The 21st Joint Inter-Governmental Meeting and Scientific Planning Group Meeting (IGM/SPG) successfully concluded on 22 April 2016 in Zhengzhou, the provincial capital of Henan, China. The Meeting was hosted by the Ministry of Science and Technology of the People’s Republic of China (MOST), and jointly organised by The Administrative Centre for China’s Agenda 21 (ACCA21) and the Department of Science and Technology, Henan Province.

The IGM approved funding for 34 new or continuing projects under its core programmes of CRRP and CAPaBLE, as well as the Climate Adaptation Framework. The IGM also endorsed plans for conducting a number of activities with key partners and stakeholders in the year ahead, including joint activities with the Hyogo Prefectural Government, the International EMECS Centre and LoCARNet, and a scoping workshop on the transfer of technology among countries to better respond to the impacts of global environmental change.

The annual IGM/SPG Meetings are a unique platform for exchanging ideas for shared understandings among scientists, policy makers and practitioners in the region. Particularly, at the 21st IGM, members and invited guests engaged in active discussion on the future development of APN. I hope the results of this Meeting will provide useful input to the mid- and long-term development of the Network in order for APN to better respond to the needs of its member countries in addressing multiple challenges of global environmental change.

This publication serves as an official record of the IGM/SPG Meeting and includes a compilation of documents considered at the Meeting. I hope it will be a useful reference for your work.

Finally, we sincerely extend our appreciation to all national Focal Points, SPG members, invited experts, and all other stakeholders for their significant contribution and continuing commitment to APN.

Zhang Jiutian
Chair, 21st IGM/SPG Meeting

Hiroshi Tsujihara
Director, APN Secretariat
National Focal Points

CAMBODIA  Sern (31)
CHINA  Zhang* (14)
JAPAN  Takemoto (47)
LAO PDR  Kumamaru* (28)
MALAYSIA  Abdullah* (17)
MONGOLIA  Dashzeveg (29)
NEPAL  Basnet
PHILIPPINES  Amaro (5)
RUSSIAN FEDERATION  Lukaenko* (12)
REPUBLIC OF KOREA  Kang* (50)
SRI LANKA  Hewawasam* (15)
UNITED STATES  Tupas (25)
VIET NAM  Nguyen (3)

SPG/CDC Members

BANGLADESH  Miah (6)
CHINA  Dong (2)
INDIA  Borgaonka (1)
INDONESIA  Adiningsih (8)
JAPAN  Fukushi (26)
MALAYSIA  Yunus (18)
NEPAL  Shrestha (34)
NEW ZEALAND  Matthews* (51)
PAKISTAN  Muhammed (30)
RUSSIAN FEDERATION  Sterin (33)
THAILAND  Boonjawat (4)
VIET NAM  Ngo (7)

Honoured Guest

DOST HENAN  Zhang (11)

Invited Experts to SPG

MAIRS  Alikun (48)
ANU  Heath (49)
MALAYSIA  Moten (35)

Invited Experts to CDC

PHILIPPINES  Pulhin (27)
USA  Fuchs (19)

Speakers & Observers

ACCA21  He (38)
CAAS  Xu (37)
CAS  Qu
IGSNRR  Yin (40)
IPBES  Huang (54)
LOCARNET  Nishihoka
PACIFICOcean Unit  Norling (52)
TSU  Sun
YRC  Peng (53)
YRC  Wang (56)

Secretariat

Condrorini (45)
Deng (46)
Dinh (23)
Imanari (16)
Koswatta (22)
Stevenson (32)
Tamura (24)
Tsujihara (10)

Local Organising Committee

F. Zhang (13)
Liu (21)
C. Zhang (44)
X. Zhang (36)
L. Zhang (57)

* Designated Alternate of nFP or SPG/CDC Member
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1. APN Members and designated alternates from Bangladesh, Cambodia, China, 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 and Viet Nam attended the meeting. Invited experts to the APN Steering Committee (SC), Scientific Planning Group (SPG) and Capacity Development Committee (CDC), as well as invited experts and representatives from the following stakeholders and partners in the international global change community were represented at the Meeting: The Administrative Centre for China’s Agenda 21 (ACCA21), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the International Research Network for Low Carbon Societies/Low Carbon Asia Research Network (LCS-RNet/LoCARNet), and the Swedish International Development Cooperation Agency (Sida). Representatives from the Chinese Academy of Agricultural Sciences, the Chinese Academy of Sciences, the Department of Science and Technology of Henan Province, Henan Science and Technology Exchange Center with Foreign Countries, Tsinghua University, the Yellow River Engineering Consulting Co., Ltd. participated as speakers or observers.

