26-Apr-13	16-May-13	38,000	-	38,000	-	38000	on-going
CBA2013-06NSY-Shrestha	Enhancing the groundwater management capacity in Asian cities through the development and application of groundwater sustainability index in the context of global change.	The proposed project aims to enhance understandings of policy makers and relevant stakeholders in selected Asian cities and develop their capacity to assess their situation of groundwater management through customization and application of "groundwater sustainability index (GSI)" by themselves via various mean such as e-conferences and regional workshops.	Dr. Sangam Shrestha, Asian Institute of Technology (AIT), THAILAND	sangam@ait.ac.th sangamshrestha@ait.ac.th sangamshrestha@ait.ac.th	1 year	26-Apr-13	16-May-13	42,000	-	42,000	-	42,000	on-going
CBA2013-07NSY-Dahal	Policy Brief Writeshop for Researchers: An Approach to Promote Greater Science-Policy Interfacing in South Asia.	This project intends to fill this gap between science and policy by building capacity. Four-day intensive training by policy research experts and policy practitioners, and writing fellowship to them to published peer reviewed journal on policy science interface will be career milestones for the young researchers.	Assoc. Prof. Khem Raj Dahal, The Small Earth Nepal (SEN), NEPAL	info@smallearthnepal.com smallearthnepal@smallearthnepal.com	1 year	26-Apr-13	16-May-13	36,000	-	36,000	-	36,000	on-going

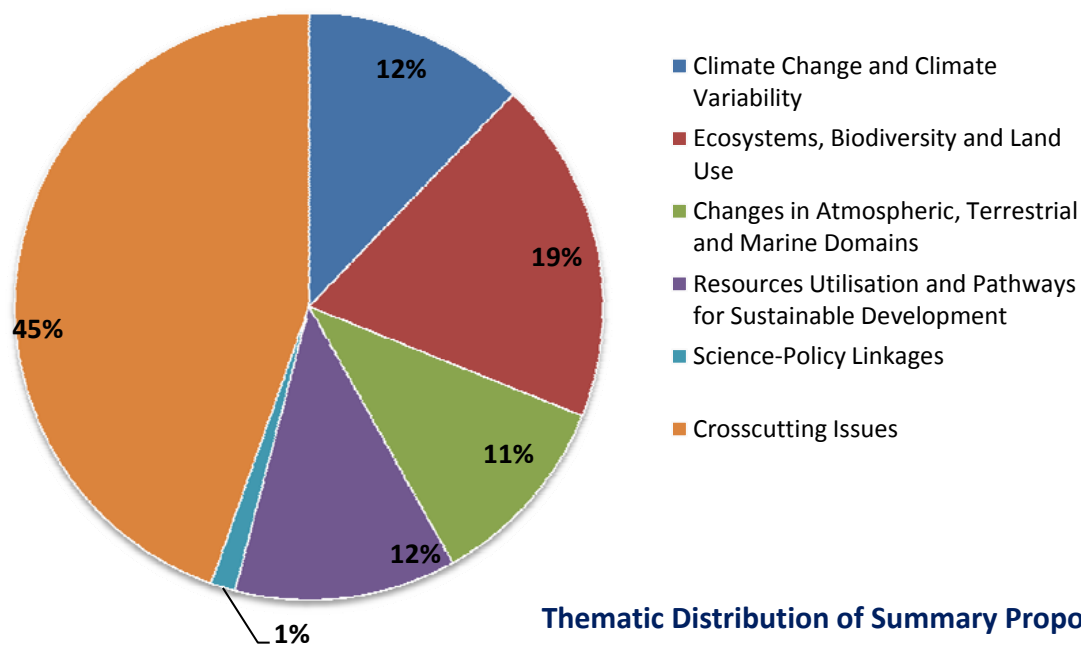
Project Reference Number	Title	Project Summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM- Approved Budget	2012 Awarded	2013 Awarded	2014 Committed	Total Project Budget	Remarks
CBA2013-09NSY- Pascoe (SOLAS)	Capacity building on Surface Ocean - Lower Atmosphere Study: The SOLAS Summer School.	The SOLAS Summer School is a 2-week advanced international capacity-building programme for early-career scientists and is an integral part of the project SOLAS. By providing excellent training on scientific techniques, soft skills, and understanding of global environment change issues, it adequately prepares future proficient scientists. Its comprehensive schedule provides the next generation of scientists opportunities to interact and network with their peers.	Dr. Emilie Brévière / SOLAS Executive Officer, Helmholtz Centre for Ocean Research SOLAS IPO Office (Germany)	ebreviere@oao.maw.de	1 year	26-Apr-13	16-May-13	23,000	-	23,000	-	23,000	on-going
CBA2013-09NSY- Pascoe (Schuttenberg)	Building Capacity for Socio-ecological Resilience to Coral Bleaching Events in Indonesia, Malaysia, and Thailand.	The project will build capacity within scientific, government, industry, and non-governmental organizations in Indonesia, Malaysia, and Thailand for supporting the resilience of coral reefs and reef-dependent tourism to climate change impacts. Building on social and ecological data collected during an extensive bleaching event in 2010, project collaborators will hold multi-stakeholder learning workshops in each targeted country to raise awareness, provide scientific input on potential responsive actions, strengthen stakeholder relationships, identify key research questions and methodologies to guide future work, and to develop training materials for dive operators that will be incorporated into on-going training programs in the region.	Dr. HZ Schuttenberg, Commonwealth Scientific and Industrial Research Organisation (CSIRO), AUSTRALIA	Heidi.Schuttenberg@omail.com Sean.Pascoe@csiro.au	1 year	26-Apr-13	16-May-13	44,000	-	44,000	-	44,000	on-going
CBA2013-10NSY- Visco	Communicating and Operationalizing Site-Specific Climate Change Adaptation Strategies in Selected Vulnerable Upland Communities in Southeast Asia.	The proposed project is the third sequel or the Phase 3 of the previous APN-funded project "Scaling-Up Agroforestry Promotion for Climate Change Mitigation and Adaptation in Southeast Asia", and the "Institutionalization of Agroforestry as a Climate Change Adaptation Strategy via Local Capacity and Policy Development in Southeast Asia. After the awareness-building and assessment of various climate change adaptation strategies that work on-the-ground, which are basically, the major objectives of the two previous projects, the proposed project aims to communicate and operationalize these climate change adaptation strategies to the selected vulnerable upland communities in Vietnam, Indonesia and the Philippines.	Dr. Roberto G. Visco, Philippine Agroforestry Education and Research Network, PHILIPPINES	secretariat@pafern.org.ph	1 year	26-Apr-13	16-May-13	36,000	-	36,000	-	36,000	on-going
CBA2013-11NSY- Palkharkova	Scale in Earth System Governance: Local Case Studies and Global Sustainability.	The proposed project will organize a workshop as means for capacity building of early-career researchers from the Asia-Pacific region and Central and Eastern Europe to discuss the issue of scale in earth system governance, with an emphasis on research challenges and analytical problems related to scale and local case studies. The workshop will also serve as an important networking opportunity and platform to initiate and combine momentum for new research.	Dr. Nina Palkharkova, Siberian Federal University, RUSSIAN FEDERATION	nina.palkharkova@yandex.ru	1 year	26-Apr-13	16-May-13	38,000	-	38,000	-	38,000	on-going
CBA2013-12NSY- MAIRS (Fu)	Promoting the sustainability science in monsoon Asian region.	This APN project is to support Asian young scientists to attend MAIRS conference held in 3-6 March 2014 in Beijing, to encourage the information exchange and communication on sustainability science among senior and young scientists, scientists and policy makers. The objective of MAIRS conference 2014 is to show the latest research of integrated studies and sustainability science dealing with Asian environmental change, to promote success projects/cases of multi-disciplinary studies, to recognize the crucial gaps of science contribution to sustainable development of Asian countries, and capacity buildings to young scientist who are interested in global change and sustainability science.	Prof. Congbin Fu, Institute of Atmospheric Physics, Chinese Academy of Sciences, CHINA	fcf@bao.ac.cn	1 year	26-Apr-13	30-May-13	38,000	-	38,000	-	38,000	on-going

Project Reference Number	Title	Project Summary	Project Leader	Email	Project Duration	Award Announced	Award Letter Issued	18th IGM-Approved Budget	2012 Awarded	2013 Awarded	2014 Committed	Total Project Budget	Remarks
CBA2013-13NSV-Varma	Building Capacity for Adaptive Governance through Participatory Modelling: Rural and Urban Flooding in India.	The training program- "Building Capacity for Adaptive Governance through Participatory Modelling: Rural and Urban Flooding in India" is aimed to enable policy makers, practitioners and researchers in sub-national level to practice adaptive governance. The policy focus of the training program is flood management in two varying socio-economic, political and ecological contexts, one in villages of Lakhimpur district of Assam in north-east of India and other in Bangalore city of Karnataka in south of the country.	Mr. Navarun Varma, The Energy and Resources Institute (TERI), INDIA	navarun@teri.res.in	1 year	26-Apr-13	30-May-13	46,000	-	40,000	-	46,000	ongoing, contract was drawn in lesser amount than approved after closer inspection of budget. US\$ 6,000 available for reallocation.
CBA2013-14NSV-Barik	Promoting algaculture in trapped waters as sustainable aquafarming and adaptive climate mitigation in inundated coastal areas.	The programme envisages a capacity building cum action research workshop in promoting algaculture in coastal village of Sundarbans in India as a sustainable alternative livelihood option and climate-smart aquafarming for community based adaptive mitigation. Hands on training on culture preparation, management and monitoring of growth, harvesting of algal biomass and usage will be demonstrated in a technology cooperation module. Carbon sequestered in culture period and cost-benefit analysis over return on investment will be integral to the programme.	Ms. Jyotiskona Barik, South Asian Forum for Environment, INDIA	satishchandra@saforum.com	1 year	26-Apr-13	16-May-13	35,000	-	35,000	-	35,000	on-going
CBA2013-15NSV-Heinrich-Sanchez	Building Capacity on Marine Litter Management in the NOWPAP (Northwest Pacific Action Plan) Region.	In order to enhance capacity for the effective management of ML in NOWPAP member states as well as the implementation of RAP MALI, 1.5 days workshop will be organized in collaboration with the relevant international organizations, focusing on strengthening regional cooperation by sharing best practices for ML management, including policy measures implemented in the region. Recommendations from the workshop will be communicated to governments, environmental NGOs and scientific community for initiating future activities to deal with ML problems.	Mr. Eduardo (Edo) Heinrich-Sanchez, NPO Okinawa Ocean Culture and Environment Action Network, JAPAN	edo@okinawa-culture.or.jp	1 year	26-Apr-13	16-May-13	33,000	-	33,000	-	33,000	on-going
CBA2013-16NSV-Dargantes	Strengthening the Capability of Colleges of Agriculture in Incorporating Food and Water Security and Climate Change and Climate Variability into Curricular Programs, Research and Extension Projects and Teaching Modules.	The major activities of the project include: a) an Asia-Pacific inter-university consultation; b) sharing of experiences and good practices, and formulation of inter-university research and extension agenda; and c) inter-university professional exchange and academic visits.	Prof. Dr. Buena Ventura B. Dargantes, Institute for Strategic Research & Development Studies (ISRDS), Visayas State University, PHILIPPINES	vsu.lwrm.drgaram@yahoo.com.ph vsuwaterres@vsu.edu.ph	1 year	26-Apr-13	16-May-13	43,000	-	43,000	-	43,000	on-going
CBA2013-17NSV-Bodeker	SPARC (Stratosphere-troposphere Processes And their Role in Climate) General Assembly 2014	The SPARC 2014 General Assembly is a 5 1/2 day international conference that will be held in January 2014 in Queenstown, New Zealand. This conference will provide an opportunity to improve SPARC engagement with researchers from developing countries in the Asia-Pacific region and foster links with the regional WCRP community. SPARC's growing interest in climate processes in the tropical Western Pacific and role in delivering action oriented research through the GFCs creates an imperative to establish research collaborations with scientists in the region. APN support of attendance of key scientists at this conference will support this goal.	Dr. Greg Bodeker, Bodeker Scientific, 42 Young Lane RD1 Alexandra 9391 Central Otago New Zealand	gbsc@bodeker-scientific.co.nz	1 year	-	11-Nov-13	-	-	20,000	-	20,000	Additional project, fast-tracked from 2013 proposal. US\$ 20,000 allocated from surplus, on-going.
TOTAL								616,000	82,495	593,000	8,000	689,495	

Thematic Distribution of 2013 Call for Proposals

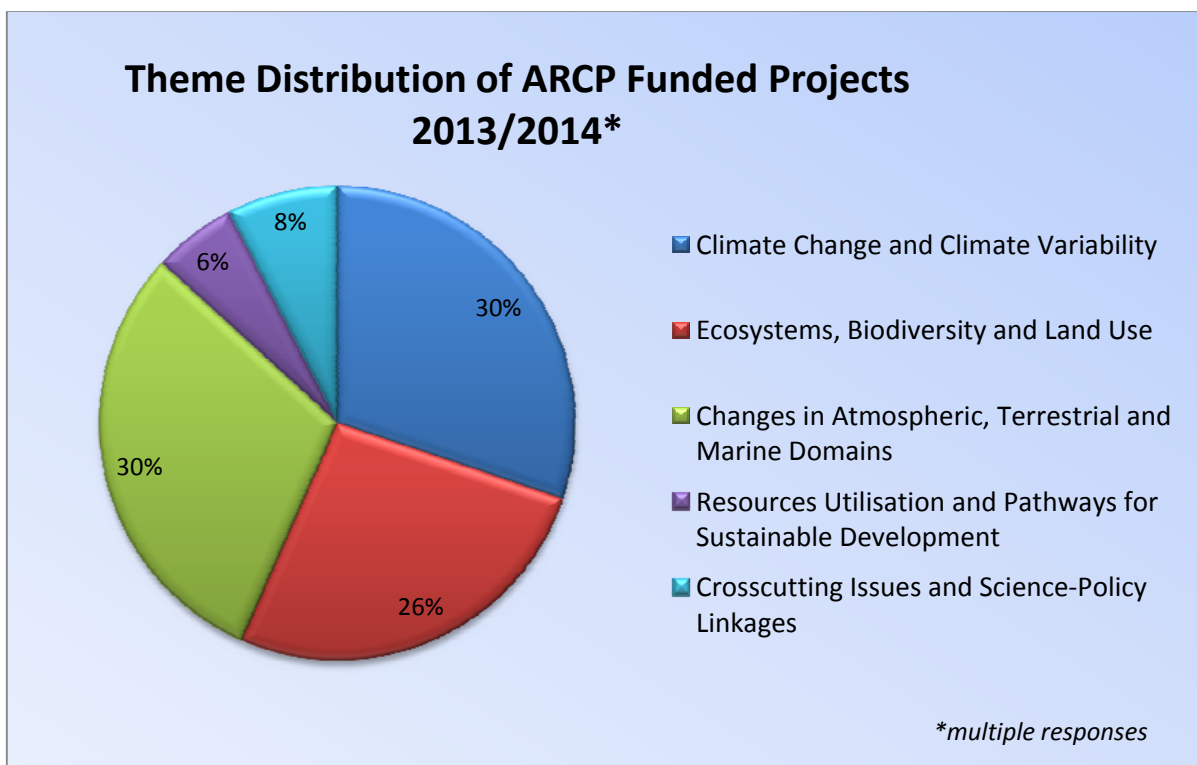


Thematic Distribution of Summary Proposals Submitted under the ARCP Programme
**multiple responses*

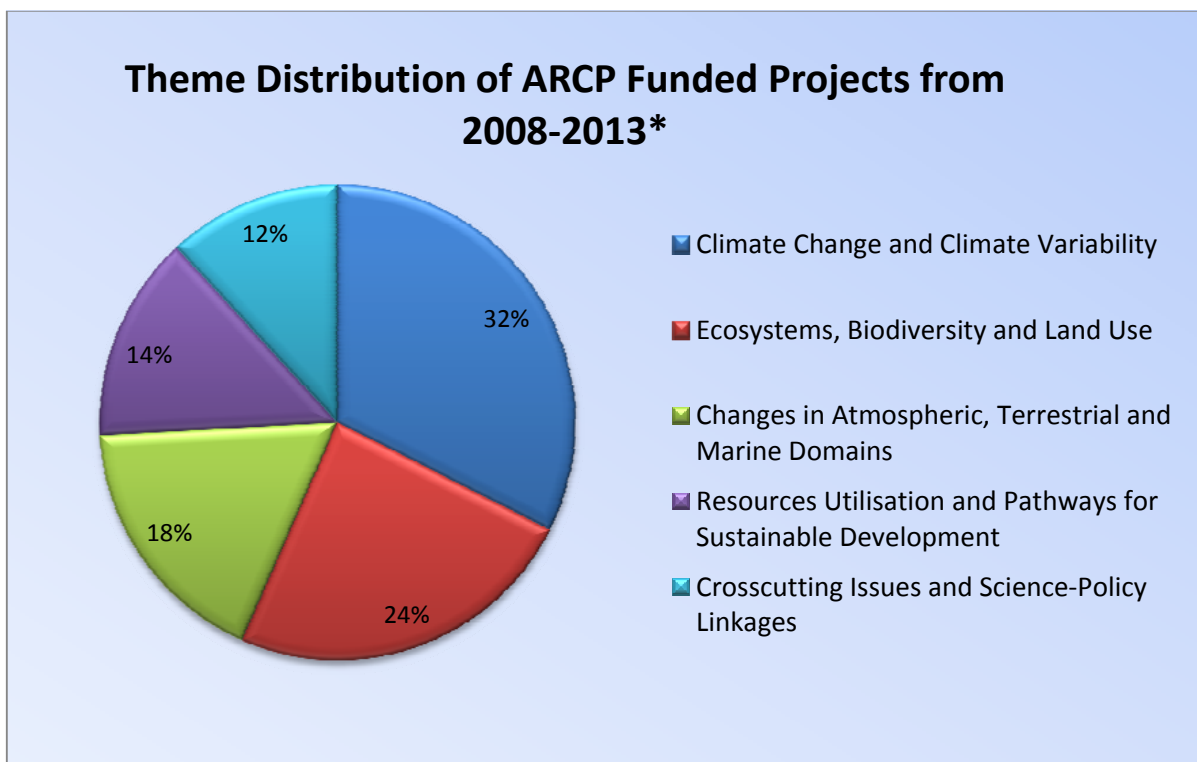


Thematic Distribution of Summary Proposals Submitted under the CAPaBLE Programme
**multiple responses*