2. Dr. Jiutian Zhang, national Focal Point (nFP) alternate for China, facilitated the inaugural session and provided welcome remarks. He noted that APN is one of the most important networks for the region and has developed the capacity of developing countries in the region over the past twenty years. He added that APN provides a good platform for communication and actively supports scientists from China. He invited participants to join an interactive session introducing the action being taken by China in the area of climate change adaptation. In closing, he extended a warm welcome on behalf of the host country to all participants and expressed his hope for strengthened collaboration under the framework of APN.

3. Dr. Konstantin Lutaenko, nFP alternate for the Russian Federation, delivered a welcome speech on behalf of the APN Steering Committee, thanking the host country for organising the Meeting in the beautiful city of Zhengzhou. Dr. Lutaenko mentioned the significant achievements by APN in 2015 and invited the IGM and SPG to review these activities in the coming days. Finally, he invited participants to contribute to the advancement of APN’s work by providing their expertise, experience and to actively participate in the Meeting.
Chairpersons’ Summary at the 20th IGM/SPG Meeting held in Kathmandu, Nepal

4. Mr. Hiroshi Tsujihara, Director of the APN Secretariat, thanked all guests and participants for attending the Meeting and thanked the Ministry of Science and Technology of China for hosting the Meeting. Noting the growing strength of APN as it entered its fourth strategic phase, he particularly expressed his hope that APN would be able to continue with its increasingly important role in transforming science on global change and sustainability into solution-oriented knowledge that influences decision- and policy-making. He acknowledged the closer communications between members through the formation of Sub-Regional Committees, and invited participants to consider ways to enhance APN activities to provide more opportunities for researchers in the Asia-Pacific region and enable policy-making via informed policy-relevant science.

5. Dr. Zhang Zhenyu, Director-General, Department of Science and Technology of Henan Province, China, welcomed all members on behalf of the local host and officially opened the Meeting. In his opening remarks, he provided a brief introduction of Henan and its geographical, cultural and economic significance as a province of China. He highlighted the recent implementation of innovation-driven development strategies and collaboration with international partners in science and technology development. He mentioned the achievements made in scientific studies on the implications of climate change technology, land use and agriculture of the Yellow River basin, and expressed his hope that APN could strengthen its cooperation with, and enhance the capacity of, its member countries, including China.

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

**Election of Chair and Co-Chair**

7. The IGM elected by acclamation the following officers to serve as Chair and Vice-Chair of the Meeting:
   - Dr. Jiutian Zhang (nFP Alternate for China) as Chair
   - Dr. Luis M. Tupas (nFP for the United States of America) as Vice-Chair

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

8. The draft agenda was accepted by the delegates as presented. No items of any other business were raised.

**Item 2-1: Reports from Steering Committee**

9. Dr. Lutaenko reported on behalf of the SC the main highlights and activities of APN in 2015, including the implementation of action points identified and approved at the 20th IGM/SPG Meeting held in Kathmandu, Nepal in March 2015, and additional action items resulting from the intersessional SC meeting held in Kobe, Japan in September 2015. He highlighted the projects being managed by the Secretariat under APN’s core programmes and thematic frameworks, and introduced the new and improved online call for proposals, noting the significant increase in summary proposals received. He briefly reported on the work related to the three thematic frameworks and activities conducted by the Sub-Regional Committees, and reminded members that further details would be reported later by various groups and regional bodies of APN. He highlighted the improved process for selecting young scientists to participate in Proposal Development Training Workshops (PDTWs).

10. Dr. Linda Anne Stevenson, Head, Division of Communication and Scientific Affairs of the APN Secretariat, provided additional information on some other notable activities, including APN’s participation in the Research Dialogue of SBSTA42, its active engagement in the Nairobi Work Programme under the United Nations Framework Convention on Climate Change (UNFCCC) and other science-policy mechanisms such as IPBES. She added that courtesy calls were made to the Sida office in Thailand, and USAID and USGCRP in Washington D.C., USA.

11. Dr. Sundara Sem, nFP for Cambodia, thanked China for hosting the Meeting and requested the development of the APN-Cambodia co-finance partnership, noting the joint Proposal Development Training Workshop (PDTW) resulting from the Memorandum of Understanding between APN and the Ministry of Environment, Cambodia.

12. Professor Wenjie Dong, SPG Member for China, expressed his appreciation for the important role APN has taken in supporting countries in the Asia-Pacific region in activities combating climate change, and welcomed all members to China and looked forward to a successful meeting in the coming days.

13. Mr. Muhammed Helmi Bin Abdullah, nFP alternate for Malaysia, pointed out an error in the list of SC members contained in APN Annual Report 2014-2015 regarding the elected nFP member for Pakistan, and requested the Secretariat to correct the error in the electronic version and make a corrigendum to the printed report.

14. Responding to the question raised by the Vice-Chair on the South Asia media visit, Dr. Stevenson stated that
the Secretariat is working with the local project coordinator who is leading the activities. She noted the strong interest from journalists in the sub-region with over 180 applications received so far. This is a result of an improved process on call for applications following the Southeast Asia media visit which was cancelled due to lack of interest.

15. Dr. Kim Chi Ngo, SPG Member for Viet Nam, provided further details regarding actions to engage Myanmar in APN and requested the IGM to consider how to further involve the country in APN activities. Ms. Taniya Koswatta, Coordinator, APN Secretariat, clarified that continuous communication has been established with relevant departments in Myanmar, however the process had to be restarted due to structural changes in its government, and she hoped that updates could be presented to the IGM at its next meeting after receiving a response from the Government of Myanmar.

16. The IGM accepted the report, with the condition that the above input from participants be reflected in the report. He thanked members for their input and invited Mr. Yukihiro Imanari, Head, Division of Development and Institutional Affairs, to provide a report on APN finances.

**Item 2-2: Financial Reporting**

17. Mr. Imanari presented the final Financial Report for Fiscal Year (FY) 2014 (IGM-SPG/21/02-02), which was approved by the SC at its 33rd meeting held in September 2015 in Kobe, Japan and the Financial Status Report for FY 2015 (IGM-SPG/21/02-03, as of 29 February 2016) for IGM information. He reported that the deficit identified in the last IGM has been eliminated as a result of the actions taken to clear such a deficit which was approved by the last IGM. He gave a detailed explanation of the figures reported by referring members to the annotations prepared for each of the reports. He acknowledged the contribution by Cambodia through the co-finance partnership and the in-kind support received through all members, project leaders, and especially by the Ministry of Science and Technology of China and the Department of Science and Technology of Henan Province for hosting the Meeting. He added that the 2015 Financial Report, when finalised, would be presented to the inter-sessional SC meeting in autumn 2016 for approval.

18. Dr. Akio Takemoto, nFP for Japan, thanked and congratulated the Secretariat for the work on financial reporting and the compilation of in-kind contributions from APN-funded projects. He expressed his appreciation to the Secretariat for the efficient use of the budget to clear the deficit. He stated that he would provide further comments on APN finances under agenda Item 6, where the proposed budget and work programme will be discussed.

19. Dr. Andrew Matthews, invited Expert to the SC and SPG Member alternate for New Zealand, stated that the actual in-kind contribution may be much higher and suggested the idea to seek volunteers that could work offline after the IGM to elaborate a definition of “in-kind contribution” in order to truly reflect the level of support from other sources using a full-cost accounting approach. He added that this definition could then be communicated to project leaders for their financial reporting to APN. Dr. Matthews and Dr. Tupas volunteered to work together on this issue.