Theme Distribution for ARCP Funded Projects 2013/2014

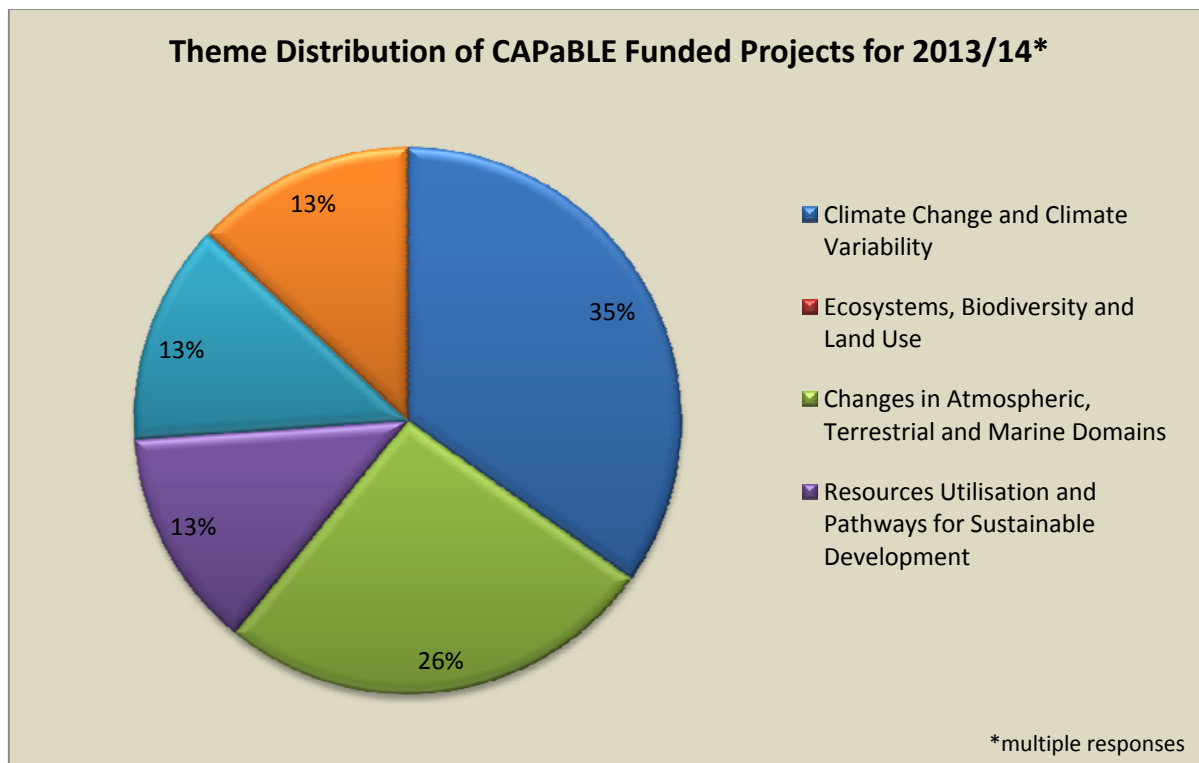


Number of projects: 28

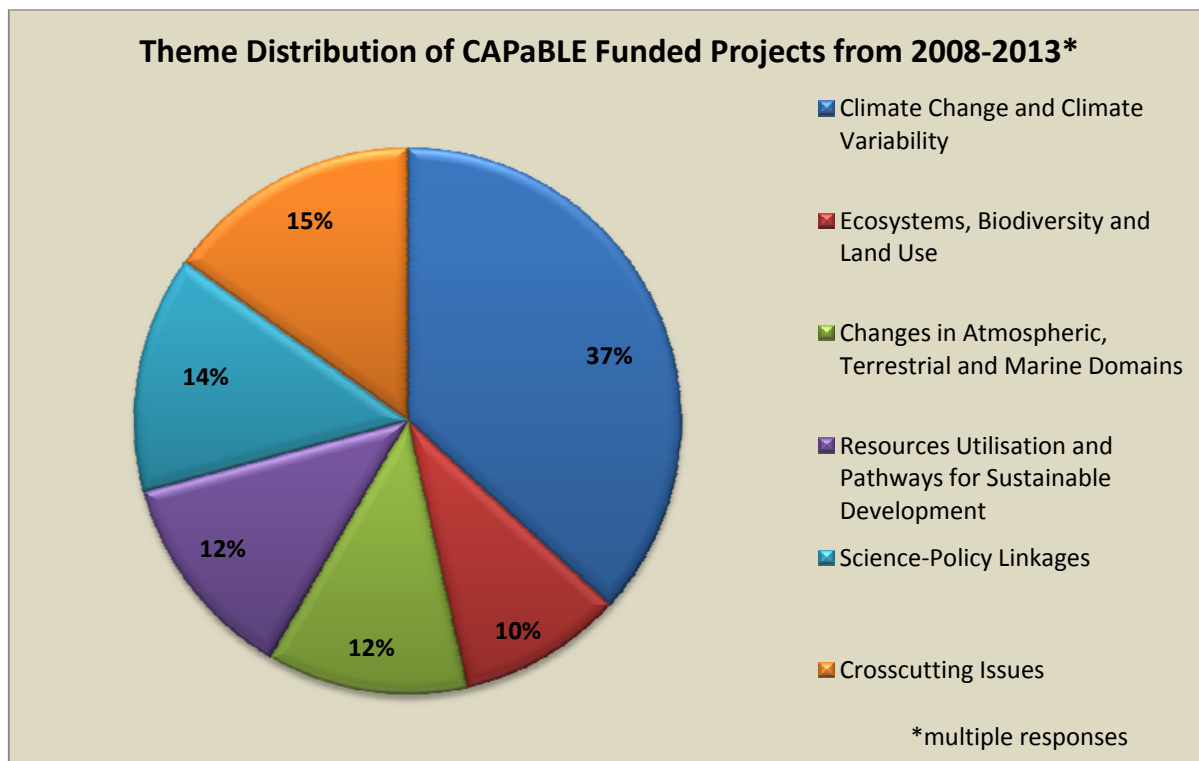


Number of projects: 115

Theme Distribution for CAPaBLE Funded Projects 2013/2014

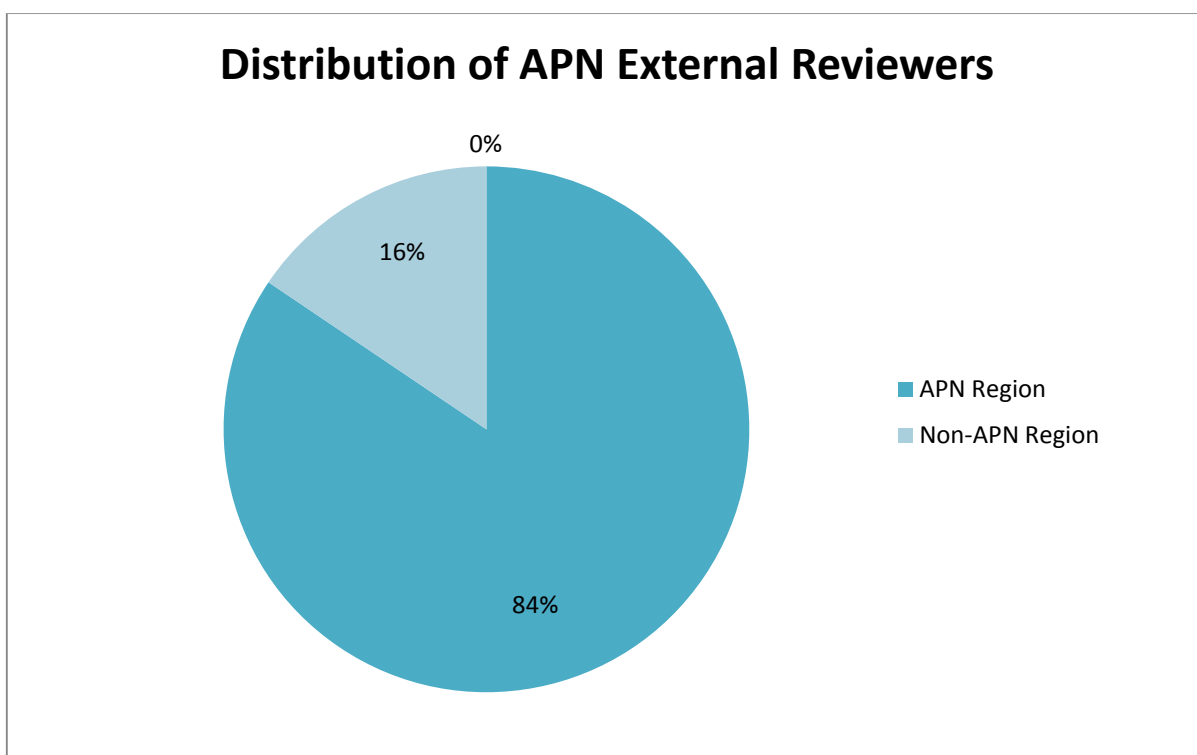


Number of projects: 17

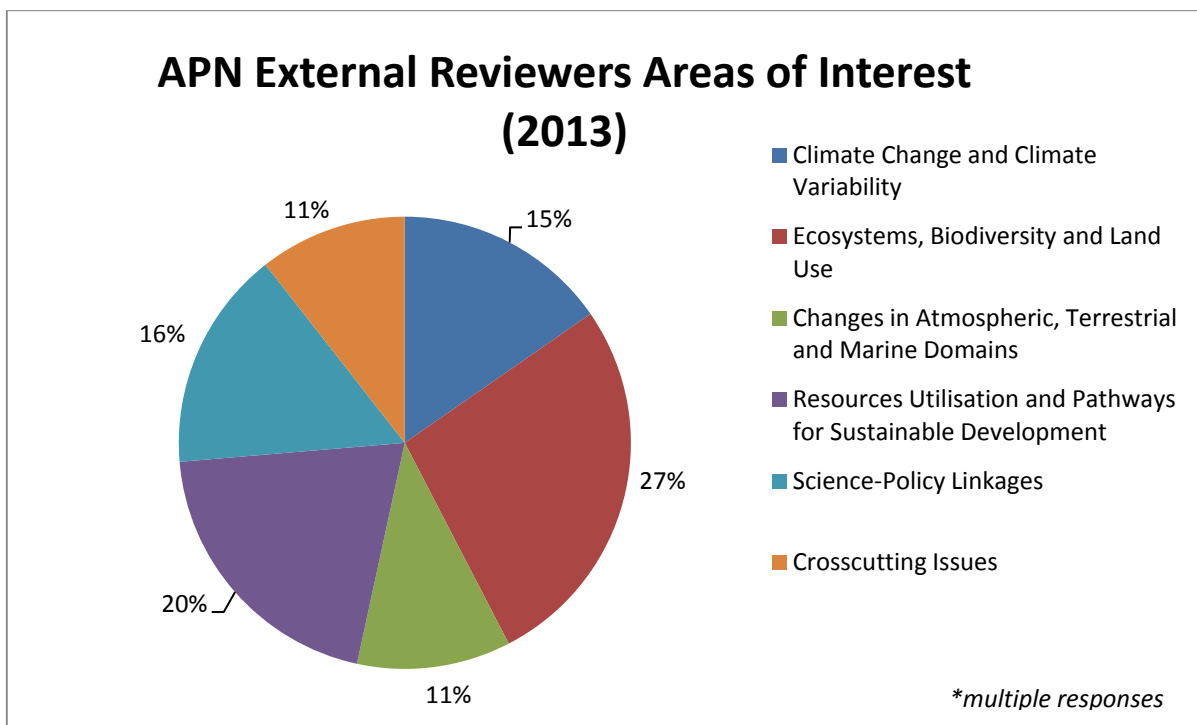


Number of projects: 94

External Reviewers' Information



General Breakdown of APN External Reviewers



External reviewers' area of interest with reference to APN Science Agenda (n=48)

General Profession	Number of Experts
Academe	21
Researcher/Scientist	15
Organisation*	12

*either as director, coordinator, officer, etc of an organization related to environment in general

External Reviewers' Areas of Expertise

Areas of Interest	Number of Expertise
Adaptation/Mitigation	5
Agriculture	1
Agroclimate	2
Agrometeorology	1
Atmospheric Science	1
Biodiversity	3
Carbon management	1
Chemistry	1
Climate Change	7
Coastal Zone Ecosystem	2
Crop Science	1
Disaster and Risk Management	2
Environmental Economics	3
Environmental Management	6
Environmental Science	1
Forestry	3
Geology	1
GIS/Remote Sensing	5
Hydrology	3
Hydrometeorology	1
Land Use and Land Cover Change	2
Marine Ecosystem	2
Meteorology	3
Mountain ecosystem	1
Natural Resource Management	3
Policy researcher	5
Renewable Energy	1
Social Science	1
Sustainable Development	5
Urban Planning	2
Urbanisation	4
Water Resource Management	2
Mitigation	4

FRAMEWORKS

Item 05-02(a): Biodiversity and Ecosystem Services (B&ES)

IGM is requested to discuss and consider for approval activities under the B&ES framework

1. Available Budget for Proposed Activities:

There is presently US\$43,000 available for the Biodiversity and Ecosystems Services Framework and this allocation is for (a) a Climate Impacts on Ecosystems Services Toolkits (led by UN-ICECAR, Srikantha Herath) at US\$40,000 under 4 above; and (b) networking activities with IPBES and other related bodies under 3 above, at US\$3,000.

2. Background

The **APN Biodiversity and Ecosystem Services Framework** is an opportunity for member countries, stakeholders, the donor community, and the international research communities and networks to propose and engage in collaborative activities with the APN that embarks on underpinning regional-based research; capacity development via training and technology transfer; strengthening, establishing and/or interacting with science-policy mechanisms in key thematic areas under the B&ES Framework for the Asia-Pacific region, especially in developing countries. **The Opportunity paper is attached as IGM-SPG/19/05-02(a) Appendix 1.**



3. B&ES Activities and Opportunities

Presently there are no formal projects operating under the B&ES Framework. This said, under the 2014 annual calls for proposals, those newly awarded proposals from fiscal year 2013 are expected to be formally shifted under the Framework. While the results are not available at the time of writing, it is expected that there will be one or more activities from the CAPaBLE and ARCP programmes that fit the “area of interest” of Biodiversity and Ecosystem Services Framework. For more information on the Opportunity Paper, please look at the Trifold provided or visit <http://www.apn-gcr.org/bes-paper>

4. Communication and networking activities

- IPBES (please refer to IGM-SPG/19/05-03 under science-policy engagement).
- UN-CECAR, UNU-IAS.

- Other interested parties as/when initiated under the B&ES Framework and Opportunity Paper (Appendix 1).

5. Proposed Future activities

- Biodiversity and Ecosystems related activities newly approved under the ARCP programme will be strategically shifted to the Framework;
- Partnership with UN-CECAR to develop a toolkit for Climate Impacts on Biodiversity and Ecosystems Services. This was approved by the 18th IGM

APN Biodiversity and Ecosystem Services Framework

DRAFT OPPORTUNITY PAPER

The present paper invites member countries, stakeholders, the donor community, and the international research communities and networks to propose and engage in collaborative activities with the APN that embarks on underpinning regional-based research; capacity development via training and technology transfer; strengthening, establishing and/or interacting with science-policy mechanisms in key thematic areas under its framework for biodiversity and ecosystem services for the Asia-Pacific region, especially in developing countries.

1. Introduction

Home to more than half the world's population and a region that is spectacularly rich in biodiversity, Asia and the Pacific is rapidly developing economically.

Policy- and decision-making in the region to realise sustainable, green growth practices need to be underpinned by sound scientific knowledge, and mechanisms that effectively link biodiversity and ecosystem services (B&ES) to sustainable development and green growth is lacking.

With this rationale the APN has undertaken a series of activities over two years culminating in the present *Opportunity Paper* for the APN B&ES framework (*Appendices 1 and 2*).

In the lead up to establishing the present document, questions of “What do we know about ecosystem services?” and “How do we want to manage them?” were raised.

While it was generally agreed that the B&ES framework must include green growth and sustainable development, the question to “What extent is economics involved?” was stressed, particularly in the context of policy- and decision-making in the region.

2. Underpinning the science of B&ES for policy

Effective ways of collaborative science that ensure policy- and management- decisions are informed by the best available information, and good understanding of uncertainties associated with science, are needed.

An example of such an established, effective process is the Intergovernmental Panel for Climate Change (IPCC), particularly via its synthesis reports, for example, the IPCC Fourth Assessment Report (IPCC, 2007).

An IPCC fifth assessment is underway and a report for policy makers is expected in 2014.

A similar mechanism was established recently for B&ES called the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES; see www.ipbes.net), as agreed by Governments in the Busan Outcome (IPBES, 2010). The first plenary

of IPBES established preliminary rules and procedures for its work (IPBES, 2013).

An IPCC for biodiversity, IPBES recognises the global importance of freshwater, marine and terrestrial ecosystems, and the services they provide.

In June 2012, the landmark United Nations Rio+20 sustainability conference presented the outcome “The Future We Want” (UNSKDP, 2012a).

Under its B&ES framework, the APN supports activities that are in line with Rio+20 outputs, in particular those highlighted in Parts: (II)61; (IV)E97-99, 102, 111, 122; (V)A 160,163-165, 205, 174, 177, 193, 197, 198, 201, 202, 204, 205, 212; (VI)B275, 276; and (VI)C 280 (UNSKDP, 2012b; see *Appendix 3*).

These areas are not intended to be exclusive but rather complement the goals of the APN B&ES Framework as well as underscore the importance of marine, coastal, freshwater, forest, and wetland and dryland ecosystems for livelihoods and human well-being.

3. Opportunities under the B&ES framework

A series of meetings and workshops since February 2011 has identified important existing gaps for the Asia-Pacific region requiring attention through comprehensive scientific research, capacity development and science-policy mechanisms (APN, 2011a).

With input from key experts from ASEAN ACB, DIVERSITAS, GEOBON, ICSU, MSU, UNU, among others; the gap analysis report (*Appendix 2*) outlines important thematic areas and key activities for the region, and underscores the need for APN to effectively align its scientific theme of Biodiversity, Ecosystems and Land-Use with the international arena, importantly the work of UNCBD, Millennium Ecosystems Assessment (MEA, 2005), such as the impact of degrading ecosystems on the ability to achieve the Millennium Development Goals (see <http://www.un.org/millenniumgoals/>); UNFCCC through decisions on REDD+ mechanisms, ecosystems-based approaches to climate adaptation, among others (UNFCCC, 2012); UNCSD Rio+20 (2012a,b); and

IPBES, especially in this “United Nations Decade on Biodiversity 2011-2020” (UNCBD, 2011).

APN invites member countries, stakeholders, the donor and international research communities, etc., to propose collaborative activities that will provide opportunities, particularly in developing countries, to engage in activities under its B&ES Framework.

Encompassing a range of comprehensive, regional-based and collaborative scientific research, capacity development, and science-policy mechanisms, “thematic gaps” will include, broadly speaking:

Four main research themes:

- i. *Identification of drivers and pressures for biodiversity change that influence ecosystem services (land-use change; climate change, etc.)*
- ii. *Assessment of the impacts of biodiversity loss and vulnerability to the shrinking of ecosystem services*
- iii. *Prediction of changes in biodiversity and ecosystem services through model-based scenarios*
- iv. *Adaptation, response and mitigation of the depletion of biodiversity and ecosystem Services*

Some of the key activities related to the above four themes are outlined in *Table 1* (page 3).

Other activities that may be considered in line with the key activities in *Table 1* in are A) awareness-raising, B) capacity development, and C) science-policy mechanisms as elaborated below.

A. Awareness raising and activities that link and/or develop networks: Research on the effectiveness of conservation education/awareness raising and capacity building on diversity in nature at all levels of biological organisation; Traditional knowledge and culture in nature conservation and management; Joint curriculum development or instructional material development; Updating stakeholders on more recent developments in research on the fundamental importance of diversity in nature and ecosystems; Improving standards of professional environmental practice; Making more visible the connections between losses in diversity at all levels of biological organisation and human well-being.

B. Training: Developing capacity for scenario-development tools, training on predictive modelling and systems analysis at various scales; Training to evaluate diversity and ecosystem services for incorporating into decision-making systems and models.

C. Science-policy mechanisms: Developing appropriate tools and processes to facilitate policy and decision-making based on complex scientific understanding;

Research to better understand the needs of policy-makers and the private sector on biodiversity and ecosystem services; Research to better understand how to facilitate engagement and support of the private sector in education on biological diversity and nature conservation; Promoting research that is holistic, integrated and interdisciplinary in approach; Enhancing awareness of different types of uncertainties for model-based forecasts.

4. Framework that is forward looking

Ensuring that the framework is dynamic in nature, the following actions will be undertaken in the APN’s present third strategic phase (APN, 2011b) from April 2013 (mid-term) until March 2015 (end):

- Identifying from the present paper selected topics for the annual calls for proposals (ARCP and CAPaBLE programmes) for 2013 and 2014.
- Developing an “opportunities brochure” inviting collaboration with organizations, stakeholders and other interested parties from the member countries and international community.
- Seeking investment from the donor community.
- Synthesizing results of activities under the APN’s “Ecosystems, Biodiversity and Land-Use” Focused Activities programme (EBLU, 2011), and other relevant activities.
- Addressing and incorporating gaps identified for ecosystems services in the APN book on Climate in Asia and the Pacific: Security, Society & Sustainability (Stevenson & Manton, 2013).
- Undertaking an 18-month review (from September 2014) with the aim of integrating key activities under the B&ES framework into the 4th Strategic Plan of the APN (from April 2015).

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Table 1. Key activities for thematic areas under the APN Biodiversity and Ecosystems Framework	
Thematic Area	Key Activities for the Asia-Pacific Region
1	<ul style="list-style-type: none"> – Supporting the articulation of biodiversity and ecosystem indices – Understanding the dynamics of land and land-use change on biodiversity resources and ecosystem services including the influence of climate change
2	<ul style="list-style-type: none"> – Enhancing knowledge and understanding on the role of biodiversity in nature as a way of conferring ecosystem resilience and reducing vulnerabilities in the face of global environmental change – Research that will identify and document ecological tipping points; Research that will illustrate the linkages between socio-cultural knowledge and livelihoods to different levels of biodiversity – Case studies that will support the work of international programmes on evaluation of changes in biodiversity and ecosystem services AP-BON
3	<ul style="list-style-type: none"> – Build spatially-explicit models for areas of interest within the Asia-Pacific region that enable the potential for future change in biodiversity and ecosystem services to be assessed as a function of plausible scenarios of change in land use, climate and invasive species – Extending these models to incorporate the potential consequences of spatially-explicit configurations of management responses in terms of multiple values of diversity in nature and ecosystem services – Establishing links between models and associated models of human-natural systems and between these models and global-scale scenario modeling of biodiversity and ecosystem services
4	<ul style="list-style-type: none"> – Elucidating parsimony and conflict between carbon management and biodiversity conservation as key mitigation strategies – Integrating the human dimensions into action for biodiversity conservation and carbon management – Restoring biodiversity in disturbed or managed ecosystems – Synthesizing best practices for adaptation and mitigation for biodiversity and ecosystem services

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 For more information on the APN or on the present framework, contact the APN Secretariat at info@apn-gcr.org or visit the APN Website: www.apn-gcr.org

FRAMEWORKS

Item 05-02(b): Climate Adaptation Framework

The IGM is requested to discuss for approval the activities under the Climate Adaptation Framework, in particular a budget for new focused activities under the Climate Adaptation Framework’s activity on CCA-DDR-L+D

(1) Background

The APN 18th APN established its **Climate Adaptation Framework** following a scoping workshop in August 2012 in order to enhance science-based adaptation activities of APN developing countries, which describes activities of high priority under APN global change research programmes and partnership development including possible joint activities with other organizations and networks. The APN’s Climate Adaptation Framework is attached as *IGM-SPG/19/05-02(B)-Appdx1* and was endorsed at the 18th Intergovernmental Meeting.



(2) Scoping, Networking and Promotion Activities related to CCA-DRR-L+D



The 18th IGM approved activities under the APN Climate Adaptation Framework (CAF) to enhance and link **Climate Change Adaptation, Disaster Risk Reduction, and Loss & Damage (CCA-DRR-L+D)** that incorporates regional research and capacity building activities in the Asia Pacific region. With funding from the Ministry of the Environment, Japan (MOEJ), a call for focused activities was formally launched at the end of August 2013, during APAN’s Forum on Loss and Damage, and new activities are expected to be funded following the review process of the present call for focused activities (see Part 3 below).

(a) Scoping Workshop

Objectives:

The first of a range of activities was a scoping workshop, held 21-23 August, 2013 to address the focused theme. Following an agenda that was developed among participants, the main objectives of the recently held workshop were to:

- Identify and explore thematic areas of high priority for sub-regional levels of Southeast Asia, South Asia, Temperate East Asia and Oceania.
- Explore both economic and non-economic losses of Loss and Damage, particularly areas where gaps have been identified.