20. Ms. Vindy Hewawasam, nFP alternate for Sri Lanka, pointed out a discrepancy regarding the total number of ongoing projects contained in the compilation of in-kind contributions by projects and requested the Secretariat to update the number.

21. Dr. Jariya Boonjawat, SPG Member for Thailand, supported by Dr. Erna Adiningisih, SPG Member for Indonesia, suggested that country breakdowns be added to in-kind contributions provided by each project and to be presented as a new column in the report.

22. Dr. Lutaenko aligned himself with Dr. Matthews on the underestimation of the level of in-kind support. He mentioned the contribution of member countries in some other activities organised by APN including SRC meetings and the Science-Policy Dialogue held in Mongolia in 2015.

23. The Chair thanked Mr. Imanari for his presentation and the delegates for their input, and requested the Secretariat to provide a finalised financial report for FY 2015 for approval by the SC at its intersessional meeting in autumn.

**Item 3. APN Framework Document**

24. The Chair invited Dr. Subramaniam Moten to provide a report on the status of work and actions required in relation to the amendment of the APN Framework Document. The Vice Chair requested members to take time to go through the suggested amendments before its final adoption on Day 2 of the Meeting.

25. Dr. Moten reported on the work undertaken to follow up on the decision made at the 20th IGM on the amendment of the Framework Document. He presented a timeline of actions addressed by the Framework Document Task Team, the SC and member countries in the course of 2015, and referred to the Document with the final draft amendments (IGM-SPG/21/03-App.1) for IGM consideration and approval. He gave a summary of the major changes suggested, including: (1) on the inclusion of Non-Affiliated Invited Expert (NAIE) as means for the Secretariat to seek support from individuals with necessary expertise for particular tasks of APN; and (2)
on the membership, procedures and guidance for the SC and its election, in addition to other minor amendments. He went through all suggested amendments line by line and reminded members that, although any further substantive revisions would require more time for consideration, any minor changes, including editorial revisions to the presented draft could be suggested and incorporated as part of the final suggested amendments for approval by the IGM on Day 2 of the Meeting.

26. In reference to the nomination procedures of elected nFPs to the SC, Dr. Adiningsih sought clarification on the detailed process of invitation for nominations. The Vice Chair responded that, as with past practices, the Secretariat will issue a formal letter from the Director to invite nominations from all nFPs.

27. Dr. Sem asked whether there was a need to address the issue of limiting continuous renewals of an elected nFP member to the SC, and enquired whether the Framework Document should specify more details regarding the procedures for the establishment of ad hoc groups by various organs of APN, which was provided for in section 8.i of the Document.

28. Responding to the first question by Dr. Sem, Dr. Matthews stated that the existing arrangement embedded in the Framework Document is aimed to ensure rotation without prejudice to practicality, since in many cases, the nFP of a country tend to change due to internal rotation or appoint a representative to participate as his/her alternate.

29. Mr. Imanari supported Dr. Matthews by referring delegates to section 6.B.2.i.a of the Framework Document, which he stated that he has incorporated the idea of ensuring the continuity of institutional memory and regional balance while leaving room for flexibility for practical purposes.

30. Regarding the question on detailed procedures for the establishment of ad hoc committees by various organs of APN (in section 8.i of the Framework Document), the Vice-Chair pointed out that it was not part of the current suggested amendments presented for consideration and approval at the present IGM. He suggested delegates to focus on the proposed amendments that has been circulated and that the IGM could consider other issues in future amendments if necessary.

31. Following logistical announcements on the arrangement of the sub-regional parallel sessions and interactive sessions, the Chair adjourned the plenary meeting until the morning of Day 2.

Item 4: Sub-Regional Parallel Sessions

32. The Sub-Regional Committees for South Asia, Southeast Asia and Temperate East Asia (SA-SRCom, SEA-SRCom and TEA-SRCom, respectively) met in parallel sessions to discuss common issues and progress in each sub-region. Each sub-region elected a Chair and a Vice-Chair for FY 2016 and appointed a rapporteur to provide a report to the plenary under Item 8 on Day 2.