- Provide common understanding of the terminology of Disaster Risk Reduction and Loss and Damage due to climate change impacts.
- Empower APN developing member countries to address Loss and Damage and conduct research and capacity development activities associated with Loss and Damage. This will allow the APN members to be involved in conducting activities and reviewing related proposals under the APN's focused activities.

Taking the above into consideration, the workshop explored the most important areas for the region, reviewed work undertaken, particularly case studies, and discussed needs and opportunities for conducting research and capacity development activities to support APN's developing countries to address DRR and L+D as associated with climate change.

Participants:

Thirty participants working in areas of adaptation, disaster risk reduction, loss and damage associated with impacts of climate change, including the followings;

- APN Member Representatives from four sub-regions of Oceania, South Asia, Southeast Asia and Temperate East Asia (Cambodia, China, Malaysia, New Zealand, Indonesia, Pakistan, Sri Lanka, USA)
- Experts on Loss & Damage
- Experts on Disaster Risk Reduction and Disaster Management
- Experts in Climate Adaptation
- Experts interested in Loss and Damage in the host country.



Outputs:

Selected High Priority Themes for the Call:

- Selected high-priority themes for the APN Focused Calls for Activities. The call was launched on 30th August and received an overwhelming response of **85 Expressions of Interest**.
- Increased awareness of APN members on issues of Loss and Damage and how they can be effectively linked to Disaster Risk Reduction and management and Climate adaptation.
- Gap analysis report (linking CA with DRR and L+D) that is policy-relevant: this is work in progress and a proceedings is currently being prepared.

(b) Helping to develop the Forum on Loss and Damage (Award approved at US\$47,500).

The recently formed Loss and Damage Forum established at the Asia-Pacific Climate Change Adaptation Forum, in Incheon, Republic of Korea, March 2013, and highlighted that “*the Asia-Pacific region is the most vulnerable region to a range of natural disasters and climate change impacts, from those emanating from extreme events to those resulting from slow onset processes.*”

At a recent Forum held in South Korea and attended by the international community including the APN, and supporting organisations the following needs were emphasised:

- accessible, high quality data relevant for decision makers and communities;
- regional collaboration; and
- more emphasis on slow-onset events.

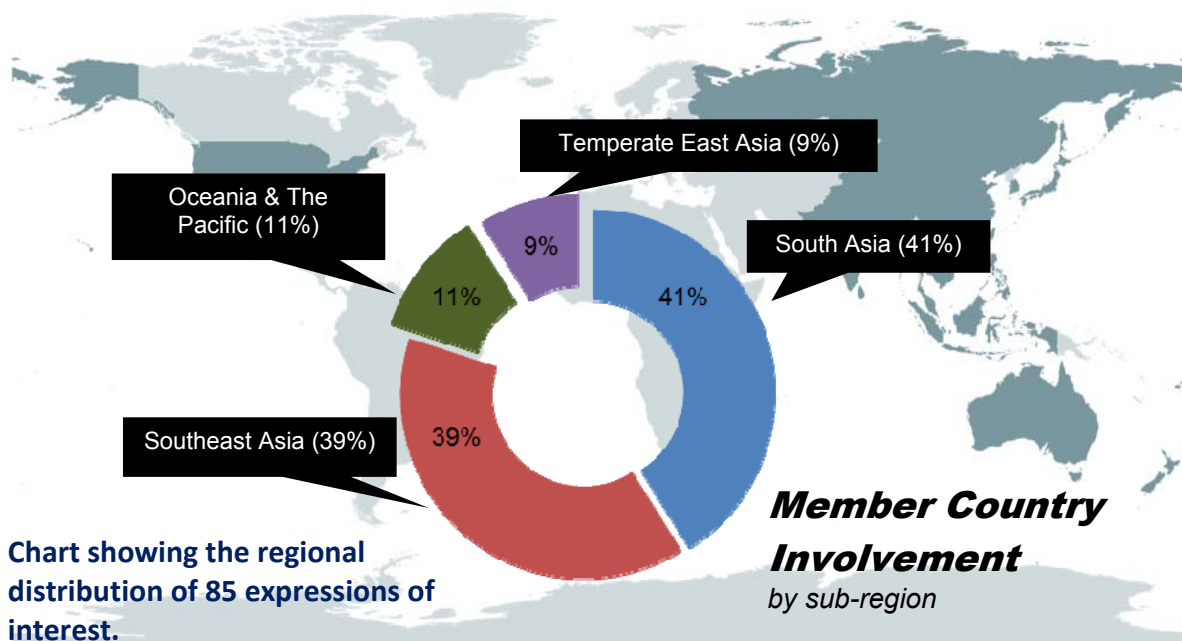
(3) Focused Call for Proposals on CCA-DRR-L+D

Budget Requested:	2013/14: US\$680,000 (Year 1 of projects):
	2014/15: US\$550,000 (Year 2/3 of projects): SEEKING APPROVAL

Launched a call for Focused Activities under the theme: ***Climate Adaptation, Disaster Risk Reduction and Loss + Damage***. This year we receive a record number of **expressions of interest: 85** in total.

Of the 85 expressions of interest, 22 were invited to submit a full proposal, one of which declined due to conflicting schedules.

The APN is presently **considering 21 full proposals for funding under the present call and those SPG members who attended the workshop will be reviewing these**. New projects are expected to begin their activities in Spring 2014.



Themes of particular interest are outlined below and are of high priority to the APN in this focused call for activities.

Regional-based multi-disciplinary research

a) Integrated Modeling that reduces vulnerability and improves resilience to Loss & Damage by looking at a combination of:

- Climate vulnerability, impacts and adaptation
- Economics
- Social and human dimension

b) Regional Downscaling

- Downscaling knowledge for adaptation, risk and loss & damage that could be transferred to the local level (including remote communities, districts, cities, etc.)
- Scientific community needs to downscale as much as possible to help impact assessment at the local level
- Gap analysis (including best practices) in knowledge and understanding of loss and damage at the local level

c) Multi-trans disciplinary research and assessment of:

- Impacts of extreme weather events and slow onset events at regional, sub-regional and local levels (what are the gaps; what is the status quo?)
- Reducing loss by revisiting current aspects of Disaster Risk Management strategies across local, national and regional (including transboundary) scales.
- Non-economic/non-insurable losses due to climate - extreme and slow onset events (cultural, health, psychological, social, etc.)

- Integrating the risks identified through Climate Change Adaptation, Disaster Risk Reduction and Loss & Damage into regional planning: What is the present scientific understanding on adaptation, disaster risk reduction, and loss & damage? Is more needed? Are there sufficient science-policy linkages?
- Methodology, terminology and other concepts that might effectively link climate change adaptation, loss and damage, and disaster risk reduction (for example, developing methodologies for quantifying non-economic losses)

Capacity Building (including dissemination, awareness-raising)

- a) Enhancing **capacity for assessment** to plan and implement Loss and Damage activities related to Disaster Risk Reduction and Climate Change Adaptation, both by government authorities and civil society that would also document successful practices of local, experiential and indigenous knowledge
- b) **Training, awareness-raising; strengthening partnerships** that will link CCA, DRR and L+D for:
 - local communities and local governments to enable bottom-up planning and mechanisms
 - Increasing the knowledge-base of CCA-DRR-L+D and how it might impact future generations
 - Strengthening linkages, effective coordination and building synergies across neighbouring countries to enhance cross-learning, especially at the sub-national/district level
- c) **Addressing gaps in multi/trans-disciplinary approaches:**
 - Developing toolkits, mapping different institutions that are engaged in, for example, disaster risk management that can help address loss and damage
 - Establishing entry points for science-policy interfaces at regional, national and local levels
- d) **Retaining knowledge, maintaining data, sustaining disaster loss databases**
 - What is going on, where are the gaps, training initiatives on resilience
 - Decision-support tools and training opportunities. Local language would be used at the local level and translations would be available
 - Addressing the problems of existing data: insufficiency, inaccessibility and/or inconsistency



APN Framework on Climate Change Adaptation

1. As a result of the discussions at the *APN-ICAS Scoping Workshop to Enhance the Climate Adaptation Actions of APN Developing Countries*, it is suggested that the APN establishes a multi-year strategic framework focusing on climate adaptation from FY2013 (April 2013), pending resource availability.
2. The framework aims to enhance science-based adaptation activities of APN developing countries and comprises the following components:
 - i. regional research programme that has a capacity building element
 - ii. capacity building programme (including projects at national and sub-national scales)
 - iii. activities jointly conducted with other organizations and networks
3. Themes of activities under the framework include a range of climate adaptation areas prioritized in the decisions at Conference of the Parties of United Nations Framework Convention on Climate Change including COP16 related to “*Enhanced action on adaptation*” (1/CP.16, para.14.(a)-(i), FCCC/CP/2010/Add.1) and COP18 related to “*Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change to enhance adaptive capacity*” (3/CP.18, para.7(a)-(f), FCCC/CP/2012/Add.1).
4. Based on needs, gaps and lessons for climate adaptation in the Asia-Pacific region (as described in the Appendix), regional research and capacity building projects should contribute to improving applicability by users, focusing on the following themes:
 - i. Development of high-resolution observational, model and downscaled datasets that can contribute to filling data gaps
 - ii. Sharing of needs-oriented data
 - iii. Calibration and validation of regional climate models; and analysis of projections and assessment of uncertainties
 - iv. Development and utilization of impact, vulnerability, risk and economic assessments
 - v. Improvement of communication skills of scientists and practitioners with stakeholders including local government, community, private sector and civil society, for

encouraging policy-makers to formulate and implement adaptation plans based on the latest scientific knowledge

- vi. Utilization of available information including climate data in applications for adaptation
5. It is recommended that the APN enhance its partnerships with local, national, regional and international organizations and networks under the new program, which include (but are not limited to) the following¹:
- i. ADB**
 - a. Collaboration on a regional climate scenarios consortium and library in the areas of coordination of data collection, rescue, mining and calibration
 - b. Collaboration on needs assessment of users at national and local levels
 - ii. APAN**
 - a. Multi-year collaboration on capacity development for scientists and practitioners on climate adaptation including themes on adaptation plans and “train the trainers” activities
 - b. Organization of a follow-up meeting for recommendations to strengthen partnerships at the 2013 Adaptation Forum
 - iii. ICAS**
 - a. Involvement of Japanese scientists for adaptation activities implemented by APN and its partners
 - b. Organization of follow-up events with APN
 - iv. Ministry of Interior, Thailand**
 - a. Cooperation with the APN national Focal Point for Thailand on the development of community-based adaptation activities that involves local governments and communities in Thailand
 - v. UNU (UN-CECAR)**
 - a. Training activities for scientists and practitioners on climate adaptation including

¹The institutions and organizations listed expressed interest in partnering with the APN and attended the scoping workshop.

modeling, downscaling, resilience, etc

- vi. WCRP**
 - a. Collaboration with CORDEX-Asia on capacity development in climate downscaling
 - vii. International Center for Climate Change and Development ICCCAD:**
 - a. Collaboration on activities on loss and damage associate with climate change impacts including Asia Pacific Forum on Loss and Damage
 - viii. Asia-Pacific Center for Security Studies (APCSS)**
 - a. Collaboration on activities related to science and security associated with climate change impacts
 - ix. Climate Change Institute of Australia National University (CCI-ANU)**
 - a. Collaboration on scientific activities on climate adaptation
6. It is recommended that APN further develops its climate adaptation programme and expand its partnerships with organizations and networks through relevant platforms. This should be considered in accordance with the APN work programme and budget, and the APN Strategic Plan and Framework Document.

Appendix**Needs, gaps and lessons for climate adaptation in the Asia-Pacific region****■ Data, Modeling, Downscaling**

- Objective of downscaling
 - ✧ Huge spectrum, variety of purposes
 - ✧ Dynamic or statistically downscaling can be selected depending on the purposes
- Data observation, collection and mining
 - ✧ In particular, the lack of capacity to collect and mine data
 - ✧ Development of common data formats
- Calibration of RCMs
 - ✧ How to combine downscaled data with local data
- Development of high resolution downscaling that is suitable to users' needs (sector-specific)
- Time scale
 - ✧ Ranging from seasonal to decadal predictions, medium term (about 5 years) to long-term predictions; and long-term climate projections
- Data distribution/interface with users
 - ✧ Capacity development to be a good user (individual and institution)

■ Impact and vulnerability assessment

- Development of assessment models
 - ✧ Different types of assessment models (impact assessment, risk assessment, and vulnerability assessment)
 - ✧ Cost analysis
 - ✧ Current/ future impacts
- Compound impacts (integrated assessment of climate and non-climate impacts)
- Capacity building for both modelers and users

■ Adaptation planning and implementation

- Scientific capacity of practitioners/decision-makers to formulate national adaptation

- plans
- Development of a screening tool on climate risk assessment for infrastructure
 - Development of approach to encourage policy makers to adopt scientific knowledge
 - ✧ Present response which is favored by practitioners
 - ✧ Consideration of policy priorities other than climate policies such as development policy
 - ✧ Consideration of economic aspects
 - Role of public and private sector
 - Range of capacity building
 - ✧ Individual, institution, governance
 - Consideration of uncertainty
 - Consideration of politics, governance, and culture
 - Enhancement of communication skills for both scientists and policy makers
 - ✧ Scientists' capacity to communicate with society (i.e., mass-media)
 - ✧ Risk perception
 - ✧ People's acceptance

Item 05-02(c): Low Carbon Initiatives (LCI) Framework

Action required: IGM is requested to discuss for consideration and approval of activities under the LCI framework

APN's low carbon initiative (LCI) framework was established at the 17th IGM, with financial support from the Ministry of Environment of Japan to enhance mitigation action across countries in the Asia-Pacific region towards achieving the global vision for a low carbon, sustainable future.

1. LCI funded projects update

Currently, APN is supporting two capacity building activities and five regional research projects related to low carbon development. All seven projects started their project activities from April 2013, and the Secretariat has drawn all contracts. Recommendation for continuation of multi-year projects will be requested from the Steering Committee following satisfactory progress by selected review team. Details of APN funded LCI continued projects are available in the appendix *IGMSPG/19/05-02 App 1*

2. Communication and networking activities

Under the communication activities of the LCI framework, APN supported the first annual meeting of the Low Carbon Asia Research Network (LoCARNet), which was held on Bangkok, Thailand 16-17 October 2012. As a follow up to that annual meeting, APN organized a special session and participated in the second LoCARNet annual meeting, which was held on 25 July 2013, Yokohama, Japan. APN invited five APN project leaders to present their project activities at the APN session.

To showcase past activities of APN related to low carbon development (LCD) APN invited Prof. P. R. Shukla as a session moderator and Dr. Janya Sang-Arun, a former CAPaBLE project leader as presenter. In addition, three LCI project leaders: Dr. Shobhakar Dhakal, Dr. Joni Jupesta, and Prof. Damasa Macandog were invited to share their APN-funded activities.

The main outputs:

- Session provided a platform for project leaders to interconnect and share project information and was considered an effective knowledge-sharing approach.
- The Asia-Pacific region has diverse and interconnected areas of interest in low carbon development and most of the issues are linked to cities, which play a crucial role in low carbon society.
- All the presenters agreed that their projects need to identify a baseline for real change in low carbon development and implementing policies related to LCD.

- Producing policy briefs and synthesis reports are important to the delivery of research outputs to policy makers and decision-making bodies to drive a real transition of society towards a green economy.

3. **Proposed Future activities**

Based on the LCI session output, APN expects to synthesis the results and showcase via a report and policy brief. Approval is sought to synthesis the results, provide a synthesis report and policy brief on LCI project outputs.

i. Tentative Time frame

During the 2014 ISAP annual meeting, the Secretariat will hold a scoping meeting to design of the layout of the synthesis report and policy brief and decide on the main contents:

- Most of LCI Project leaders will participate to ISAP event as invitees. Therefore having back-to-back scoping workshop to plan and structure synthesis report is cost-effective and timely;
- Based on the discussion the structure of the report will be drafted and shared among the project leaders who will be asked to provide information from their projects; and
- Prepare questionnaires to identify policy recommendation from each project for the policy brief.

ii. Budget Requested

US\$20,000 is requested for synthesis (US\$10,000) and networking activities (US\$10,000).

Project Reference Number	Project Reference Number	Proposal Title	Project Summary	Proponent, Institution and Country	Email Address	Regional Collaboration Countries Involved	Project Duration	Funding (US\$)			Remarks from Secretariat	
								Total Funding	2013/13 Year 1 Funding (US\$)	2013/14 Year 2 Expected		Requested
LCI2012-01NMY(R)-Vashist	LCI2013-01NMY(R)-Vashist	Identification of policy and institutional gaps, drivers and strategies to scale-up low carbon and energy-efficient technology application in the construction and infrastructure sectors in South Asia	The proposed comparative research will study the rapidly growing construction and infrastructure sectors in the identified APN developing countries with a focus on low carbon, resource and energy efficient options. It will study the policy thrusts and national commitments towards transformation of the sectors and the barriers with respect to technology, know-how, regulatory mechanisms, capacities of stakeholders and market promotion. It will look at drivers for change within the institutional mechanisms, financing systems, incentives and partnership arrangements to define the critical elements of the eco-system for promoting low carbon development pathways in the identified sectors.	Dr. Sanjay Vashist Climate Action Network South Asia (CANSA)	ksnarath@clawall.org	India, Nepal, Pakistan	2 years	83,600	40,000	43,600	43,600	progress review process underway
LCI2012-02NMY(R)-Dhakal	LCI2013-02NMY(R)-Dhakal	Understanding and Quantifying the Water-Energy-Carbon Nexus for Low Carbon Development in Asian Cities	There are three research activities (a) comparative case-studies of Asian cities to characterize the nature of water-energy-carbon nexus and (b) quantification of the nexus in order to show the extent of the direct and indirect importance and to illustrate the potentials of the nexus to the low carbon development in cities, and (c) based on these, we will gauge the extent and relevancy of addressing the barrier and opportunities for optimizing the water-energy-carbon nexus.	Dr. Shobhakar Dhakal, Asian Institute of Technology, Thailand	shobhakar@ait.ac.th ar.chakal@ait.ac.th	Thailand, Japan, India	2 years	80,600	45,000	35,600	35,600	progress review process underway
LCI2012-03NMY(R)-Lopez	LCI2013-03NMY(R)-Lopez	Assessment of Carbon Sequestration through Vermitechnology in Organic Farming	This proposal is a multi-disciplinary research-based project that aims to assess the carbon pathway or footprint of a natural or organic farming system (using earthworms) and examine its effectiveness in lowering carbon emission through sequestration and reduction of use of petroleum-based inputs. A carbon pathway model and carbon credit potential of the system will be established.	Assistant Prof. Mariou J. Ang Lopez, UNIVERSITY OF THE PHILIPPINES VISAYAS, Philippines	mariangopez@upv.edu.ph	Philippines, Vietnam, Korea	2 years	83,500	45,000	38,500	38,500	progress review process underway
LCI2012-04NMY(R)-Macandog	LCI2013-04NMY(R)-Macandog	Integrated sustainability assessment of bio energy potentials in Asia: An application of a hybrid approach on trade-offs and pathway	The main objective of the project is to estimate bio energy potentials not only on a biophysical but also on a socio-economic perspective through systematic integration of parameters in trade-offs and pathways assessments. An understanding of the trade-offs among the socioeconomic and ecological determinants will allow design of strategies to maximize each country's bio energy potential.	Prof. Damsa B.M. Macandog, University of Philippines, Philippines	dmmacandog@up.edu.ph dem.macandog@yahoo.com	Philippines, Germany, China, India	2 years	90,000	45,000	45,000	45,000	progress review process underway
LCI2012-05NMY(R)-Jupesta	LCI2013-05NMY(R)-Jupesta	Low Carbon Urban Infrastructure Investment: Cases of China, Indonesia, and Japan	This research project will use explorative qualitative and quantitative approaches to define, measure and monitor the green investment in city scale. The definition is made during the first semester by examining activities and progress of local governments for a low carbon city. The second semester will be made to provide indicator to monitor the progress of the green investments based on market mechanism. The third semester will focus on the existing funding mechanism for technology transfer and foreign investment, to identify risks and barriers of investment in low carbon city, to examine the role of government or sponsors to facilitate and coordinate investments, to identify investors and understand the needs of investors. The fourth semester is used to monitor the progress that has been made based on the new funding mechanisms options in semester three based on the selected indicators created in semester two.	Dr. Joni Jupesta & Ms. Takako Wakiyama United Nations University Institute of Advanced Studies, Institute for Global Environmental Strategies	jupesta@iias.unu.edu wakiyu@iias.unu.edu iam@iges.or.jp	Japan, Indonesia, Thailand, China	2 years	83,700	45,000	38,700	38,700	progress review process underway
Total								421,400	220,000	201,400	201,400	

Item 05-03 Science-Policy Engagement

The IGM is asked to review the activities undertaken; and discuss and consider, with a view to approving, activities for the ensuing year.

Budget requested for 2014/14 activities:

IPBES, IPCC and UNFCCC/SBSTA: US\$16,000 (for approval under item 6).

South Asia Science-Policy Dialogue: US\$50,000 (approved at 25th SC Meeting)

UNFCCC SBSTA and COP Meetings

(a) UNFCCC SBSTA 38, Bonn Germany, June 2013

In response to UNFCCC Secretariat, the APN has been attending the research dialogues organised at annual SBSTA meetings at Bonn, Germany. Dr. Akio Takemoto, APN Secretariat Director and Dr. Andrew Matthews, invited expert to the SC, represented the APN at SBSTA38 and the research dialogue, which focused on recent developments in global climate information, and emerging scientific findings by the research community.



Dr. Matthews highlighted activities to support identification of policy priorities and regional capacity development actions, including supporting the region's young research community. In particular, Dr. Matthews introduced APN's ongoing and completed activities related to UNFCCC, including:

1. New book: Climate in Asia and the Pacific: Security, Society and Sustainability;
2. Selected research on terrestrial biodiversity;
3. New projects under the LCI framework;
4. APN's Climate Adaptation Framework, and new opportunities for Asia-Pacific countries; and
5. APN's Biodiversity and Ecosystem Services Framework, and associated new opportunities.

As the research dialogue was held early in the first week of SBSTA38 (instead of Saturday afternoon after a long week of meetings as was the case in 2012), it was not only well attended but also received a range of good comments and questions to the panel from delegates. Two very positive interventions about the activities of APN were made by the delegation of Japan attending the research dialogue. Full background about the research dialogue and APN's submission to SBSTA38 is available on the UNFCCC website (<http://unfccc.int/resource/docs/2013/sbsta/eng/misc05a01.pdf>).

International Research Dialogue at SBSTA40

The IGM is requested to consider and approve further interaction with the UNFCCC/SBSTA community by engaging in its high-level events, including the 40th session of SBSTA, which is scheduled to be held from 4 to 15 June 2014 in Bonn, Germany.

Suggested attendees to SBSTA40:

- Dr. Andrew Matthews, Invited Expert to the Steering Committee

(a) UNFCCC COP19, Warsaw, Poland, November 2013

Background: While scientists are grappling with the challenge of modelling for extreme event conditions, the world is moving into climate regimes that have no comparisons with the past. Hence, the past may not be the guide for countries as they tackle climate uncertainties and changing risks. This will require new strategies and discussions to deal with



uncertainty, including co-financing, strengthened partnerships and core networking strategies. Local community needs have to be factored in by so that action-oriented research can offer answers to the concerns of vulnerable communities. Knowledge production needs to be broadened, going beyond scientists and policy makers to include other actors who matter. This multi-stakeholder production of knowledge should consider financing, partnership and networking strategies from the scientific community, governments, the private sector, local communities, non-governmental organisations, and civil society.

Opening and Introduction: Mr. Satoshi Tanaka, Japan introduced APN, an intergovernmental network in Asia and the Pacific since 1996. He remarked that this is the first time APN has organised a side event, while noting APN's previous involvement with the UN Framework Convention on Climate Change (UNFCCC). He stressed his pride in being connected with such an organisation as APN's and provided his congratulations on the success of the network to date. Dr. Akio Takemoto, APN, explained that APN comprises 22 member countries in the Asia-Pacific region and focuses on climate change, biodiversity, water, land-use change research. He listed four goals: cooperating regionally in global change research; facilitating interactions between scientists and policy makers; improving scientific and technical capabilities; and cooperating with other global change networks. He announced the launch of APN's new book, entitled *Climate in Asia and the Pacific: Security, Society and Sustainability*.

Member Country Presentations: Four countries, namely Thailand, Sri Lanka, Bhutan and Japan provided presentations and presented their perspectives on the topic. Dr. Soottiporn Chittmittrapap, Thailand, stated climate change is perceived as a development challenge in Thailand. He noted support from the US Agency for International Development (USAID) to set up a Centre for Scientific Research on Climate Change, linking six organisations to combine funding and expertise. Dr. Monthip Srirantana Tabucanon, Thailand, introduced Thailand's Climate Change Research Strategy, including nine areas, inter alia: modelling and assessment; agriculture and food security; ecosystem dynamics; climate and health; urban development; and knowledge management. Dr. Sunimal Jayathunga, Sri Lanka, expressed the need to implement action-oriented research and to pool resources, while noting the need for additional support for capacity building, technology development and technology transfer. Mr. Karma Tshering, Bhutan, highlighted that Bhutan is allowed to increase emission levels under the UNFCCC, but for the "human benefit" they prefer to be carbon-neutral but require support to ensure this. Mr. Tshering noted climate change, environment and gender are mainstreamed at the policy and project level and stressed that Gross National Happiness is something we should all strive for as the future is in the hands of our younger generations. Dr. Junichi Fujino, National Institute for Environmental Studies (NIES), Japan, introduced an ongoing collaborative research project between Japan and Malaysia, the Iskandar Malaysia Research Project which aims to facilitate a green economy, green community and green environment.

Perspectives from Partner and Stakeholder Organisations: Short interventions were provided for other participating organisations. Dr. Ali Taqeer Sheikh, Climate and Development Knowledge Network (CDKN), noted strong overlap between CDKN and APN, as both are strong multi-sectoral networks attempting to bridge the science-policy gap. Dr. Hiroki Kondo, MEXT/RESTEC, highlighted ongoing modelling activities in Japan and how this has influenced policy research in Japan and other parts of Asia, while inviting researchers from developing countries to collaborate. Dr. Takuya Nomoto, Ministry of the Environment of Japan, provided pertinent remarks as the final speaker emphasising that the capacities of developing countries have been enhanced by partnerships, such as those developed by APN.

Summary: The moderator, Dr. Linda Anne Stevenson, APN, summarised the ensuing panel-interactive audience session highlighting that APN’s function, role and ability to facilitate research and capacity development project implementation in developing countries and provide holistic approaches linking the natural science of climate change with socio-economic aspects is key for effective adaptation and mitigation responses. She also stressed that expansion of the science-policy approach to other regions may be pertinent and worthwhile by sharing best practices at events such as the “Adaptation Futures” conference in 2014 to be held in Brazil, highlighted by audience member Dr. Saleemul Huq. Other main points highlighted during the event will be shared with the APN members for consideration as it transitions into its 4th Strategic Phase from April 2015. Some of these are:

- *Best practices and climate knowledge needs to be shared with the public;*
- *APN should continue to mobilise funds. In doing so, developed and developing countries need to be involved;*
- *The uniqueness of APN is strong and needs to be protected. Now APN is ready for a second generation of projects that are more complex in nature and larger in scope;*
- *Strengthening financing, building partnerships for action-oriented research; and*
- *Sharing national experiences across borders on what has already been done.*

Intergovernmental Platform for Biodiversity and Ecosystems Services (IPBES)

(a) AOF Activity: Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES Conceptual Framework and Knowledge Sharing

With full funding from the APN, the United Nations University Institute for Sustainability and Peace (UNU-ISP) and the Korea Environment Institute (KEI) hosted a workshop entitled “Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES Conceptual Framework and Knowledge Sharing” in Seoul, Republic of Korea, from 2 to 4 September 2013, with joint support from APN and the Ministry of Environment, Republic of Korea.



The main objectives of the symposium-cum-workshop were: (1) to discuss regional interpretation of the IPBES (Intergovernmental Platform on Biodiversity and Ecosystem Services) conceptual framework, which is at the final stages of development and is expected to be adopted at the second session of IPBES (IPBES-2), Turkey, from 9 to 14 December 2013; and (2) to share knowledge and practices, from a regional perspective, on promoting conservation and the sustainable use of biodiversity and ecosystem services for regional assessment.

In four working groups, the participants summarised challenges and suggestions to meaningfully progress IPBES assessment, capacity building, policy support, and knowledge generation functions in Asia and the Pacific. Outcomes of the workshop, particularly on current practices, challenges and recommendations regarding regional implementation of IPBES will be summarised and submitted to IPBES-2 as an information document, covering the four key functions of IPBES — policy support, assessments, knowledge generation and capacity building. This information document, together with the workshop report, will be widely distributed at various biodiversity related international forums, including IPBES-2, CBD-SBSTTA, GBIF Governing Board meeting.

Outcomes from the workshop were reported to the 112 IPBES member nations at its second Plenary in Turkey in December 2013, as reported in (b) below.

(a) AOF Activity: Asia-Pacific Regional Workshop on Regional Interpretation of the IPBES Conceptual Framework and Knowledge Sharing

The 2nd Session of Inter-governmental Platform on Biodiversity and Ecosystem Services (IPBES-2) was held on 7-14 December 2013 in Antalya Turkey. Akio Takemoto, APN Secretariat Director participated in the IPBES-2 meeting (9-11 December) and the Stakeholder Consultation meeting that was held on 7-8 December as representing APN as an acknowledged stakeholder of IPBES.

IPBES provides a mechanism recognised by both the scientific and policy communities to synthesise, review, assess and critically evaluate relevant information and knowledge generated worldwide by governments, academia, scientific organisations, non-governmental organisations and indigenous communities. The Member governments agreed to set the four key functions of IPBES;

- **Knowledge generation:** Identify knowledge needs of policymakers, and catalyse efforts to generate new knowledge
- **Assessment:** Deliver global, regional and thematic assessments, and promote and catalyse support for sub-global assessment
- **Policy support tool:** Identify policy relevant tools/methodologies, facilitate their use, and promote and catalyse their further development
- **Capacity building:** Prioritise key capacity building needs, and provide and call for financial and other support for priority needs

At the IPBES-2, it was expected to adopt many important decisions to operationalise the Platform such as conceptual framework, initial work programme and budget 2014-2018, financial arrangements and procedures, rules and procedures for operation of the Platform, guidance on strategic partnerships, and stakeholder engagement and communication strategies. One of the most important agendas was the work programme. The goal of the work

programme is “Strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.” In order to achieve the goal, 15 deliverables are set up under 4 objectives.

The Plenary appointed Dr. Anne Larigauderie, formerly Executive Director of DIVERSITAS and Head of Science in Society at the International Council for Science (ICSU) as the Head of the IPBES Secretariat in Bonn, Germany.

On the first day of Plenary (9 December), the event titling “Towards implementing of the IPBES Stakeholder Engagement Strategy” was held. Professor Kazuhiko Takeuchi, Vice Rector of United Nations University introduced the outcome of the Asia-Pacific Workshop on Regional Interpretation of the IPBES, 2-4 September 2013, Seoul Republic of Korea, which was sponsored by APN (funded from the opportunity fund) and Ministry of Environment of Republic of Korea. He introduced 12 key messages for developing the IPBES framework in regional and sub-regional context.

The key messages are as follows:

– **Actions on cross-cutting issues should**

1. Establish an IPBES Regional Hub to promote universal methods, policy coherence, regional collaboration, and address assessment shortfalls,

– **Structure, content, and key questions for assessments should**

2. Highlight where IPBES can deliver advances beyond the Millennium Ecosystem Assessment framework, especially regarding status and trends in biodiversity,
3. Address cultural services beyond recreation and tourism; and regulating and supporting services beyond climate regulation and water purification,
4. Integrate biodiversity and ecosystem services co-management across private, and civil society sectors,

– **Capacity building actions should**

5. Facilitate common data set and sharing of knowledge to track changes over time,
6. Address most commonly identified capacity building needs – improved practitioner skills for ecosystem assessment and methods for integrating cross-scale stakeholder knowledge and priorities,

– **Knowledge generation actions should**

7. Expand scope to cover gaps in Western Asia, Polynesia, and Eastern Asia sub-regions,
8. Address gaps in assessments on urban and dry land ecosystems,
9. Create advanced knowledge systems across scales and institutional levels through the integration of social science, citizen, private sector, indigenous and local knowledge,

– **Policy-relevant tools and methodologies should**

10. Develop scientific methodologies for trade-off resolution that engage cross-scale, non-elite stakeholders,
11. Develop verifiable criteria for holistic policy impact monitoring and reporting,
12. Provide communications assistance for policy support tools.

Many governments and stakeholders including Japan highly expected regional research organisations such as APN and IAI to support research and capacity development activities under IPBES. After the Event, IAI and APN Secretariats discussed collaboration to support IPBES in the future. On possibility is to co-organise a side event at the next IPBES session.

Sub-Regional Science Policy Dialogues

(a) Second Science-Policy Dialogue in South Asia

The next APN Sub-regional Science-Policy Dialogue will be held in South Asia (SA-SPD) is the second APN science policy dialogue among the series planned in PAN Asia that will culminate in a synthesis. The SA-SPD was proposed at the 18th IGM, and follow-up discussions on planning and securing financial support were discussed at the 25th Steering Committee Meeting and 5th South Asia Sub-Regional Cooperation Meeting.

Since the latest Sub-Regional meeting, held in Sri Lanka, the APN has continued with the planning stages and the following are the progress to date:

- Recalling the discussion at the 5th SA-SRC Meeting, members agreed to hold the SA-SPD in India from **Monday 19th to Friday 23rd January 2015 at the Indian Institute of Tropical Meteorology (IITM), Pune**, India will be the local host institution and Prof. B.N. Goswami, India SPG member, and Dr. Hemant Borgaonkar, SPG alternate, will lead the local organising committee.
- It was agreed that the 6th South Asia Regional cooperation meeting will be held back to back with the SPD. During the meeting, APN aims to have an in-depth discussion on synthesising the outcomes of the science policy dialogue and discuss the structure and content of South Asia Science Policy Brief
- At the 25th Steering Committee Meeting, the **APN secured US\$50,000 for the SA-SPD.**
- APN has contacted the potential partners, START (Global Change SysTem for Analysis, Research and Training), Climate and Development Knowledge Network (CDKN) and the World Agroforestry Centre (ICRAF) based in South Asia to collaborate to the SA-SPD. Prof. Hassan Virji, Executive Director of International START Secretariat, informed that if the SPD can take place in January 2015 or later, there is a possibility that START can provide direct financial support for the SPD. Communications will continue on this and with CDKN in terms of raising additional collateral support for the dialogue, keeping in mind that the SEA dialogue was undertaken in 2012 with a substantially larger budget of US\$90,000 (US\$30,000 from the APN and US\$60,000 from START). On behalf of CDKN, Dr. Hina Lotia also informed that they can contribute to the SPD if the SPD will be held in 2015.
- The objectives of the SPD as well as topics and scope have not changed from the last discussion (Refer to the Appendix 01)

(3) Continuation of the Science-Policy Dialogue Series

The 3rd and final Science-Policy Dialogue is expected to be held in Temperate East Asia in collaboration with Temperate East Asia START Regional Committee, in 2015. Also, it is proposed to conduct, as a Hyogo-based activity in 2016/17, a Synthesis Workshop of the three Sub-Regional Science-Policy Dialogues. Budgets for these activities will be requested in the next fiscal year.

Item 5-4: 3Rs Scoping Activity

1. Proposed new activity

We propose to organise the Scoping Workshop to Formulate APN 3R Framework in the fiscal year 2014/2015 (probably in June 2014) in Kobe, Japan. Scientists and experts relevant to 3R agenda will be invited. Participants will discuss how APN will engage in science agenda in response to policy needs on 3R in the Asia-Pacific region including the followings:

- (i) to identify focused thematic areas under the APN;
- (ii) to identify roles of APN to contribute to achieving the selected Goals of *the Ha Noi 3R Declaration*;

The workshop is expected to draft the Framework to implement activities on 3R science agenda which is in line with “Resources Utilisation and Pathways for Sustainable Development” and other science agenda under the 3rd APN Strategic Plan. Based on the 3R initiative, **which could be part of the LCI Framework**, APN is expected to consider necessary actions in the future.

2. Budget Requested and Timeline:

The budget requested for such an activity is **US\$30,000** and the scoping workshop is planned to be held around May 2014, in order that the results can be used in the strategic planning of the APN for its fourth Strategic Phase (2015-2020).

3. Background

Natural resources and ecological assets are being depleted across many parts of Asia and the Pacific region along with the rising economy, unprecedented urbanisation, and consumption trend. Resource efficiency and material efficiency with an underpinning objective to achieve waste prevention and reduction have become a significant part of many government policies and programmes, including macro-economic policies.¹ Following the Rio+20 outcomes – *The Future We Want*, a number of countries in Asia and the Pacific region² voluntarily agreed the *Ha Noi 3R*

¹ Reference: Draft concept note of the Fifth Regional 3R Forum in Asia and the Pacific, 25-27 February 2014, Surabaya, Indonesia

² Countries which agreed to the Ha Noi 3R Declaration are Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Fiji, India, Indonesia, Japan, Kiribati, Republic of

*Declaration – Sustainable 3R Goals for Asia and the Pacific (2013-23)*³ at the Fourth Regional 3R Forum in Asia held in March 2013. The Declaration aims to provide an important basis and framework for Asia-Pacific countries to voluntarily develop and implement 3R policies and programmes.

The Ha Noi 3R Declaration, which is a legally non-binding and voluntary document, set up goals to achieve a resource-efficient and resilient society in the region, which include those in line with the missions and goals of APN as follows:

Goal19: Enhance national and local knowledge base and research network on the 3Rs and resource efficiency, through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities.

Goal27: Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency.

At the Fifth Regional 3R Forum in Asia Pacific, 25-27 February 2014 in Surabaya Indonesia, governments of member countries and stakeholders reaffirmed the *Ha Noi 3R Declaration*, and stressed importance of scientific capacity building for implementing 3Rs in the region.

Following the Fifth 3R Forum, on 10-12 March 2014, the 3R International Scientific Conference on Material Cycle and Waste Management⁴ was held in Kyoto, organized by Japan Society of Material cycles and Waste Management (JSMCWM) and co-organized by the Korean Society of Waste Management (KSWM), Society for Solid Waste, Chinese Society for Environmental Sciences (SSW-CSES) and other regional and global change academic networks. At the conference, participants stressed the urgent need to enhance scientific capacity on 3R agenda by supporting regional research activities with involvement of developing countries, and they requested APN to further engage in 3R agenda through promotion of regional research and capacity building activities in the region.

Korea, Lao PDR, Malaysia, Maldives, Marshall Islands, Federated States of Micronesia, Mongolia, Myanmar, Palau, Papua New Guinea, the Philippines, Samoa, Singapore, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, and Viet Nam.

³ http://www.uncrd.or.jp/env/spc/4th_3r_forum_f.htm

⁴ <http://3ri-2014.org/>

Item 5-5: Communication, Outreach and Networking:
Report on Recent Progress and Plans for the Coming Year, Leading Up To the 20th IGM

Action Requested

The IGM is requested to discuss and accept the report for the year 2013-2014 and to discuss and endorse/approve the plans summarised above and to provide guidance to the Secretariat on implementation of the proposed communication and outreach activities.

This paper summarises communication and outreach activities in fiscal year 2013-2014 and presents a tentative work plan for the upcoming fiscal year, which leads up to APN's 20th anniversary and a new strategic phase.

1. Report of Communication and Outreach Activities

Recalling, first, the action plan for implementing the APN Communications Strategy that the IGM approved in 2010 and, second, the APN's policy on focussed publications that the IGM approved last year¹ the Secretariat is pleased to report as follows to the IGM the results and progress of related work to date:

1.1 Improving the quality and style of publications

- A new publication process has been implemented for regular publications. Custom-designed templates were created to streamline the publication process and allow for more focus on content and less on form. Contributions to the Science Bulletin are subject to closer review and editing than previous issues, while the Secretariat proposes further improving the process by inviting articles upon project completion (See section 2).
- New/focused publications, including brochures for the new frameworks of LCI, CAF and B&ES, have been published as planned, with the exception of the CAPaBLE 10th anniversary publication, now proposed to be issued in conjunction with APN's 20th anniversary.
- While two policy briefs (that resulted from Secretariat-organised activities) were disseminated at various regional and international science-policy events, it is suggested that the IGM consider how to improve their content and organisation, with guidance from the SC and SPG, in order to improve their effectiveness in serving their intended purpose of providing policy-relevant recommendations to the policy-making community.
- With the approval of the SC, the Secretariat discontinued the quarterly electronic APN Newsletter due to its limited impact, and shifted focus to disseminating the same information using the growing email list. This allows for general updates and targeted dissemination of information according to different subscriber criteria.
- Web-based, event-oriented press releases continue to be published online. There is a need to expand its scope to cover project updates and focus more on project outputs.

¹ Papers IGM-SPG/15/07 and IGM-SPG/18/05-06, including their appendices, are available electronically at the secure server under the same item. Web statistics are also included on the secure server.

1.2 Encouraging wider use of the APN website

- Since the launch of the revamped APN website in 2011, the Secretariat has been noting trends in the numbers of visits to the new site. At the time of writing, the monthly average number of visits to the website has increased by just over one-third as compared to FY2011. The EML has become increasingly useful as it brings about 8.5% of the total visits to the website.
- Data-related web statistics are available electronically on the IGM secure sever for information.

1.3 The APN's Strategic Information System

- The APN Information System has in operation three main components (as outlined in document IGM-SPG/15/07-App.5), a content management system, an automated email list service, and an online library (E-Lib).
 - The content management system powers the APN home page, which integrates APN news, project updates, global change announcements, new project publications and an event calendar.
 - The automated email list was launched in late 2011. Since then, the list has seen a 22% increase in subscribers to about 2200. Subscribers can now choose to provide information about their interests and background, hence creating the possibility of providing well-targeted email messages to specific subsets of subscribers.
 - The E-Lib, launched in 2012, is a dynamic service which is constantly being updated and improved. It has received increasing attention as it houses the results of all of the APN's projects and related outputs or metadata, as well as all of the APN's formal publications. The E-Lib interface offers multiple search options that allow easy locating of information. Statistics about the E-Lib are included in information paper IGM-SPG/17/05-05-App.1.
- A new fourth component, an online collaboration and networking platform, is now being developed and is proposed to include an Online Alumni Directory and Service, where scientists, researchers, practitioners and decision-makers associated with APN will be able to post articles, updates, and announcements and will be able to interact with other users regarding issues of common interest. More details are provided in Section 2, Plans for FY2014.

1.4 Outreach and Visibility

- APN continues to promote the network at various national, regional and international events through presentations, side events/workshops and/or exhibits. Posters, publications, CD-ROMs and other materials are prepared and displayed/disseminated at these events to promote APN visibility and networking. A summary of these events has been provided in the Report on Activities Undertaken (Since IGM-SPG 18), Doc. IGM-SPG/19/02-01.
- Sub-Regional Committee meetings and associated workshops (including PDTWs — Proposal Development Training Workshops) have included presentations to sub-regional audiences on APN programmes and activities.

1.5 Cooperation with the International Global Change Research Programmes

- APN maintains close partnership with these programmes (IHDP, IGBP, DIVERSITAS and WCRP) and their core projects. As these programmes will eventually evolve into the new Future Earth initiative, the APN also maintains close communication and partnership with Future Earth, particular its activities in Asia and the Pacific.