Item 5: Activities for Fiscal Year 2016

33. At the resumed meeting on Day 2, the Chair invited Dr. Stevenson to introduce a number of planned activities to be undertaken in FY 2016, and asked members to consider and approve the presented activities, and where appropriate, propose and approve any action points in relation to these activities. She reminded that the financial figures contained in the reports would be considered and approved under the succeeding Item 6.

34. Dr. Stevenson presented the following activities for IGM consideration and approval: (1) new and continuing projects under the ARCP/CRRP programme, the CAPaBLE programme and the Climate Adaptation Framework (CAF); (2) a scoping workshop on technology transfer for environmental global change related issues; (3) collaboration with Hyogo Prefectural Government, including a workshop on Satoyama and participation at the annual conference organised by the Environmental Management of Enclosed Coastal Seas (EMECS); (4) science-policy activities including UNFCCC and IPBES; (5) networking with LoCARNet/LCS-RNET; and (6) plans for partnership development, including South Asia, and engagement in international conferences.

35. With reference to the scoping workshop on technology transfer, Dr. Lance Heath, invited expert to the SPG, informed that the Australian National University was working with the Asia-Pacific Economic Cooperation (APEC) to hold annual workshops on technology transfer, usually held in November. He stated that he would provide contact details of the APEC work group and suggested that APN look into opportunities to work together with the group to seek synergies and build potential networks.

36. Dr. Matthews stated that it would be very important to seek collaboration with APEC not only because of the content of the exchange of expertise but also due to the political significance of joining the APEC programme of work. Therefore, he strongly supported the proposal by Dr. Heath and mentioned that the cooperation could take the form of a back-to-back event with the APEC workshop.

37. Responding to a question by the Vice-Chair, Dr. Stevenson indicated that members could contact her directly with regard to ideas on collaborative activities in general.

38. The Chair suggested that the Secretariat circulate
additional information and ideas about the workshop to members for their input, which, along with a plan for the scoping workshop, could be discussed at the inter-sessional SC meeting in autumn before the workshop is held. Regarding the output of the workshop, he noted the need to narrow down priority areas and develop a list of specific areas that APN would focus on.

39. Members approved the activities presented under this item and requested the Secretariat to follow up on implementation.

**Item 6: Proposed Work Programme and Budget Plan for Fiscal Year 2016**

40. Mr. Imanari presented the proposed work programme and budget plan for FY 2016 (IGM/SPG-21-06) for IGM approval. He provided a detailed explanation of the figures presented, referring members to the annotations attached to the document.

41. Dr. Matthews extended his gratitude to the Government of Japan for the generous financial contribution for FY 2016 and congratulated on the substantial work that resulted in that contribution. He also noted that few countries provide direct financial resources to APN, which although is not a new concern, would be a serious concern for the operation of APN in the future.

42. Dr. Takemoto confirmed that the financial contribution to APN had been approved by the Cabinet of Japan on the previous day and provided few comments which APN could consider in order to secure continued finance from the Government of Japan. He mentioned that APN could focus its work on improving the scientific capacity of developing country scientists in support of the IPCC AR6 process, developing actions to enhance the capacity of countries in adaptation and mitigation in line with the Paris Agreement, and continuing its support, for example through CAPaBLE, to activities on the realisation of the Sustainable Development Goals.

43. The Vice-Chair reminded members of a 2009 ARCP project (Schaefer) which had not been closed out financially due to the absence of response from the project leader and implementers, and therefore was still holding a small amount of committed financial resources every year. He asked the IGM for advice on how to deal with this matter. The IGM agreed to officially terminate the said project and release the associated committed funds.

44. Dr. Matthews made a suggestion which followed the suggestion of Dr. Takemoto that the Secretariat could develop specific descriptions on what types of projects would be preferred in the 2016 call for CAPaBLE proposals. The IGM endorsed the work programme of 2016. He added that this could be an opportunity for APN to refine its definition of capacity development in order to align the specific needs with proposals.

45. The IGM approved the programme and budget plan for FY 2016 by acclamation.

**Item 7: Framework Document: Approval of Suggested Amendments**

46. The Chair invited the IGM to formally approve the suggested amendments to the APN Framework Document presented under Item 3 on Day 1.

47. Regarding an enquiry on when the amended Framework Document would become effective, Dr. Matthews clarified that the amended Document would take effect immediately following the conclusion of the IGM at which those amendments were approved.

48. The Chair clarified that the procedures for SC election of nFPs, if approved, would apply in the following year. He added that while the IGM may want to further work on other aspects of the Framework Document, it was asked to consider and approve the suggested amendments presented on Day 1.

49. The IGM approved the suggested amendments by acclamation. The Vice-Chair thanked the Task Team members for preparing the suggested amendments and the IGM for approving the amendments.

**Item 8-1: TEA Sub-Regional Committee Report**

50. Dr. Ailikun, invited expert to the SPG, provided a report on behalf of the TEA SRCom. She informed that the Committee elected Professor Wenjie Dong, SPG Member for China as Chair, and Dr. Soojeong Myeong, SPG Member for Republic of Korea as Vice-Chair of the Committee for a one-year term. She went on to review the actions taken by the Committee especially since the previous TEA meeting held in Ulaanbaatar, Mongolia. She referred to the open discussion of the Committee on APN’s role in developing capacity of young scientists in the region, noting the intention of the Committee to further enhance activities for that purpose. She highlighted the results of the TEA Science-Policy Dialogue, particularly the science and institutional issues identified and the key messages gathered. A report on the TEA PDTW was given which included some suggestions for future workshops based on participant feedback. Finally, she made a few suggestions on future activities based on the SRC discussions so far. These include the need for continuing the support of young scientists from the sub-region to engage in APN, the establishment of a young scientist platform for networking, and the development of co-financing systems to expand the capacity of young scientists across the sub-region. She noted that China or the Republic of Korea may host the next SRC
meeting although the dates and venue are yet to be fixed. Finally, she reported that the topic of biodiversity was agreed as a focus of the Committee’s work in the new fiscal year.

51. Regarding possible activities to be undertaken by the TEA SRCom, Dr. Takemoto stated that the Committee does not have to follow what other sub-regions do since countries in those sub-regions are geographically diverse and the Committee is still young compared to others. He noted that it was important to continue the discussion and identify common interests within the region.

52. Dr. Alexander Sterin, SPG Member for the Russian Federation, recalled the discussion in the TEA parallel session on mechanisms to provide more support to young and early-career scientists, and increase their success rate in the proposal process. He mentioned that a number of ideas were put forward which include a scoring mechanism for young proponents and invited members to provide further input in this regard.

53. Dr. Sem pointed out the need to promote the interactions between young scientists and policy makers, noting the limited capacity of international communication among young scientists and researchers, especially in developing countries.

54. Adding to the discussion on supporting young scientists, Dr. Matthews stated that all member countries need to explore new ways and opportunities for partnership with APN by contributing financial resources to the Network, either for the benefit of a single country or multiple countries. He recalled the thematic frameworks including that of disaster risk reduction which was recently established to address specific needs of the Government of Japan, and encouraged members to look into possibilities of similar initiatives in their countries by identifying and contributing financial resources to APN. An example, he added, could be an open call with specific guidelines in line with partner country needs.

55. The Vice Chair noted the importance of discussing the issue on enhancing support for young and early-career scientists. He suggested the Meeting proceed with reports from other Sub-Regional Committees and, if time allows, deal specifically with that topic afterwards.

56. Ms. Hewawasam reported on behalf of the SA SRCom that Mr. Udaya R. Seneviratne, nFP for Sri Lanka and Professor Gishuddin Miah, SPG Member for Bangladesh, were elected as Chair and Vice-Chair, respectively, to the Committee for FY 2016. She presented a proposal from the Committee on a collaborative approach with organisations in South Asia which was expected to bring multiple benefits to APN including: an increase of interest in collaborative research; creation synergies with partnering organisations; improvement in dissemination of APN outcomes; increased visibility of APN, among others. She presented a proposed work plan for such an approach and reported on the progress made so far. She indicated that Pakistan or Sri Lanka would host the SRC meeting in October back-to-back with the workshop on collaborative partnerships. She also reported on the results of a discussion related to the nomination of a suitable nFP to serve the SC for the remainder of the current term.