1.6 Improving Interaction and Communication with Members

- In 2013, the Secretariat introduced an electronic mailing list service to encourage and facilitate easier electronic communication among IGM, SPG, SC, and CDC members, in particular by supporting two-way interaction.

- Members are encouraged to represent the APN in international events, thus increasing their sense of ownership and engagement. Sub-Regional Committee meetings also encouraged APN members to participate in strategic activities of the APN.

2. Plans for Fiscal Year 2014

The APN enters its 4th Strategic Phase and celebrates its 20th anniversary in 2015. To mark and celebrate this important milestone, the Secretariat proposes to take the opportunity to launch a number of communication initiatives as follows, for IGM endorsement.

2.1 Involving APN Alumni in Its Activities

As part of the fourth and last component of the APN Information System, a new online Alumni Directory and Service are being developed. The Directory and Service will first be open to past PDTW trainees and young scientists associated with the APN, and will also be made available to anyone interested in working with the APN.

The Alumni will be an interactive platform with the following features:

- **Researcher profiles**, for users to showcase their professional background, including their education, research interests, publications, etc; This will also make it easier for users to search for potential collaborators for research and knowledge-sharing activities.
- **Focus Groups and moderated discussion forums** for discussions and networking. The focus groups will be managed by active users, and forum content is expected to be moderated by these users.
- **Blog post writing and submission**; selected articles will be featured in the main APN website and circulated in email lists. Writing competitions could be organised to celebrate important dates, for example, International Day for Biological Diversity, etc.
- **Other social network features** such as resource sharing and user timeline, etc., to increase user engagement in the platform.

2.2 Website Improvement/Redesign

Since its launch in September 2011, the new website has been successful in increasing visitor engagement while reducing secretariat workload. The homepage is able to provide a portal to APN information, such as its electronic library (E-Lib), event calendars, announcements, and other news. However, the layout of the homepage could be improved, for example by directing more attention to the latest output from APN projects.

With this in mind, the Secretariat considers the upcoming 20th Anniversary of the APN and the launch of the 4th Strategic Phase in the Spring of 2015 to be an opportune occasion to introduce a brand new redesign for APN's website.

Major changes being considered for the website include:

- **Reorganisation of the homepage layout**, to give more emphasis to APN projects and related output. A consistent design will be applied to different components of the APN website, to produce a unified brand identity and user experience.
- **New section for guest articles/op-ed articles** from invited writers and APN members.

- **New section to feature articles from APN Alumni.** Alumni would have the opportunity to freely create and submit articles to be featured on the homepage.
- **Monthly featured projects and researches.**
- **Better integration with social media services.**

Along with the redesign and restructuring of the website, it is equally (if not more) important to ensure high quality content and active user engagement, which is crucial to creating a dynamic and user-supported website.

2.3 Short Video to Celebrate the 20th Anniversary of APN

The Secretariat plans to produce a short video in celebration of APN's two decades of supporting global change research, capacity building and networking in the Asia-Pacific region. The video will demonstrate the value of the APN and the research and other activities (e.g., SPDs) that the APN has sponsored to all – the countries of the region, policy makers, scientists, the public, etc. It is suggested that key elements of the video could include personal interviews and testimonials, etc:

- Short interviews with selected APN members, project leaders and collaborators, young scientists involved in APN activities, Mitra Award winners, invited experts and other stakeholders.
- Video clips submitted by/solicited from APN project leaders, including field activities, discussions, data visualisation etc.
- Still images from the APN secretariat, including photos from early IGMs and other activities.

The Secretariat will lead the interview process and the collection of relevant content. A small amount of resources is requested to produce the video using the clips collected.

2.4 New Publications

a) Third Strategic Phase Report and Fourth Strategic Plan

The Task Committee on strategic report and planning is coordinating the preparation of the Third Strategic Report and Fourth Strategic Plan. The two publications will be launched at the 20th IGM, and a press event could be organised for the launch of these documents (see Section 2.5 below).

b) CAPaBLE 10-year Publication

To mark the tenth anniversary of the CAPaBLE programme, a short publication will be produced and for issuing at the 20th IGM, for use by a wide audience including policy makers, scientists and both present and potential funders. The publication will be first issued in hard copy, but will also be made available on the APN website and actively distributed to various mailing lists.

c) Policy Briefs

Further to the information provided at the 15th IGM in paper *IGM-SPG/15/07-App.3*, the Secretariat suggests improving the content and structure, and the production and distribution of the policy brief series, including through:

- Strengthening contact with project leaders and collaborators who are expected to provide input and contribution to policy briefs.

- Developing a standardized process to produce and distribute policy briefs, covering all stages of publication from conceptualization to final dissemination.

Once the process is established, policy briefs can be produced on regular basis in cooperation with project leaders and with guidance from the SC and SPG. These materials can be disseminated through various channels, in print or electronically to the global change community.

2.5 Press conference at the 20th IGM

With logistics and other necessary in-kind support from the host of the 20th IGM, the APN may want to organise a press event to further raise awareness and showcase the achievement of APN since its establishment in 1995.

The press conference could be attended by the host country nFP, selected SC/SPG/CDC members, ARCP and CAPaBLE project leaders and invited experts.

The conference could announce the launch of the APN Third Strategic Report and the New Strategic Plan, the new CAPaBLE publication, and the launch of the new APN website.

The Mitra Award ceremony could also be held during the press conference.

Item 5-6: New Hyogo Activities

1. Hyogo Activities

The Hyogo Prefectural government hosts the APN Secretariat and has strongly been supporting APN's activities since 1999. Specific activities that are beneficial for APN member countries funded by Hyogo Prefecture are called Hyogo Activities. Results of specific activities organised in FY2013/2014 are outlined in [IGM-SPG/19/05-06-Appendix1](#)

2. Proposed New Activities in FY2014/2015

(a) Expert Meeting on Air pollution Control in Urban Asia-Pacific

Air pollution is one of the science agenda under APN's ARCP programme. It is estimated that more than 1 billion people are exposed to outdoor air pollution annually. Urban air pollution is linked to up to 1 million premature deaths and 1 million pre-native deaths each year. Rapid urbanisation has resulted in increasing urban air pollution in major cities, especially in developing countries (UNEP).¹ While most developed countries have put in measures to reduce vehicle emissions, in terms of fuel quality and vehicle emission reduction technologies, these measures are yet to be adopted in most cities in developing countries.

Zhuhai City, Guangdong Province in China is one of the urban areas facing severe air pollution in the country. In response to the problem, the National and local Governments are taking stringent measures to control air pollutants in order to address the problem.

In this regard, we propose to organise the "Expert Meeting on Air pollution Control in Urban Asia-Pacific" in the latter half of the fiscal year 2014/2015. The meeting is co-organised by APN and Beijing Normal University (BNU), and the venue is Zhuhai City, China where BNU has a major branch office. The objective of the meeting is as follows:

- (i) to share information on air pollution in urban areas in the Asia-Pacific region, which include status on the air quality, recent technologies applied in relevant sectors such as industries and transport, and policies and measures to control air pollutants in the Asia-Pacific region;
- (ii) To identify thematic areas and effective approaches which should be enhanced under APN funding programmes;
- (iii) It is expected that scientists and practitioners involved in air pollution problems in APN member countries will be invited to the meeting.

Budget Requested: US\$50,000

¹ http://www.unep.org/urban_environment/issues/urban_air.asp

(b) Symposium on Satoyama and sustainable development

Satoyama landscapes have been rapidly declining due to various factors including increased rural-urban migration, the rapidly aging population, depopulation, land-use conversion and the abandonment of traditional agricultural cultivation. From FY2011/2012 to FY2012/2013, APN, DIVERSITAS, IHDP, UNU-ISP and Hyogo Prefecture jointly conducted the Project, “Building Resilience with Common Capital” as a Hyogo Activity. The project comprised a series of workshops to explore ways and means of enhancing resilience of communities to climate and ecosystems change by identify new governance systems overseeing the management of the New Commons, supply of ecosystem services and enhancement of socio-ecological resilience against climate and ecosystem changes in an efficient and equitable manner across a range of stakeholders.

At the third and final workshop held in Kobe, Japan 3–5 December 2012, participants visited Kurokawa area in Kawanishi city, Hyogo Prefecture. They learned Satoyama landscape and ecosystem have been conserved in Kurokawa through sustainable use of natural resources such as production of Kiku-zumi charcoal.

Hyogo Prefecture, in particular its Hanshin-kita (north) Regional Office, which contains Kurokawa-Satoyama area, is much interested in further promoting Satoyama activity internationally by showcasing good practices on sustainable use of natural resources in local community. In this regard, in FY2014/2015, we propose to organise the Symposium on Satoyama and Sustainable Development in the latter half of FY2014 (probably in December 2014) in Hyogo Prefecture. The Symposium will be co-organised by APN and Hyogo Prefecture (Hanshin-Kita Regional Office). At the Symposium, participants will be invited to discuss sustainable use of natural resources in Satoyama areas in Japan and Asian countries, including an opportunity for creating Satoyama business in local community.

Budget Requested: US\$10,000

(co-funded US\$45,000 by Hyogo Prefecture Hanshin-Kita Regional Office)

Item 05-06-Appendix 1: Hyogo Activities in 2013/14

The Hyogo Prefectural government hosts the APN Secretariat and has strongly been supporting APN's activities since 1999 in Kobe, Japan. Specific activities that are beneficial for APN member countries funded by Hyogo Prefecture are called Hyogo Activities. Results of specific activities organised in FY2013/2014 are outlined below:

(a) EMECS10-MEDCOAST2013 Joint Conference

The International EMECS Centre, which is hosted by Hyogo Prefecture in Kobe Japan, is an organisation to support EMECS activities in the world. Historically, APN has partnership with EMECS Centre by participating in biannual international EMECS Conferences from EMECS5 (2001) to EMECS9 (2011). From October 30 to November 3, 2013, EMECS and MEDCOAST (Mediterranean Coastal Foundation) co-organised the **EMECS10-MEDCOAST2013 Joint Conference**¹ in Marmaris, Turkey.

The purpose of the EMECS10 Conference was to share past efforts and experiences on integrated coastal management (ICM) that could lead to developing solutions for sustainable use of marine environment in coastal areas. The conference was started by opening remarks by Mr. Toshizo Ido, Governor of Hyogo Prefecture, Japan, followed by key note presentation by an expert on IGM, Frank van der Meulen, Building with Nature in the Dutch Delta Dune Coast. Then, Satoumi Special session and Students and Schools Partnership Session and other scientific sessions were held. For the Conference, Dr. Akio Takemoto, Director of APN Secretariat attends to showcase APN activities to participants. APN also supported participants from developing countries in Asia-Pacific region for their travel cost.

(b) APN-IGES-Hyogo Symposium

The Institute for Global Environmental Strategies, Kansai Research Centre (IGES/KRC) has been carrying out a research project since May 2010 with The Energy and Resources Institute (TERI) in India entitled "Research Partnership for Application of Low Carbon Technology for Sustainable Development" (ALCT). This research project aims to accelerate the application of Japanese low-carbon technologies to small and medium enterprises in India that will contribute to an international framework on climate change. The ALCT project has made significant achievement over the last three years with technical assistance by experts from Japanese industries, ranging from policy analysis to technology needs assessment from supply and demand sides and pilot projects, to install advanced heat pumps for energy intensive manufactures.

¹ http://www.emecs.or.jp/englishver2/cnference/kaigi_er_emecs10.html

On 4 March 2014, APN, IGES/KRC and Hyogo Prefecture co-organised the Symposium² in order to share knowledge resulting from the ALCT project with various stakeholders from Hyogo prefecture, and to discuss opportunities for disseminating low-carbon technology to developing countries in the Asia-Pacific region by enhancing foreign investment. More than hundred people participated in the Symposium.

For the Symposium, TERI experts and Managing Directors of Small and Medium industries in India as well as Japanese researchers and experts were invited to speak. From APN, Dr. Akio Takemoto, Director of the APN Secretariat participated in the panel. Dr. Takemoto overviewed APN and stressed importance of scientific capacity building to disseminate low carbon technology in developing countries in the Asia-Pacific region.

² <http://www.apn-gcr.org/2014/01/31/fy2013-apn-iges-hyogo-symposium/>

Item 05-07: CAPACITY DEVELOPMENT ACTIVITIES

The IGM is asked to consider two activities, with a view to discussion and potential approval to continue the activities

The PAN Asia Risk Reduction (PARR) Fellowship Program

Budget approved at the 25th SC Meeting: US\$30,000

In response to this challenge, an international alliance of science-focused, research, education and capacity building organizations – henceforth referred to as the “PARR Alliance” – proposes design, development and facilitation of the *Pan-Asia Risk Reduction (PARR) Fellowship Program*. The PARR Program offers unique research, training and educational opportunities to Asian researchers, practitioners, and policy makers to enhance their capabilities for advancing and applying knowledge on critical issues of GEC and human environment security in the Asia-Pacific.

The principal objectives of the program are to:

- Train a cadre of young Asian scientists and professionals in advanced understanding and management of the complex relationships between GEC and human and environmental security;
- Strengthen the capacities of a spectrum of regional institutions (e.g., universities, research institutions, NGOs, government agencies, the private sector) to provide relevant opportunities for inter- and trans-disciplinary research, education and application;
- Nurture a collaborative and sustainable network of such individuals and institutions so that it becomes an active resource for promoting and facilitating future research, decision-making, and action in and for the region; and
- Foster South-South collaboration' exchange of information, knowledge and experience.

The PARR Fellowship Program is designed to provide holistic fellowship experiences that support participants from proposal development through research/project implementation to dissemination and application of results and outcomes. Program opportunities prioritize a transboundary and cross-sectoral approach to understanding and reducing risk, which enhances the capacity of Fellows to confront GEC and human-security challenges from an integrative perspective. A PARR Fellow becomes a regional leader in risk reduction who, through this program, gains skills in ‘systems’ perspectives, futures literacy and effective communication and synthesis. PARR Fellows also acquire practical skills in project and budget management and networking.

Annual Proposal Development Training Workshops (PDTWs)

Budget requested: US\$25,000 (of which US\$20,000 is already secured)

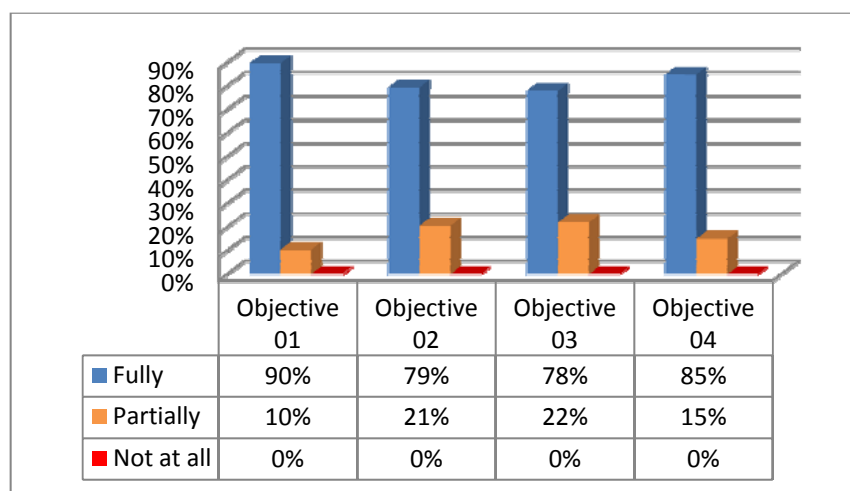
Each year the APN has a back-to-back PDTW workshop at each of the sub-regional cooperation meetings. While these PDTWs are successful overall, the APN Secretariat recommends that a sub-regional-rotational PDTW be held on an annual basis (i.e. one per year instead of three per year) in order mainly to relieve the

stress on the budget for these activities and to reduce the workload of the members and Secretariat. It has already been agreed that the first of these be held in Lao PDR and this will include an open call for young scientists to be organised by the Secretariat with a local organising committee formed by the Lao PDR national Focal Point and Scientific Planning Group members.

The proposal development training workshop is a two-day work shop that consists of two main sessions: learning and hands-on experience. The learning session aims to provide an overview of the APN annual call for proposal and its review process together with guideline on summary proposal writing. The hands-on experience session is designed to develop group proposals by groups of three or four young scientists with support from two or three mentors in each group. So far, APN has organised 11 PDTWs and trained 186 young scientists in the Asia-Pacific region. The workshops have been held in China, United States of America, India, Philippines, Viet Nam, Bhutan, Cambodia, Nepal, Russia, Sri Lanka and Malaysia. It involves experts from the APN scientific planning group and 18 external experts (APN project leader or project collaborators).

A recent evaluation indicates that PDTWs are successful and should be continued. This is based on the response from the proponents to the feedback as well as successful proponents who have competed in the APN’s annual calls for proposals effectively, by way of getting a seed grant or becoming fully funded. Please refer to [IGM-SPG/19/05-07-Appendix 1](#) for a preliminary analysis of the PDTWs since their inception in 2008.

(a) PDTW Strengths



Overall evaluation data suggests that PDTW has achieved its four main objectives and develop the capacity of young/early-career scientists on proposal development in Asia Pacific region. PDTW is a platform to bring young scientists together and share their knowledge and experience among neighbouring countries. Further, it is proved that PDTW is a successful tool to address regional and transboundary research issues in the Asia-Pacific region.

(b) PDTW Challenges

Although the workshops have received positive feedback from the participants, APN identified some challenges on organising the workshop. A most challenging factor was to identify the correct candidate to the workshop. The current young scientist’s selection process is based on nFP nomination and most of the candidates come from a diverse area of expertise. Due to this diversity, grouping of scientists is a difficult

process and some participants need to be placed randomly in groups. Another factor is late nomination, which creates a challenge on workshop preparation stage. As the nomination follows the formal procedure of respective APN member countries, some nomination takes longer time to obtain approval. This will result in a smaller number of participants and insufficient preparation by young scientists. Apart from that, insufficient donor contribution towards PDTW is also a key factor that limits the number of participants in each workshop.

(c) Recommendation for future PDTWs

- Increase the time allocation for the workshop to three days instead of two days
- Open the workshop to all who are interested in APN proposal submission
- Pre-event questionnaire survey among participants to identify their capabilities and awareness of APN activities
- Allow participants to identify their own groups by implementing online registration forms
- Invite other Regional/National research funding organisations to share information on their research funding opportunities
- In depth discussion on general proposal writing tips which are applicable to other funding organisations
- Include discussion sessions on;
 - Project implementation and management
 - CAPaBLE proposal development
 - More in-depth discussion on budgeting and timeframe development
 - General introduction on interested research areas and research need of the APN
 - Sharing of successful research funding and sample research proposal
- Introduce more attractive learning methodology and group exercises
- Partner with universities/ institutions that have similar courses on proposal development
- Involve external reviewers as resource persons

Evaluation report of APN's Proposal Development Training Workshops conducted from 2008-2013

Background and Introduction

Proposal Development Training Workshop (PDTW) is a capacity development activity undertaken by APN since 2008. The initial workshop was proposed at the APN's 13th IGM meeting as a Hyogo-funded activity. The primary aims of the workshop were to raise APN profile among young and early career scientists in the Asia-Pacific region in an inexpensive manner and also to increase young scientists' capacity to develop competitive proposals to the APN annual call for proposals programme. The first workshop was held as a back-to-back event with the 8th Environmental Management of Enclosed Coastal Seas (EMECS) Conference in 2008. After the successful implement of first workshop, APN continuous to held training workshops as back to back event with APN Sub-Regional cooperation meetings and international events. The objectives of the workshop were further developed to empower APN members to provide their knowledge on the APN proposal submission process and learn about the APN proposals process and deliver their knowledge and experience to their respective countries and impart knowledge.

The proposal development training workshop is a two-day work shop that consists of two main sessions: learning and hands-on experience. The learning session aims to provide an overview of the APN annual call for proposal and its review process together with guideline on summary proposal writing. The hands-on experience session is designed to develop group proposals by groups of three or four young scientists with support from two or three mentors in each group. So far, APN has organised 11 PDTWs and trained 186 young scientists in the Asia-Pacific region. The workshops have been held in China, United States of America, India, Philippines, Viet Nam, Bhutan, Cambodia, Nepal, Russia, Sri Lanka and Malaysia. It involves experts from the APN scientific planning group and 18 external experts (APN project leader or project collaborators).

Overview of the Evaluation process

An evaluation of the series of PDTWs was carried out based on Post-Workshop Evaluation forms which were collected at the end of the each workshop. Quantitative and qualitative methods were used to evaluate the participants' responses. The data for the quantitative analysis were collected from the responses of survey questions. Data for the qualitative method collected from open-ended survey questions. Among the proposal development participants, 88 participants completed the post-workshop evaluation forms and their responses were used as raw data for the evaluation.

Quantitative analysis was designed to evaluate and identify participant's responses towards the degree attainment of the workshop objectives and level of satisfaction on presentation and discussion session. In terms of degree of attainment of the workshop objectives, data were collected against the four objectives of PDTW. Participants marked their degree of attainment of each objective by selecting the best option among three degree of responses. The three degrees are "fully", "partially" and "not at all". Table 1 illustrates the valid percentage of degree of attainment of the four objectives of the workshop. The valid percentage is the number of respondents choosing that response divided by the number of respondents who answered the question.

Table 1: Participants self-evaluation on the attainment of workshop objectives (Total responses N=88)

Objective	Fully	Partially	Not at all
To raise the profile of the APN among young/early career scientists in the Asia-Pacific	90%	10%	0%
To increase capacity to submit proposals to the APN and compete effectively in its competitive Annual Calls for Proposals (for research and capacity development) in key scientific areas for sustainable development in the Asia-Pacific region	79%	21%	0%
Empower APN Members to Provide their knowledge on the APN proposal submission process	78%	22%	0%
Empower APN Members to Learn about the APN proposals process so that they might go back to their respective countries and impart their knowledge.	85%	15%	0%
Analysis: More than 85 percent of participants fully agreed that PDTW has achieved its four main objectives and 15 percent of the participants partially agreed on achievement of the objectives. This indicates PDTW successfully raised the APN profile among the young /early career scientists and it help to develop the capacity of the young scientists to submit a proposal to APN. In addition, it shows that it empowered the APN members to transfer their knowledge and expertise to young scientists.			

Participants attitude on level of satisfaction towards the presentation and discussion sessions were evaluated by three-option survey questions. The data were collected for six categories and with three levels of satisfaction: “Very Satisfactory” Satisfactory” and “Unsatisfactory”. The table 2 illustrates participant’s level of satisfaction on these categories.

Table 02: Participant’s self-evaluation on the level of satisfaction on presentations and discussion sessions (Total responses N=88)

Presentation and discussion session	Very Satisfactory	Satisfactory	Unsatisfactory
APN: Overview and Calls for Proposals Process	77%	23%	0%
Writing a competitive proposal for the APN	56%	41%	2%
Guidelines and Advice for Proposal Writing	62%	36%	1%
The APN Proposals Process: the role of SPG Members and nFPs in reviewing APN Proposals	60%	37%	2%
Group Oral Presentation	43%	55%	2%
Overall workshop management	67%	33%	0%
Analysis: The overall responses show a positive satisfaction towards the presentation and discussion session. However, the group oral presentation session shows less percentage of success as compared to the other sessions. Group oral presentations were prepared and presented by young scientists and it’s emphasised that young scientists need to develop their presentation skills. All participants express (100%) positive satisfaction towards the overall workshop management and it suggests that training workshops have good managed structure.			

Qualitative data were collected through responses from open-ended questions and questions were designed to collect opinion and experience about the training workshop. All responses from the participants coded in to similar themes and identify the common opinion among participants. Among the participant's comments, 41 responses suggested to increase the workshop durations in order to develop a proper proposal. And 15 participants requested to share successful proposals and project outcome as samples. Furthermore, six participants emphasized that due to the diversity of research area among group members, it is difficult identify a group proposal topic. In terms of administrative matters and physical arrangement of the workshops, all participants had positive comments and did not receive specific recommendations or future suggestions for improvement. Furthermore, participants were requested to share their opinion on possible areas of collaboration with the APN. All of the participants show diverse interest on collaborating with APN and many participants are willing to collaborator in the area of ecosystem, biodiversity and land use.

Successful Outcomes

Apart from the self-evaluation analysis, the evaluation process has identified successful outcomes of the workshops through the proposals received to the APN Annual call for proposal programme. The following is the table of successful outcomes;

Table 03: List of successful outcomes from training workshops series

Project	Young Scientists Involvement
CBA2012-17NSY-Pradhananga	Mr. Dhiraj Pradhananga lead the project
CBA2010-12NSY-Pradhananga	Mr. Dhiraj Pradhananga lead the project
CIA2009-07-Lotia	Mr. Muhammad Arif Rashid Gohee is the project collaborator
CBA2011-06NSY-LOICZ	Dr. Cheng Tang lead the project
CBA2012-11NSY-Sangmanee.	Mr. Chalermrat Sangmanee awarded grant under the reference number of CBA2012-11NSY-Sangmanee. Due to higher education opportunity he is not conducted the research activity
ARCP2012-11NMY-Quynh	Dr. Le Thi Phuong Quynh lead the project
ARCP2012-22NSG-Prayitno	Mr. Joko Prayitno and Ms. Kristine Garcia involved in the seed grant proposal of the ARCP2012-22NSG-Prayitno. The initial project proposal was developed at the PDTW. Malaysian SPG members Mr. Subramaniam Moten and Dr. Erna S. Adiningsih act as mentors for further development of the proposal
ARCP2013-20NMY-Shresta	Ms. Suneetha Pilli, Mr. Jeeban Panthi and Ms. Qurat-ul-Ain Ahmad are collaborating in the ARCP2013-20NMY-Shresta project. The initial project proposal was developed at the PDTW. Proposal was further developed under the supervision from Nepal SPG member- Dr. Madan Shrestha and received APN fund on 2013 annual call.
ARCP2013 -11FP Lokupitiya	Dr. Lokupitiya Erandathie, Dr. Ahmad Bashir, Mr. Ahamed Tofayel further developed training workshop group proposal and submitted to the 2013 annual call. The proposal currently under final stage review.
ARCP2013-FP15-Noimunwai	Mr. Noimunwai Watcharapong submitted a full proposal to 2013 annual call. The proposal is currently under final stage review.
ARCP2013-SP33-Poerbandono	Dr. Poerbandono submitted the summary proposal 2013, not succeeded at the summary proposal stage.

PDTW Strength

The overall evaluation data suggest that PDTW has achieved the four main objectives of the workshop and develop the capacity of young/early-career scientists on proposal development in the Asia-Pacific region. PDTW is a platform to bring young scientists together and share their knowledge and experience among neighbour countries. Further, it is proved that PDTW is successful tool to address the regional and transboundary research issues in the Asia-Pacific region.

PDTW Challenges

Although the workshops have received positive feedback from the participants, APN identified some challenges on organising the workshop. A most challenging factor was to identify the correct candidate to the workshop. The current young scientist's selection process is based on nFP nomination and most of the candidates come from a diverse area of expertise. Due to this diversity, grouping of scientists is a difficult process and some participants need to be place randomly in groups. Another factor is late nomination, which creates a challenge on workshop preparation stage. As the nomination follows the formal procedure of respective APN member countries, some nomination takes longer time to obtain approval. This will result in a smaller number of participants and insufficient preparation by young scientists. Apart from that, insufficient donor contribution towards PDTW is also a key factor that limits the number of participants in each workshop.

Recommendation for the future PDTWs

- Increase the time allocation for the workshop to three days instead of two days
- Open the workshop to all who are interested in APN proposal submission
- Pre-event questionnaire survey among participants to identify their capabilities and awareness of APN activities
- Allow participants to identify their own groups by implementing online registration forms
- Invite other Regional/National research funding organisations to share information on their research funding opportunities
- In depth discussion on general proposal writing tips which are applicable to other funding organisations
- Include discussion sessions on;
 - Project implementation and management
 - CAPaBLE proposal development
 - More in-depth discussion on budgeting and timeframe development
 - General introduction on interested research areas and research need of the APN
 - Sharing of successful research funding and sample research proposal
- Introduce more attractive learning methodology and group exercises
- Partner with universities/ institutions that have similar courses on proposal development
- Involve external reviewers as resource persons

IGM-SPG/19/05-06(a) Needs Assessment for 2014 and Future

	Country	Amount Confirmed (US\$)
NEW RESOURCES CONFIRMED	Japan (MOEJ and Hyogo)	2,373,000
	New Zealand (MFE)	25,000
	Republic of Korea (MOEV)	50,000
	Other Stakeholders	0
		2,448,000

Needs Assessment and Resources Planning: Summary for APN 2014 and future						
Science, Policy and Institutional Activities		Needs Assessment for 2014 (US\$)	Resources Planning		Comments from Member Countries (Please place your comments in this column)	
			Committed & Secured Resources in present fiscal year (A)	New Resources as of 19/02/2014 (B)		Total Resources (A + B)
1	Core Programmes	ARCP New Projects from 2013 Call for Proposals	1,500,000	9,600	Pledges from Members Countries received to date total US\$2,448,000	US\$3,506,046
		ARCP Continuing Projects with Mortgage (mortgage refers to funds needed but not reserved yet)	287,000	0		
		ARCP Continuing Projects with Committed Funds from previous fiscal years (committed funds means we have reserved the funds from previous years)	565,000	565,000		
		Subtotal	2,352,000	574,600		
		CAPaBLE New Projects from 2013 Call for Proposals	660,000	110,000		
		CAPaBLE Continuing Projects with Committed Funds from previous fiscal years	8,000	8,000		
		Subtotal	668,000	118,000		
2	Frameworks	Low Carbon Initiatives Framework	40,000	10,500		
		Biodiversity and Ecosystems Services Framework	100,000	43,946		
		Climate Adaptation Framework	715,000	0		
		Subtotal	855,000	54,446		
3	Science-Policy Linkages and Capacity Development	One Annual Sub-Regional Proposal Development Training Workshop	25,000	20,000		
		Science-Policy Linkages	100,000	50,000		
		PARR (Urbanisation) Programme Fellowships	30,000	30,000		
		Subtotal	155,000	100,000		
4	APN Institutional Meetings and Activities	20th Intergovernmental Meeting	198,000	0		
		28th Steering Committee Meeting				
		APN 4th Strategic Planning (Retreat) Workshop, 3Rs Scoping Workshop	51,000	44,000		
		Hyogo Activities	60,000	0		
		South Asia	20,000	20,000		
		Southeast Asia	20,000			
		Temperate East Asia	20,000			
		Planned travel for Secretariat to APN meetings	42,000	0		
Subtotal	411,000	64,000				
5	Institutional and Scientific Networking, Communications, Publications	3 Framework Publications	5,000	0		
		CAPaBLE 10 Years Publication	2,000	0		
		Annual Science Bulletin, Annual report, general brochures, evaluation and strategic planning reports	20,000	0		
		Climate in AP: Book review & IPCC connections	2,500	2,500		
		20th Anniversary <u>Science Conference</u> in 2016	3,000	0		
		Ad hoc travel for scientific and institutional activities	35,000	0		
Subtotal	67,500	2500				
6	Secretariat Staffing	Science, communication, development and institutional affairs staff (including coordinator)	455,000	0	86,500	
		Administrative staff	159,000	0	58,000	
		Programme Fellowships	35,000	0		
		Subtotal	649,000	0		
7	Maintenance and operation costs	General Maintenance and Operational cost	85,000	0		
		Upgrading the equipment of APN	7,500	0		
		IGES Overhead (Based on Contributions from MOEJ, Japan)	65,500	0		
		Subtotal	158,000	0		
		5,310,500	1,058,046	2,448,000	3,506,046	Difference: US\$1,804,454

Resources Available:²⁾

Amount Confirmed	
Japan (MOEJ and Hyogo)	2,373,000
New Zealand (MfE)	25,000
Republic of Korea (MOEV)	50,000
Other Stakeholders	2,448,000

Use of Resources:

	Science, Policy and Institutional Activities ³⁾	Resources Planning ⁴⁾			In-Kind (monetary and other) Contributions
		Committed and Secured Resources as of 31/12/2013 (A)	Draft Budget Allocation from New Resources (B)	Total Resources (A + B)	
1	Core Programmes	ARCP New Projects from 2013 Call for Proposals and to Supplement Funds to 2013 Awards (subject to availability) ⁵⁾	77,168	615,000	692,168
		ARCP Continuing Projects with Committed Funds from Previous Fiscal Years (committed funds means we have reserved the funds from previous years) ⁶⁾	508,500	0	508,500
			325,000	450,500	
		CAPABLE New Projects from 2013 Call for Proposals ⁷⁾	8,000	0	8,000
		CAPABLE Continuing Projects with Committed Funds from Previous Fiscal Years			
2	Frameworks	Low Carbon Initiatives Framework ⁸⁾	10,000	10,000	20,000
		Biodiversity and Ecosystems Services Framework ⁹⁾	43,000	0	43,000
		Climate Adaptation Framework ¹⁰⁾	0	585,000	585,000
3	Science-Policy Linkages and Capacity Development	One Annual Sub-Regional PDTW ¹¹⁾	20,000	5,000	25,000
		Science-Policy Linkages ¹²⁾	50,000	16,000	66,000
		PARR (Urbanisation) Programme Fellowships ¹³⁾	30,000	0	30,000
4	APN Institutional Meetings and Activities	20th Intergovernmental Meeting	0	120,000	120,000
		28th Steering Committee Meeting	33,000	23,000	56,000
		APN 4th Strategic Planning Workshop - 3Rs Scoping Workshop ¹⁴⁾	0	60,000	60,000
		Hvogo Activities ¹⁵⁾			15,000
		SRC South Asia ¹⁶⁾			15,000
		SRC Southeast Asia	20,000	25,000	45,000
		SRC Temperate East Asia			15,000
		Planned Travel for Secretariat to APN Meetings ¹⁷⁾	0	35,000	35,000
		20th Anniversary Science Conference in 2016	0	3,000	3,000
				4,000	4,000
5	Institutional and Scientific Networking, Communications, Publications ¹⁸⁾	3 Framework Publications	0	1,500	1,500
		CAPABLE 10 Years Publication	0	20,000	20,000
		Annual Science Bulletin, Annual report, General Brochures, Evaluation and Strategic Planning Reports	2,500	0	2,500
		Climate in AP: Book Review & IPCC Connections	0	25,000	25,000
		Ad Hoc Travel for Scientific and Institutional Activities	0	25,000	25,000
6	Secretariat Staffing ¹⁹⁾	Science, Communication, Development and Institutional Affairs Staff (including Coordinator)	0	328,000	328,000
		Administrative Staff Programme Fellow	0	86,000	86,000
			0	32,000	32,000
7	Maintenance and Operation Costs	General Maintenance and Operational Cost ²⁰⁾	0	59,000	59,000
		Upgrading the Equipment of APN	0	5,000	5,000
		IGFS Overhead ²¹⁾	0	65,500	65,500
		927,668	2,448,000	3,375,668	
				189,500	

Item 7-Sub-Regional Committing meetings

Instructions for the parallel sessions

- In this parallel session **SA, SEA and TEA SRCom** members will group into their respective sub-regions to discuss SRC activities.
- The agendas of the parallel sessions are available under items 7.
- Each sub-regional group is asked to provide a summary of the discussion (**Word file**) for submission to the APN Secretariat.
- SRCom members are asked to **report to the IGM under Item 9**, preferably via PowerPoint presentation on Friday 21, March 2014 at the IGM based on discussion at this parallel session.
 - 9:00 to 9:10 Report from South Asia
 - 9:10 to 9:20 Report from Southeast Asia
 - 9:20 to 9:30 Report from Temperate East Asia
- Following the SRCom presentations, a 10-minute general discussion will be held from 9:30 to 9:40 to discuss the sub-regional activities.
- The sub-regional committee representatives should hand their presentation and report to Secretariat members
- Please proceed to your respective groups according to following table.

Sub-regional Groups	Member Countries	Room Assigned
South Asia	<ul style="list-style-type: none"> • Bangladesh • Bhutan • India • Nepal • Pakistan • Sri Lanka 	Pressroom
Southeast Asia	<ul style="list-style-type: none"> • Cambodia • Indonesia • Lao PDR • Malaysia • Philippines • Thailand • Viet Nam 	VIP Lounge I
Temperate East Asia	<ul style="list-style-type: none"> • China • Japan • Mongolia • Republic of Korea • Russian Federation 	VIP Lounge II

Item 8 - Sub-Regional Chairs Meeting

Under this item, chairs and rapporteurs of each sub-regional group will gather and discuss the following points:

1. Identify the common issues among the APN sub regions
2. Suggestions and comments on the SRC component of the APN framework document
3. APN sub-regional science policy dialogues and synthesis – Chairs need to identify the timeframe for the conduct of the SPD synthesis.
 - SEA-SPD was held in July 2012.
 - SA-SPD will be held in January 2015.
 - TEA-SPD is proposed to be held in 2016 during the 21st IGM, but is yet to be confirmed.
 - Synthesis - During the 18th IGM, the synthesis workshop was proposed to be held as a Hyogo-funded activity.
4. Annual Proposal Development Training Workshop (PDTW) – Chairs need to identify the sub-region that will host the 2015 and 2016 annual PDTWs

NOTE: Considering current financial situation, the APN suggests to hold one annual training workshop from 2014 onwards. The workshop will be held in each sub-region in rotation and will allow young/early career scientists in each sub region to participate.

- SEA has held four PDTWs, and the next one (5th PDTW this 2014) is scheduled to be conducted in Lao PDR, based on the 6th SEA-SRC meeting decision.
 - SA has held four PDTWs.
 - TEA has held one PDTW.
5. The Future of SRC activities

Report of the 19th IGM Sub-Regional Chairs Meeting

20 March 2014, Siem Reap, Cambodia

Participants:

The Southeast Asia and South Asia sub-regional chairs, vice chairs and rapporteurs participated in the Chairs meeting.

Ms. Peldon Tshering (nFP Bhutan)

Dr. Madan Lall Shrestha (SPG Nepal)

Dr. Wan Azli Wan Hassan (nFP alt. Malaysia)

Dr. Virasack Chundara (SPG Lao PDR)

Dr. Jariya Boonjawat (SPG Thailand)

Ms. Taniya Koswatta (APN programme coordinator)

Suggestions and comments on the SRC section of the APN Framework Document

All sub-regional members agreed that both nFP and SPG members should participate in SRC activities. The draft amendments to the Framework Document on SRC were agreed among SRC members with some additional suggestions. SEA members suggested removing the word “second” in sub-point iv. of the procedure under the SRC committees (i.e. “second vice chair” to be replaced by “vice chair”).

South Asian members suggested that at least one from each sub-region to be present in the total of five nFPs in the APN Steering Committee. Also under the Steering Committee membership term, it was suggested that no term be renewable unless all APN member countries have been represented at least once in the steering committee.

APN sub-regional science policy dialogues and synthesis

Concerning the time gap between the first SEA Sub-Regional policy dialogue and the second one, the Chairs suggested to conduct an SPD Synthesis in 2015 to coincide with APN’s 20th anniversary.

Annual Proposal Development Training Workshop (PDTW)

Both sub regions agreed to give the opportunity to the Temperate East Asia group to hold the 2015 annual proposal development tanning workshop. However, if the TEA group is not ready to organise a training workshop, the South Asia region will hold the 2015 annual proposal development workshop.

Members identified that to increase developing country involvement in APN scientific research activities, PDTW workshops should continued to be organised as they help to build the capacity of developing country scientist to develop competitive proposals. Further, they suggested that APN donor members, such as the United States, can consider funding PDTW and help develop the capacity of developing country young scientists.

The Future of SRC

The SEA Chair suggested that time allocated for sub-regional parallel meeting is insufficient for detailed discussion. Further he stressed that sub-regional parallel meetings should be held before the IGM in order for the SRCs to make recommendations to the IGM on sub-regional issues. He emphasised that if sub-regional committees do not meet during the intersessional period, at least they will need a full day prior to the IGM in order to have successful discussion.

South Asia- Sub Regional Committee (SA-SRC) Meeting

Report submitted by Peldon Tshering, SA-SRC Chair

20 March 2014, Siem Reap, Cambodia

Members present

- Bangladesh
- Bhutan
- India
- Nepal
- Pakistan
- Sri Lanka

5th SA-SRC Chair: Mr. Faiz Ahmed, nFP from Bangladesh

6th SA-SRC Chair: Ms. Peldon Tshering, nFP Bhutan

Vice Chair: Mr. Sunil Kariyawasam, SPG Sri Lanka

Rapporteur: Dr. Madan Lall Shrestha, SPG, Nepal

Item 1- Adoption of the Draft Agenda

The agenda was adopted without change

Item 2- Review of the action points of 5th SA-SRC Meeting and discussion of the way forward:

- **APN Science Policy Dialogue:** Discussion of the output of Science policy dialogue shared with START and CDKN.
- **South Asian Sub-Regional Committee summary proposals (Coordinated by Prof. Miah):**
- The two proposals circulated are:
 - “Climate resilience in farming systems under sloping lands of South Asia” and

- “Assessment of ecosystem services of selected landscapes of South Asia”

These have been revised and any further inputs to the summary proposals may be provided by the committee members by 10 April 2014.

- **APN Framework Document:**

Institutionalizing Sub-Regional Committee in the APN Framework: points stressed on for inclusion to the document:

- The SPG members are to be present at the IGM/SPG meeting.
- Under membership of the Steering Committee, it was suggested that at least one from each sub region be present in the total of the 5 nFPs.
- Under the SC membership term, it was suggested that no term be renewable unless all member have been represented at least once, to avoid permanent fixtures and provide opportunities for all members.

Evaluation of South Asia Sub-Regional Committee:

- The format used by SEA-SRC will be referred to (Dr. Linda to provide the format).
- Dr. Amir Muhammed, SPG Member from Pakistan will facilitate in this task. He will assess if further inputs are required and circulate the draft format to the member countries for further inputs.
- A draft format to be developed by 15 April 2014.
- The draft evaluation format would be used by members for the SRC evaluation and all evaluations are to be submitted by 1st week May 2014.

Enhancing Communication with Other Regional Networks: All contact details of the regional network /organisations in each country are to be provided by members to the Chair by 15 April 2014.

6th APN SA-SRC Meeting: The 6th SA-SRC meeting and SA Science Policy dialogue is to be held in Pune, India from 19-23 January 2014.

- The list of potential invitees from the member countries will be prepared by the nFPs (SPG will assist in this in case nFPs are not available) for submission by 15 April 2014.
- Regarding the involvement of Dr. M.S. Swaminathan, Prof Giashuddin Miah, SPG Member from Bangladesh and Dr. Hemant Borgaonkar, SPG Alternate from India will provide the necessary information.

Item 3- Institutionalizing Sub-Regional Committee in the APN Framework document:

The Chair briefed the committee on the recently drafted framework document and points of discussion have been presented as earlier.

Item 4- South Asian Sub-Regional Policy Dialogue:

- Dr. Linda Stevenson will continue in her efforts to involve CDKN, She will also include START, SAARC development Fund and LEAD.
- THE APN Secretariat will work on a time line for the event and also explore for more partners in terms of funding and expertise. This was to be completed by 1st week of May 2014
- It was decided that both nFPs and SPG Members of member countries would be involved in the organizing committee for the science policy dialogue event.

Item 5- Future Plan/Activities

- The proposal from SA-SRC is to be made ready for submission for 2015.
- Members suggested that some emerging issues to assess were: resource utilization in the context of water resources, diminishing land areas and exploration towards the precision agriculture with proper water utilization.

Southeast Asia Sub-Regional Committee (SA-SRC) Meeting

Report submitted by Dr. Wan Azli Wan Hasan, SEA-SRC Chair

20 March 2014

Siem Reap, Cambodia

Member Countries of South-East Asia Sub-Regional Group

- Cambodia: nFP, Sundara Sem; SPG, Veasna Kum
- Indonesia: nFP, Sabar Ginting; SPG, Erna Sri Adiningsih
- Lao PDR: SPG, Virasack Chundara
- Malaysia: nFP alt. Wan Azil Wan Hassan; SPG, Fariza Yunus
- Philippines: SPG, Portia G. Lapitan
- Thailand: nFP alt. Prasert Sirinaporn; SPG, Jariya Boonjawat
- Vietnam: SPG, Kim Chi Ngo
- Invited Experts: Kanayathu C. Koshy; Subramaniam Moten
- APN Secretariat: Taniya Koswatta; Dyota Condrorini

Report: SEA- Sub-Regional Committee Meeting, i.e. the Parallel Sessions of IGM-SPG 19:

Item 7

- Self-Introduction and Election of Officers

Dr. Wan Azli Wan Hassan, nFP (alternate) Malaysia, Acting Chair of the 6th SEA-Sub-Regional meeting proceed with the self introduction and the result of the elected officers are:

- Chair: Dr. Wan Azli Wan Hassan, nFP alt. Malaysia,
- Vice-Chair: Dr. Virasack Chundara, SPG Lao PDR, and

Rapporteur: Dr. Jariya Boonjawat, SPG Thailand

Item 1. Adoption of the Draft Agenda

The elected Chair of the meeting seek adoption the draft agenda after the self-introduction and Election of Officers. The agenda was adopted without any objection.

Item 2. Review of the action points of 6th SEA-SRC Meeting/19/08-App.2

- Dr. Erna Adiningsih and Dr. Jariya Boonjawat coordinate the APN seed grant proposal on Climate Adaptation and circulate to all members for more details and more definite plan on the trainings.
 - 1st Training in Thailand and invite Cambodia, Lao PDR, and Myanmar
 - 2nd Training in Indonesia and invite Malaysia
 - 3rd Training in Vietnam or the Phillipines

Time line of the final proposal should be completed in April

- Communication issues among members, which was identified as weakness of the SEA group have been completed by sharing mobile phone numbers on 26th November 2013.
- Involvement of Myanmar has been proposed by Dr. Subramaniam Moten and Dr. Virasack Chundara, and the meeting considers that Dr Tun Lwin (Myanmar), poposed by Dr. Subra should be approached first by APN Secretariat as observer of the next SEA-SRC meeting.
- Sub-Regional Committee Evaluation Report
 - Dr. Kim Chi Ngo has circulated the first draft, according to the background information provided by Ms Taniya Koswatta, which has been further developed by Dr. Subramaniam Moten and Dr. Fariza Yunus and forward to all members.
 - Communication among Members
 - Conducting SRC S-P Dialogue
 - Working remotely
 - Devising & undertaking joint Projects
 - Self-sustainable

- Success of PDTW
- Success of regional proposal (committee activities)
- SWOT Analysis

Item 3. Institutionalization Sub-Regional Committee in APN framework document:

(cont.)

SEA-SRC had discussed on the amendment of APN framework document, which focus on the SRC document only. The meeting accepts the organization chart (Page 4) that SRC is an organ of APN. SEA member also agreed with other SRCs issues, namely 1. Mandate, 2. Membership, and suggest for minor amendment of:

3. Procedures; the committee agree with i, ii, and iii, but iv is suggested for changes as follows

iv. When an SRC meets during an intersessional period an the IGM accepts an offer from an SRC member to host the meeting, the host country will appoint its nFP (or SPG) to act as Second Vice-Chair. The Vice-Chair will remain in office until the end of the next SRC meeting at the IGM;

Item 4. Seed grant proposal on urban planning

- Dr. Erna and Dr. Jariya led the discussion on the updating of the proposal. Dr. Jariya has invited Dr. Bundit Chulasai and Dr. Banasopit Mekvichai to organize the training in Bangkok, and will invite Cambodia, Lao and Myanmar. Dr. Erna will be the coordinator for training in Indonesia and invite Malaysia. Dr. Kim Chi will provide CV of the coordinator of the training in Vietnam and invite the Philippines. Financial support for each training will be sought from local funding agency.

Item 5. Future Plans/Activities

- Next SEA-SRC meeting will be hosted by Lao PDR and back to back with PDTW.
 - Dr. Virasack informed that the estimated budget of both activities may be more than USD40,000. Since the budget of SEA-SRC may be only USD 15,000 and PDTW USD 25,000 (3 days), participants from Thailand and other country may consider use of domestic flight Bangkok-Udonthani to cut the travel cost to Vientien;
 - The venue can be at the office of the host organisation to reduce cost;

- Time line for the SRC-PDTW should be tentatively in early July 2014.

Item 5. Future Plans/Activities (con.)

- Science-Policy Dialogue Synthesis
 - The meeting discuss/suggest that SPD Synthesis should be in 2015 coincident with APN-20 years anniversary

Item 8 of 19th IGM: SRC-Chairs & Rapporteurs Meeting

- Chairs and Vice Chairs of SEA and SA –SRC discuss common issue among the two Sub-Regions and agree to propose that USA and other developed Member Countries should support PDTWs, in order to facilitate **capacity building in** developing Sub- Regional ARCP projects with the research themes that have co-benefit among developed Member Countries and Sub-Regions, led by young scientists from developing countries.

General Report from Scientific Planning Group Co-Chairs
on SPG and CDC Issues

Presently, there is no paper for this Item and a PowerPoint presentation will be delivered to the IGM by the SPG Co-Chairs on the outputs of the SPG Pre-Meeting held on Tuesday 18th March, 2014

APN Framework Document

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Framework of the Asia-Pacific Network for Global Change Research

Rationale

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

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

APN defines "global change" as the set of natural and human-induced processes in the Earth's physical, biological, and social systems that, when aggregated, are significant at a global scale. APN strives to enable the developing countries of the region to participate increasingly in, and to benefit fully from, cooperative research in the region and its sub-regions. APN assures that the research results contribute to the development of sound science-based response strategies and measures, policy- and decision-making processes, and scientific capacity development to address these important issues.

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

1. Vision

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

2. Mission

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

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

3. Goals

In order to achieve its mission, the APN has identified four goals:

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

4. Core Strategies

The core strategies of the APN are to:

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

5. Membership

- i. Membership is open to all countries in the Asia-Pacific region. The current APN member countries are listed in Appendix 1 (page 14).

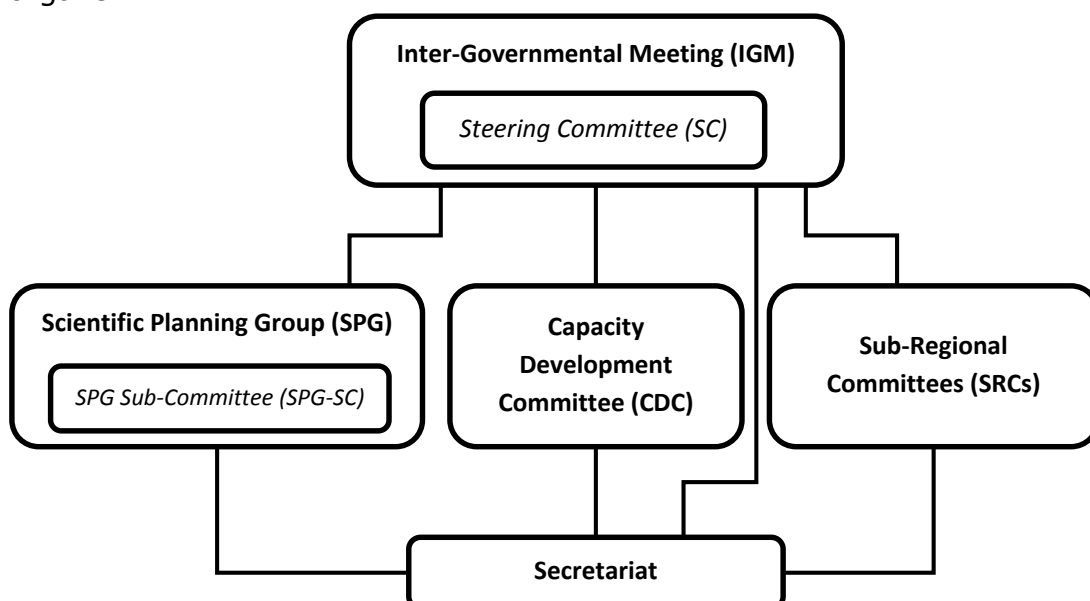
- ii. Each Member Country appoints:
 - a. a national Focal Point who is responsible for coordinating national activities and participating in the annual Inter-Governmental Meeting (IGM); and
 - b. a global change research expert who is the scientific contact in the respective country and participates in the annual Scientific Planning Group (SPG) Meeting.
- iii. A country in the region may become a member subject to IGM approval of an official governmental request from that country. A Member Country may withdraw from the membership of the APN at any time by submitting written notice to the Secretariat.

6. Organs and Sub-Organs

The APN’s Organs and Sub-Organs are:

- i. Inter-Governmental Meeting (IGM);
 - Steering Committee (SC);
- ii. Scientific Planning Group (SPG);
 - SPG Sub-Committee (SPG-SC);
- iii. Capacity Development Committee (CDC);
- iv. Sub-Regional Committees (SRCs);
- v. Secretariat.

The organisational chart below illustrates the relationships between the organs.



Organisational Arrangements and Procedures

A. The Inter-Governmental Meeting (IGM)

1. Mandate

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

- 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 to be undertaken or supported by the APN, based on recommendations made by the SPG and CDC;
- vi. reviews and approves other activities to be undertaken or supported by the APN, based on recommendations made by SPG, the SC, the CDC, SRCs and the Secretariat;
- vii. provides guidance to the SC, SPG, CDC, SRCs and the Secretariat;
- viii. conducts regular reviews of, evaluates and approves the APN's long-term plans, especially its Strategic Plan, and the implementation of these plans;
- ix. establishes SRCs when appropriate; and
- x. performs other functions, as necessary, to achieve the mission and goals of the APN.

2. Participation at IGM Annual Meetings

- i. National Focal Points of each Member Country may participate; A member country may designate an alternate national Focal Point to participate in an IGM if the national Focal Point is unable to attend;
- ii. SPG members may participate.
- iii. APN-approved countries may be invited to participate as appropriate;
- iv. Any non-APN member country that wishes to attend must indicate its interest to and receive an invitation from the Secretariat following consultation with the IGM, if it is in session, or, if it is not, by the SC;

- v. International global change research and research-related organisations, and national and international funding organisations engaged in supporting global change research may be invited to send observers. Invitations will be made in consultation with the IGM, if it is in session, or, if it is not, by the SC.

3. Meeting Procedures

- i. The IGM convenes annually;
- ii. The IGM elects a Chair, usually from the host country, and one Vice-Chair from among the national Focal Points in attendance;
- iii. The Chair facilitates all sessions of the IGM. He/she may delegate this role to the Vice-Chair;
- iv. The 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 national Focal Points may participate in the adoption of APN policies and programmes;
- vi. The Secretariat maintains a record of the IGM; and
- vii. The Chair, with the assistance of the Secretariat, will prepare for IGM review and adoption a List of Actions taken by the IGM and a Chairperson's Summary of the Meeting.

B. The Steering Committee (SC)

1. Mandate

The Steering Committee (SC):

- i. acts on behalf of the IGM during the period between the IGMs, implementing IGM decisions; and
- ii. facilitates administrative and management arrangements necessary to implement the programme of activities of the APN, especially through thorough consideration of the APN budget.

In particular, the SC guides the Secretariat in:

- iii. developing funding for the APN and its programmes and activities by encouraging member countries to contribute funds or in-kind support;
- iv. exploring potential funding from other sources, e.g., international agencies and the private sector;

- v. liaising with international global change research and research-related organisations and encouraging their involvement in and support for APN activities and programmes; and
- vi. considering the potential attendance of observers as referred to in section 6.A.2.iv and 6.A.2.v.

2. Membership

- i. The SC includes:
 - a. five national Focal Points elected by the IGM, each to serve for a two-year term, taking into account the need to assure representation from the various sub-regions and the need to assure the rotation of membership;
 - b. the national Focal Point from the country to host the next IGM, to serve for a one-year term;
 - c. the two SPG Co-Chairs ex officio;
 - d. another Focal Point if an SPG Co-Chair is also a Focal Point;
 - e. experts co-opted by the SC, each to participate in SC activities for a one-year term (renewable); and
- ii. National Focal Points from donor countries may participate in SC activities.

3. Procedures

- i. The SC selects from among its elected national Focal Points a Chair, First Vice-Chair, and Second Vice-Chair. Should the position of Chair become vacant, the First Vice-Chair shall become Interim Chair until the next IGM. This procedure shall be followed until the SC can hold a normal election for this post. Similarly, should the position of First Vice-Chair become vacant, the Second Vice-Chair shall become Interim First Vice-Chair. This procedure shall be followed until the SC can hold a normal election for this post; and
- ii. The Chair is responsible, with the assistance of the Secretariat, for managing SC activities.
- iii. 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.

C. The Scientific Planning Group (SPG)

1. Mandate

The Scientific Planning Group (SPG):

- i. reviews research proposals received by the APN for funding, especially those in response to the APN calls for proposals, and on the basis of this review, recommends research proposals to the IGM for its approval;
- 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 global research and research-related organisations; and
- 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 APN scientific themes;
 - b. participation in research or programmes directly related to APN activities;
 - c. capacity to initiate and strengthen science-policy linkages; and
 - d. willingness and availability to participate in the SPG's activities, especially proposal review processes and annual SPG-related meetings.
- 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 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 Meeting at which his/her successor is elected;
- 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 decisions are made by consensus;
- vii. The SPG agrees on the processes for the conduct of its activities, including meetings;
- viii. The SPG may invite additional experts to participate in its meetings and other activities, as appropriate; and
- ix. The SPG prepares and submits reports of its meetings and activities to the IGM.

4. The SPG Sub-Committee (SPG-SC)

- i. Convenes prior to the SPG Meeting;
- ii. Reviews and prioritises 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) and
 - b. three other SPG Members elected by the SPG at its meeting in the previous year.
- iv. the SPG Sub-Committee may invite additional experts to attend its meeting as observers.

D. The Capacity Development Committee (CDC)

1. Mandate

The Capacity Development Committee (CDC) is responsible to the IGM, while reporting to the SC during the intersessional periods between IGMs. The CDC:

- i. oversees the processes related to the operation of the CAPaBLE Programme;
- ii. develops strategies for the development and future of the CAPaBLE Programme; and
- iii. reviews and prioritises CAPaBLE proposals received for APN funding, for consideration by the IGM.

2. Membership

- i. the membership of the CDC consists of:
 - a. the Steering Committee Chair (ex officio);
 - b. the two SPG Co-Chairs (ex officio); and
 - c. one donor representative, invited by the IGM.
- ii. 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 links to organisations and programmes that are involved in capacity development.

3. Procedures

- i. convenes prior to the SPG Meeting and reports on the results of its work to the SPG;
- ii. this report will include its review and prioritisation of CAPaBLE proposals.

E. Sub-Regional Committees (SRCs)

The IGM may establish a Sub-Regional Committee (SRC) when requested by APN Member Countries from a sub-region.

1. Mandate

Each SRC will provide a forum for:

- i. identifying and discussing scientific research, capacity development and other related needs that are common to the sub-region;

- ii. recommending to the IGM actions that the IGM could take to address these needs in the sub-region;
- iii. working with the other organs of the APN to assure effective implementation of APN programmes and related activities in the sub-region;
- iv. maintaining and strengthening communication and interaction among the members of the SRC and between the SRC and the other organs of the APN; and
- v. strengthening interactions among scientists and policy makers in the sub-region.

2. Membership

- i. When the IGM establishes an SRC, the Director of the Secretariat will invite all APN Member countries in the sub-region to join the SRC;
- ii. Each such Member Country that wishes to participate in the SRC will notify the Secretariat of its interest and willingness to participate in the SRC and of its member(s) on the SRC;
- iii. Members will normally be the Member Country's nFP, its SPG Member, or both; an SRC Member may designate an alternate to participate in SRC meetings if he/she is unable to attend;
- iv. The Secretariat will assure that all APN Members are kept informed of the membership of SRCs.

3. Procedures

- i. Each SRC will normally meet annually during the IGM but may also meet separately during the intersessional period if the need arises and funding is available;
- ii. Each SRC will elect a Chair and Vice-Chair at the beginning of its annual meeting at the IGM;
- iii. The Chair and Vice-Chair will be elected for a one-year term and may be re-elected for a second year;
- iv. When an SRC meets during an intersessional period and the IGM accepts an offer from an SRC Member to host the meeting, the host Country will appoint one of its members on the SRC to act as Second Vice-Chair. The Second Vice-Chair will remain in office until the end of the next SRC meeting at the IGM; and

- v. Each SRC will prepare and submit reports of its meetings and activities to the IGM and keep the SC and the Secretariat informed of its work during the intersessional period.

F. The Secretariat

1. Mandate

The Secretariat:

- i. facilitates the day-to-day operations of the APN;
- ii. provides support to the organs and sub-organs of the APN; and
- iii. implements IGM and SC decisions on behalf of these organs.

2. Operations

- i. Resources and support for the Secretariat are provided by the host country, including the Central and Local Governments. In addition, the host country provides the services of a senior expert in global change issues, seconded as the Director of the Secretariat.
- ii. The Secretariat operates under the administrative arrangements of an institution based in the host country. For further information, refer to Appendix 3 (page 16).

7. Financial Arrangements

- i. The APN maintains a special funding/financial account within an institution based in the host country (refer to Appendix 3). 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, 6.F.2.i., 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, SC, SPG, CDC and SRC 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 IGM, SC, SPG, CDC and SRCs may establish small ad hoc groups for specific tasks, such as planning or provision of specialised advice. Such groups will normally conduct their work during the sessions of their parent bodies and/or intersessionally via electronic correspondence. Establishment of any such group that requires financial resources requires the approval of the IGM
- ii. Expected roles of the nFPs, SC Members, SPG Members, CDC Members, SRC Members and the Secretariat are specifically elaborated in Appendix 4 (pages 17–24) as guidance.

9. Language and Records

- i. English is the official and working language for all IGM, SC, SPG, CDC and SRC meetings, documents, and communications.
- ii. Members, observers or invited experts 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 Document 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 the following countries may participate in all APN programme activities and are considered to be from an APN Approved Country under the programme membership participation criterion:

Maldives
Myanmar
Pacific Island Countries
Singapore

Appendix 2

The APN presently (March, 2014) has three Sub-Regional Committees as listed below, with the membership of each:

South Asia Sub-Regional Committee (SA-SRC)

Bangladesh
Bhutan
India
Nepal
Pakistan
Sri Lanka

Southeast Asia Sub-Regional Committee (SEA-SRC)

Cambodia
Indonesia
Lao PDR
Malaysia
Philippines
Thailand
Viet Nam

Temperate East Asia Sub-Regional Committee (TEA-SRC)

China
Japan
Mongolia
Republic of Korea
Russian Federation

Note: Approved countries within a sub-region where an SRC exists may participate as observers.

Appendix 3

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

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

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

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

Appendix 4

Guidance for APN national Focal Points (nFPs)

National Focal Points (nFPs) are responsible for representing their countries in the activities of the APN, especially their countries' 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 Meeting (IGM) and meetings of the Sub-Regional Committee of which the nFP's country is a member.

NFPs are responsible 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 guidance to the Scientific Planning Group, the Steering Committee, the Capacity Development Committee, the Sub-Regional Committees 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 meetings of the IGM, SPG, and SRCs.

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.

The Chair, with the assistance of the Secretariat, will prepare a List of Actions taken by the IGM for its review and adoption before the end of an IGM Meeting. A Chairperson's Summary of the Meeting will be made available to the IGM within three months after the end of that meeting.

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 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 intersessional period between the IGMs, especially to promote and encourage effective implementation of IGM decisions. SC members are expected to be very proactive and to initiate action to improve the APN programme, planning and operations, especially via electronic communications.

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

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

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

The SC Chair and other SC Members as well are expected to work closely with the APN Secretariat to represent the APN in a wide range of international meetings and related activities, carrying to these audiences information regarding the APN programme, planning and operations; inviting input to the

APN programme, planning and operations within and from these fora; and encouraging, when appropriate, improved interaction with the APN.

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

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

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

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

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

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

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

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

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

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

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

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

Guidance for Capacity Development Committee (CDC) Members

Designated and accountable to the IGM, the CDC will:

- i. Ensure that CAPaBLE operates and develops in accordance with the Objectives of the APN vis-à-vis 1) fostering global change research, 2) promoting developing-country scientists' participation, 3) science-policy interfacing, 4) specific objectives of CAPaBLE, and 5) directives of the Intergovernmental meeting and/or the APN Steering Committee.
- ii. Ensure that CDC deliberations and actions are transparent and communicated widely, especially to the APN Steering Committee and the Inter-Governmental Meeting.

- iii. Establish and review the procedures of the CAPaBLE Programme related to:
 - call(s) for proposals for funding through the Programme;
 - the selection of proposals for funding including the disciplinary areas of research and regional focus that reflect the priorities established by the IGM;
 - the review of overall performance of the projects;
 - ensuring the dissemination of materials generated; and
 - developing guidelines to focus activities around current and developing themes in global change.
- iv. Identify contact point persons who will 1) act as a link between a specific CAPaBLE project and the CDC providing feedback to the CDC, 2) assist APN recipients of CAPaBLE support to achieve their objectives, and 3) provide advice and mentoring to the project.
- v. Establish effective mechanisms for the communication of activities and outcomes of the CAPaBLE Programme to all members and stakeholders.
- vi. Assist with the development of strategies for the growth of investment in APN's capacity building activities.

This will include developing a strategy to provide the basis for an evolving agenda for APN capacity building that can, in turn, lead to developing a strategy for building the financial support, diversity, continuity and reporting for the programme, including:

- more inclusive financial participation from across the members nations
 - higher profile of CAPaBLE within members nations (government) and appreciation of the value of capacity development
 - engagement with alternative funding sources
- vii. Through its membership, the CDC will use its networks to create linkages into the activities of a range of international agencies and programmes involved in global change research and capacity building activities so that the APN's work aligns and complements the works of the other agencies but also provides for the continued development and integration of those individuals and groups supported by APN.
 - viii. Develop a conceptual framework of the Science-Policy Interface, explicitly identifying the role of APN and CAPaBLE and develop

methodologies for enhancing the process and promoting the incorporation these methodologies into research activities.

Guidance for Members of Sub-Regional Committees (SRCs)

A Sub-Regional Committee (SRC) is established upon approval of the IGM.

An SRC is expected to plan and implement activities that promote the APN in the sub-region and beyond. Such activities shall be approved by the IGM prior to implementation.

An SRC provides a forum for identifying and discussing scientific research, capacity development and other related needs that are common in the sub-region; recommends to the IGM actions that the IGM could take to address these needs in the sub-region.

An SRC works with the other organs of the APN to assure effective implementation of APN programmes and related activities in the sub-region; maintains and strengthens communication and interaction among the members of the SRC and between the SRC and the other organs of the APN; and strengthens interactions among scientists and policy makers in the sub-region.

An SRC is also expected to:

- communicate with project leaders and their collaborators, and organisations and networks in the sub-region
- encourage involvement of scientists in the region in research and capacity development activities
- identify and attract potential donors for the sub-region

When the IGM establishes an SRC, the Director of the Secretariat will invite all APN Member countries in that sub-region to join the SRC. Each Member Country that wishes to participate in the SRC will notify the Secretariat of its interest and willingness to participate in the SRC and of its member(s) on the SRC. Members will normally be the Member Country's nFP, its SPG Member, or both. An SRC member can designate an alternate to participate in SRC meetings if he/she is unable to attend. The SRC informs the Secretariat of any changes in the Membership. The Secretariat will then assure that all APN Members are kept informed of the membership of SRCs.

An SRC normally meets annually during the IGM. During the intersessional period, it is expected that the work of the SRC will be carried out electronically. If the need arises and funding is available, an SRC may also meet during the intersessional period. Administrative support for such a meeting is expected to be largely provided by the country hosting that meeting.

An SRC elects a Chair and Vice-Chair at the beginning of its annual meeting at the IGM. The Chair and Vice-Chair is elected for a one-year term and may be re-elected for a second year. When an SRC meets during an intersessional period and the IGM accepts an offer from an SRC Member to host the meeting, the host Country will appoint its nFP to act as Second Vice-Chair. The Second Vice-Chair will remain in office until the end of the next SRC meeting at the IGM.

An SRC is expected to submit reports of its meetings and activities to the IGM and keep the SC and the Secretariat informed of its work during the intersessional period.

Guidance for the APN Secretariat

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

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

The Secretariat is expected to support APN Meetings, including the IGM, SC, SPG and CDC Meetings. This support may include 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 called upon to assure timely and effective APN communications and to work closely with all of its organs, with its members; with other regional institutions and networks; with the international global change research programmes; with policy makers; with donors and stakeholders; and with the scientific community and the general public (e.g., through 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 staff is expected to submit a mission report, normally within a few weeks of the completion of the activity.

Item 13: Discussion on Plans for the APN 20th Anniversary

The IGM/SPG is asked to discuss ideas to celebrate the 20th anniversary of the APN and, in addition to that, consider discussing and approving the recommended activity outlined in the present paper.

APN was born in 1996 as an inter-governmental network to address global environmental change issues in the Asia-Pacific region. After two decades of scientific and capacity development activities, APN is approaching its 20th anniversary and will celebrate this at the 20th IGM in March, 2015. In showcasing APN involvement in global change research, APN will highlight the outcomes of its achievements through showcasing specific APN-funded projects. The following activities to celebrate the 20th anniversary of the APN are proposed for consideration and discussion at the IGM.

Communication and Promotion

Prior to the APN 20th anniversary celebration, a brochure (or relevant publication) will be developed to promote the 20th anniversary activities and APN's two decades of contribution to global change research.

Restructuring APN website and launching young scientist alumni website.

A series of video clips will be developed and released through the APN website and social networking sites (e.g. Facebook, Twitter, Youtube, Google +). Voices from the Members and Project Leaders will be highlighted in the video.

Science Conference

To date, the APN has funded 335 projects in the field of global change research, particularly related to regional scientific research and capacity development. Outcomes of these funded activities were evaluated at the end of each APN Strategic Phase. However, APN did not present or organise any events to showcase all project outcomes as a one event. Therefore, in celebrating the 20th anniversary, APN plans to organise a two-day scientific conference to showcase the output of the outstanding APN projects and acknowledge APN donors for two decades of contribution.

a. Structure of the Science Conference

The conference will be organised as an independent event in fiscal year 2015/2016, tentatively set at the end of August or first week of September 2015, with 150 participants including APN members, project leaders and guests. It also aims to raise funds by inviting private sectors and other potential donors to the conference. The conference will include the following sessions:

Conference opening session – This session aims to acknowledge APN stakeholders and their contributions to the APN.

Scientific and capacity development research session – To showcase the project outcome, the conference will include three main sessions. Outstanding projects will be selected based on project evaluation. The selected projects will be categorised to three sub sessions;

- i. Oral presentation session – Scientific or capacity building project activities which have outstanding outcome will be invited to deliver oral presentations at the conference. The conference will have four main oral presentation sessions to cover four thematic area of APN.
- ii. Poster session – This session aims to accommodate outcome of capacity development activities and especially target to showcase young scientist involvement from developing countries.
- iii. Partnering or networking session – Session aims to showcase the outcome of APN-funded regional research network activities and partnership activities among the international/regional organisations such as APAN, GEOSS, Future Earth, CORDEX, WCRP, AWCI, MAIRS, IGBP, START, IGES, LoCARNet, IHDP, UN-CECAR, UNU, SEN, PICES, Asian Flux, etc.

Panel or roundtable discussion session – to highlight the future research needs and mainstream scientific findings into policy and development.

Conference closing with award ceremony – highlighting APN members who have actively contributed to APN for two decades, and APN Secretariat directors who made significant contributions to APN growth and development.

b. Funding & In-kind contribution

- Tentatively the activity will need US\$200,000 to cover participants travel, accommodation, DSA and conference cost.
- APN will elaborate the current proposal and share with potential donors to raise fund for the conference.
- In addition, APN will seek direct financial support from member countries to share or contribute to the activity.
- Seeking the host country and local organising committee to support the events is among the important immediate concerns.

Item 14: Hosts of 20th and future IGMs

A letter from the APN Secretariat Director was sent on 19 February 2014 to member countries asking for their willingness to host the 20th IGM, which marks the 20th anniversary of the establishment of the Network, and the start of the 4th Strategic Phase.

During the regular process of seeking potential hosts, the secretariat received an official expression of interest offered by the government of Nepal through its national Focal Point Mr. Gokarna Mani Duwadee. Discussions are expected to take place the present item, and announcements may be made.

Locations of past IGMs and associated meetings

Year	Location	Sub-Region	Meetings
2014	<i>Siem Reap, Cambodia</i>	<i>SEA</i>	19 th IGM/SPG, 17-21 March
2013	<i>Kobe, Japan</i>	<i>TEA</i>	18 th IGM/SPG, 8-12 April
2012	<i>Jakarta, Indonesia</i>	<i>SEA</i>	17 th IGM/SPG, 12-16 April
2011	<i>Colombo, Sri Lanka</i>	<i>SA</i>	16 th IGM/SPG, 4-8 April
2010	<i>Busan, Republic of Korea</i>	<i>TEA</i>	15 th IGM/SPG, 15-19 March
2009	<i>Kuala Lumpur, Malaysia</i>	<i>SEA</i>	14 th IGM/SPG, 16-20 March
2008	<i>Relocated from Sri Lanka to Kobe, Japan</i>	<i>TEA</i>	13 th IGM/SPG, 16-20 March
2007	<i>Honolulu, USA</i>	<i>Pacific</i>	12 th IGM/SPG, 19-23 March
2006	<i>Bangkok, Thailand</i>	<i>SEA</i>	1 th IGM/SPG, 20-24 March
2005	<i>Kobe, Japan</i>	<i>TEA</i>	10 th IGM/SPG, 10-14 April
2004	<i>Canberra, Australia</i>	<i>Oceania</i>	9 th IGM/SPG 21-24 March
2003	<i>Hanoi, Viet Nam</i>	<i>SEA</i>	8 th SPG and 8 th IGM, 9-14 March
2002	<i>Manila, Philippines</i>	<i>SEA</i>	7 th SPG and 7 th IGM, 10-14 March
2001	<i>Jeju Island, Republic of Korea</i>	<i>TEA</i>	6 th SPG and 6 th IGM, 18-24 March
2000	<i>Islamabad, Pakistan</i>	<i>SA</i>	5 th SPG and 5 th IGM, 26-30 March
1999	<i>Kobe, Japan</i>	<i>TEA</i>	4 th IGM, 18-20 March
1998	<i>Beijing, China</i>	<i>TEA</i>	3 rd IGM, 11-13 March
1997	<i>Tokyo, Japan</i>	<i>TEA</i>	2 nd SPG and 2 nd IGM, 24-28 March
1996	<i>Chiangmai, Thailand</i>	<i>SEA</i>	1 st IGM, 25-26 March

Locations of other APN Meetings

- 6th SEA Sub-Regional Committee Meeting — Kuala Lumpur, MALAYSIA (25-29 Nov 2014)
- 5th SA Sub-Regional Committee Meeting — Wattala, Sri Lanka (1-5 Oct 2013)
- 25th SC Meeting — Wattala, Sri Lanka (30 September – 1 Oct 2013)
- 4th SA Sub-Regional Committee Meeting – Kathmandu, Nepal (14-18 Jan 2013)
- 22nd SC Meeting – Kobe, Japan (31 October-1 Nov 2012)
- 5th SEA Sub-Regional Committee Meeting – Siem Reap, Cambodia (22-26 Oct 2012)
- 3rd SA Sub-Regional Committee Meeting – Paro, Bhutan (16-19 Jan 2012)
- 19th SC Meeting – Phnom Penh, Cambodia (6-7 Oct 2011)
- 4th SEA Sub-Regional Committee Meeting – Hanoi, Viet Nam (25-29 Jul 2011)
- 3rd SEA Sub-Regional Committee Meeting – Manila, Philippines (9-10 Nov 2010)
- 2nd SA Sub-Regional Committee Meeting – Pune, India (2 Nov 2010)
- 16th SC Meeting – Kobe, Japan (30-31 Aug 2010)
- 13th SC Meeting, Augmented SC Meeting and Writing Workshop–Kobe, Japan (24-27 Aug 2009)
- 2nd SEA Sub-Regional Committee Meeting – Bangkok, Thailand (19-20 Aug 2009)
- 1st SA Sub-Regional Cooperation Meeting – Colombo, Sri Lanka (27-28 Jul 2009)
- 10th SC Meeting – Manila, Philippines (6-7 October 2008)
- 7th SC and 6th CDC Meeting – Kobe, Japan (4-5 Oct 2007)
- 1st SEA Sub-Regional Committee Meeting – Jakarta, Indonesia (20-21 Aug 2007)
- 4th SC Meeting and Workshop on the New Liaison Model – Jakarta, Indonesia (24-26 Aug 2006)
- 3rd CAPABLE Standing Committee Meeting – Tokyo, Japan (18-19 Nov 2005)
- 2nd SC Meeting – Tokyo, Japan (19-20 Nov 2005)
- 8th SC Meeting – Wellington, New Zealand (11-12 Dec 2003)
- 6th SC Meeting – Kuala Lumpur, Malaysia (9-10 Dec 2002)
- 4th SC Meeting – Manila, Philippines (16-17 Dec 2001)
- 1st SC Meeting – Honolulu, USA (3-4 Dec 2000)
- 4th SPG Meeting – Jakarta, Indonesia (2-4 Feb 1999)
- 3rd SPG Meeting – Canberra, Australia (19-21 Jan 1998)
- 1st SPG Meeting – Kuala Lumpur, Malaysia (29-30 Aug 1996)
- 1st SPC Meeting – Tokyo, Japan (25-26 Jan 1996)

Sub-regions*SA – South Asia**SEA – Southeast Asia**TEA – Temperate East Asia**Oceania***APN Groups/Committees***IGM—Inter-Governmental Meeting**CDC – Capacity Development Committee**SC – Steering Committee**SPG – Scientific Planning Group**SPG-SC – Scientific Planning Group Sub-Committee*

Section IV

Winning Poster and Selected Presentation





Sanitation Technology for a Safe Environment in Floating Communities in Tonle Sap Lake, Cambodia

Khon, P., C. Tep, S. Kim¹, J. Allen, I. Chakraborty, T. Hand. Wetlands Work! Ltd., Phnom Penh, Cambodia. ¹presently University of Georgia, College of Engineering, USA



Introduction

Families in floating communities on Tonle Sap Lake face serious health risks because of a lack of appropriate sanitation systems. Children are especially vulnerable (Brown 2013). Although drinking water is usually treated, water for washing vegetables and dishes is taken directly from the lake. As floating houses tend to be small, the lake is also the playground for children (Fig. 1). WWI has designed and tested the HandyPod, a natural wastewater treatment system for floating houses which is one of the first technological solutions developed to effectively treating a household's latrine waste.

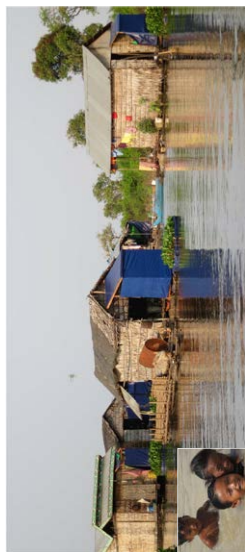


Figure 1. Children spend hours playing in contaminated water

The HandyPod

- The HandyPod is a simple structure, consisting of 1) a primary anaerobic digester and 2) an open floating Pod with water hyacinth, a plant with well-established water treatment capacity (Wouter 2003).
- The hyacinth Pod floats with the aid of empty water bottles stitched into the edge of the liner
- Small perforations in the liner allow for very slow, passive exchange of Pod content with ambient water.



Figure 2. The HandyPod contains and treats household wastewater to a level safe for recreational use.

Objective

- 1) Test a new design of flexible, sealed anaerobic digester, including optimizing size
- 2) Monitor water quality in two villages over time
- 3) Collect user feedback on HandyPods

Materials and Methods

Controlled study

- Anaerobic Pods of different volumes were inoculated with raw pig waste for a week before sampling.
- E. coli* numbers were measured in the Pod every two days. Chromogenic RAPIDE. coli 2 Agar from Bio-Rad was used to perform plate counts of *E. coli*

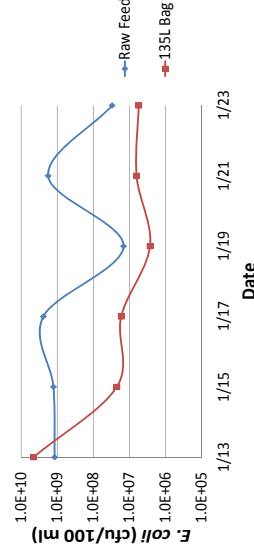
Water quality monitoring

- E. coli* monitored inside and outside of two floating villages over one year and on-going, using the same method as above
- User testing of HandyPods
- Floating village households had HandyPods installed, and were surveyed after a year of use

Results

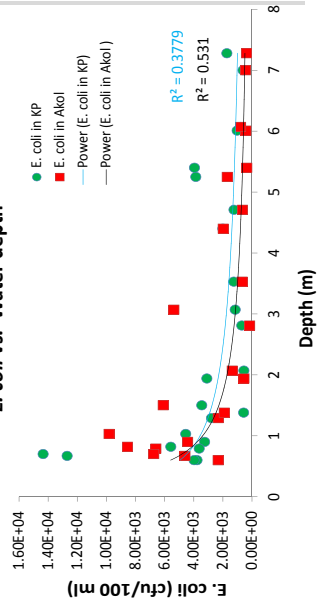
- 135 L was the smallest volume required for the anaerobic digester to effectively reduce *E. coli*. Further treatment in the floating Pod reduced *E. coli* an additional 3 log order, to below 1.0E+04.

E. Coli in Anaerobic Pod vs. Raw feed



- Higher levels of *E. coli* were detected inside two villages during dry season. The ambient water was highly contaminated at depths under 2 meters (between February and June).

E. coli vs. Water depth



- User feedback was collected over the course of product testing as well as in a final survey. The following key insights emerged:
 1. Users were interested in the product as well as upgrades on the basic design
 2. By eliminating floating solid waste around houses, the HandyPod provides the immediate benefit of a more aesthetically pleasing environment
 3. An effective anaerobic digester eliminates any concerns over smell
 4. The HandyPod provides convenience to families, eliminating the need for long boat journeys out of the village in search of a private place to defecate

Conclusions

- An appropriate sanitation system has been developed for floating communities, adaptable to flood-prone communities including those impacted by climate change
- HandyPod treatment consistently reduces fecal coliform by 5 log order (which is equivalent to 99,999 % removal).
- A behavior survey in our demonstration village indicates significant desire for HandyPods.
- Village-wide use of Pods is expected to lead to fewer diarrheal events, thus improving child development.
- A variation of the HandyPod design may be a viable sanitation solution not only in waterborne, but also seasonally flooded communities.
- A sanitation marketing program is the next step needed to create the public and private demand for sanitation, as well as the supply of the treatment systems made and sold by local entrepreneurs.

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Acknowledgements

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Wetlands
Work!

APN

Sanitation Technology for a Safe Environment in Floating Communities in Tonle Sap Lake, Cambodia

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- Introduction
- Objective
- Materials and Methods
- Results
- Conclusion

Introduction



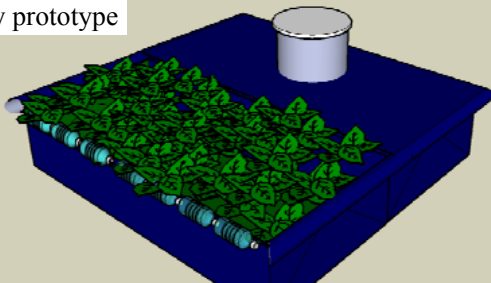
Introduction

- Lack of sanitation – serious health risk
- Children are especially vulnerable



Introduction

Early prototype



WW!'s HandyPod effectively treats household sewage

Final design

Raw waste
from toilet



The HandyPod contains and treats household wastewater to a level safe for recreational use.

Current objectives

- 1) Test a new design of flexible, sealed anaerobic digester, including optimizing size
- 2) Monitor water quality in two villages over time
- 3) Collect user feedback on HandyPods



Materials & Methods

Objective 1: Controlled study

- Anaerobic digestors of different volumes were inoculated with raw pig waste for a week before sampling.
- *E. coli* numbers were measured in the Pod every two days. Chromogenic RAPID'E. coli 2 Agar from Bio-Rad was used to perform plate counts of *E. coli*.

Materials & Methods

Objective 2: Water Quality Monitoring

E. coli has been monitored inside and outside of two floating villages on Tonle Sap Lake, Pursat province, since January 2012



Materials & Methods

Objective 3: User testing of HandyPods

Floating village households had HandyPods installed, and were surveyed after a year of use



Results

Anaerobic digester

- **135 L** was the smallest volume required for the anaerobic digester to effectively reduce *E. coli*.



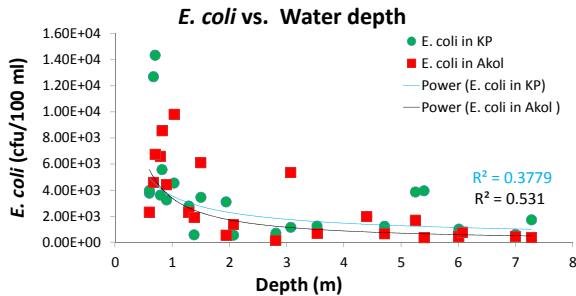
Results

- Further treatment in the floating Pod reduced *E. coli* an additional 3 log order, to below **1.0E+04 cfu/100 ml**



At this level of treatment, expected number of *E. coli* in water within 0.5 m from the Pod: < 10 cfu / 100 ml

Water quality in villages



Results: User feedback on HandyPods



- Interest in product and upgrades
- Appreciated no floating solid waste around houses
- Effective anaerobic digester eliminates smell



- Convenience: no more long boat journeys to find private place to defecate

Conclusions

- An effective sanitation system has been developed for floating communities
- HandyPod treatment consistently reduces fecal coliform by 5 log order (which is equivalent to 99.999 % removal).

Conclusions

- Village-wide use of Pods is expected to lead to fewer diarrheal events, thus improving child health and development.
- A behavior survey in our demonstration village indicates significant desire for HandyPods.



Conclusions

- A sanitation marketing program is the next step: to create the public and private demand for sanitation, and train local businesses to make and sell HandyPods
- A variation of the HandyPod design can be adapted to flood-prone communities including those impacted by climate change.
- Wetlands Work! seeks to scale up use of the HandyPod throughout Cambodia's floating villages on the Tonle Sap and across the world's water-impacted communities





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