57. Dr. Amir Muhammed, SPG Member for Pakistan, stated that Pakistan remained keen to host the SRC meeting which was postponed until FY 2016 due to schedule conflict. He added that he would clarify and confirm with the nFP for Pakistan and keep the members informed. On a separate topic, he pointed out the problematic issue of fast rotation of nFPs in many countries which result in the lack of understanding of APN and its work. He further noted the need for a common understanding that APN focuses on range of global change issues and not just climate change.

58. Dr. Ngo presented on behalf of the TEA SRCom which elected her as Chair of the Committee and Dr. Sundara Sem, nFP for Cambodia as Vice-Chair for FY 2016. She introduced the latest status of the CAPaBLE project on Urban Climate Change Adaptation in the SEA Region which is ready to start with its second-year activities. She reported the outcome of the international workshop on waste management which was held at Hanoi in March 2016 on innovation of public private partnerships with the participation of SEA members and scientists. She shared with participants a list of country-based activities to celebrate APN’s 20th anniversary in Cambodia, Malaysia, Philippines and Viet Nam. Regarding future plans, she introduced the decision of the Committee on regional priorities, including climate change adaptation for vulnerable areas, the livelihood of vulnerable areas, among others. The Committee had a discussion on the issues of vacant members in the SC and decided to nominate two nFPs from SEA to serve on the SC until early 2017. There was a proposal on suggested amendments to the Framework Document regarding the procedures for forming ad hoc groups by Sub-Regional Committees. It was decided that Viet Nam will host the next SRC meeting in Ho Chi Minh City in November back-to-back with a synthesis workshop for the SEA summer school project on Urban Climate Change Adaptation.

59. Mr. Sem stated that, in response to the call for member countries to join the celebration of APN’s 20th anniversary, the Ministry of Environment of Cambodia took action to promote the visibility of APN during
in-country activities such as the co-financed PDTW held in Siem Reap, for example, by giving out T-shirts with printed APN logo to policy makers and young scientists attending the events.

60. Mr. Marcial Amaro Jr. pointed out that with regard to the proposed collaboration with ASEAN, the SEA SRCom agreed that members should approach its various working groups instead of the ASEAN Secretariat. He requested the Secretariat to prepare draft terms of reference for submission to ASEAN in order to identify focused areas for collaboration.

Item 9: SPG Report: Topics of Interest and CRRP Recommendations for Funding

61. Professor Kensuke Fukushi, SPG Member for Japan, presented on this item on behalf of the SPG. Referring to item papers IGM/SPG-21-09-01 and IGM/SPG-21-09-02, he first introduced the recommendation of the SPG to fund two multi-year ARCP projects with funds from the FY 2016 budget. The SPG recommended funding of US$506,750 (including mortgaged amounts of US$ 65,000) for 12 continuing projects under the Climate Adaptation Framework (CAF). With regard to new proposed projects under the CRRP and CAPaBLE programmes, he presented a list of ten proposals that were recommended for funding, the amount of which totalled US$977,650 inclusive of US$ 757,650 reserved for the programme, and US$ 220,000 contributed from CAPaBLE allocation. He also presented a list of seven projects that were below the cut-off line and were not recommended for funding. The funding recommendations for the two continued projects and ten new proposals were approved by the IGM by acclamation.

62. Professor Fukushi continued to update the IGM on ongoing discussion within the SPG in relation to the restructuring of the calls for proposals, and the proposal review process in order to increase transparency and efficiency. He reported that a concept paper was discussed with the intention of implementing a pilot proposal and review process in 2016. He noted that the results would be presented at the next IGM. He then shared a list of emerging issues and topics that were recommended as priorities for funding under the 2016 call for CRRP programme proposals. Finally, thanking Dr. Jariya Boonjawat for her service as one of the Co-Chairs of the SPG for the past two years, he welcomed Professor Miah on board to the SPG Sub-Committees as the new Co-Chair to serve for a two-year term. The membership of the SPG Sub-Committee, therefore, comprises the following members:

- Professor Kensuke Fukushi (Japan, SPG Co-Chair)
- Dr. Giashuddin Miah (Bangladesh, SPG Co-Chair)
- Dr. Tsogbaatar Jamsran (Mongolia)
- Dr. Fariza Yunus (Malaysia)
- Dr. Luis Tupas (USA)

63. The Vice Chair reminded members that there had been an ongoing discussion in the SPG and SC meetings prior to the IGM on improving the efficiency of the proposal process. He invited members to provide input after the CDC presentation under Item 10. He added that the issue of how to support young scientists to be more successful in the proposal process could also be further discussed under that item.

64. The Chair and Vice-Chair expressed their appreciation to the outgoing SPG-SC members and SPG Co-Chairs, and welcomed Professor Miah on board as a new Co-Chair of the SPG.

Item 10: CDC Report: Topics of Interest and CAPaBLE Recommendations for Funding

65. Dr. Matthews reported on this item on behalf of the CDC. He shared that two continuing multi-year projects and eight new proposals were recommended by the CDC for funding, noting that the funds totalling US$ 72,000 for the continuing projects had been secured from FY 2015 budget, and US$ 309,000 was requested from FY 2016 budget for new CAPaBLE activities. He referred members to item paper IGM/SPG-21-10 for details of the proposals. These funding recommendations were approved by the IGM by acclamation.

66. Dr. Matthews then updated participants on a discussion by the CDC in relation to refining the definition of capacity development in APN’s context in order to better support the core mission of APN in developing the capacity for individuals, organisations and ultimately societies in the Asia-Pacific region. In this context, he shared a number of possible texts suggested by the SPG and CDC and a conceptual diagram to illustrate a systematic approach towards effective capacity development. Finally, Dr. Matthews acknowledged the CDC and the Secretariat for their work and contribution to the discussion in continuing the improvement of the CAPaBLE programme.

67. The Chair and Vice-Chair suggested that the IGM resume discussion on how to improve the involvement of young and early-career scientists, and increase their success rate in the APN proposal process. He opened the floor for input.

68. Dr. Lutaenko recalled the discussion at the TEA SRCom parallel session and noted the comparatively smaller number of proposals from countries like Russia and Mongolia. He asked how to make use of sub-regional activities to increase the engagement of young and early-career scientists from the region and, to this end, requested the Secretariat to remind the alumni of the
PDTW in Mongolia regarding the opportunity once the call for proposals are launched.

69. Dr. Madan Shrestha, SPG Member for Nepal stated that APN's PDTWs have been very effective and suggested that proposals from young scientists could be supported by a senior scientist from their respective countries to increase competitiveness in the proposal process. He expressed his support to the previous comment of Dr. Matthews on exploring new mechanisms for co-financing, possibly through an open call.

70. Dr. Juan Pulhin, invited expert to the SPG, noted capacity building as a core pillar of APN's work and suggested that APN could allocate a certain percentage of funds under the CAPABLE programme that could be used specifically for awards to support young scientists' development. He suggested APN could also look at capacity development in multiple dimensions, for example, by providing more incentives for capacity development to be embedded into CRRP project activities. A third approach, he said, could be the integration of capacity development into APN's own activities in addition to its funded projects. These may include science-policy interfacing activities which would give young scientists valuable exposure to the policy community.

71. Dr. Adiningsih noted the significant improvement in the SEA sub-region in regards to engaging young scientists in comparison to ten years ago. She agreed with the suggestion that senior scientists should be involved in the proposed projects to provide guidance and identify collaborators. Regarding the co-finance mechanism, she highlighted the importance of aligning the activities with the national scientific research agenda of individual countries. She mentioned that opportunities exist in aligning activities with universities and research institutions that are open for collaboration with international institutions.

72. Professor Fukushima proposed that APN could allocate a specific amount of financial resources specifically for applications from young scientists which would allow them to avoid competing with senior scientists. He suggested that such awards could be limited to approximately US$ 10,000 per year and it would benefit young scientists, especially in establishing networks necessary to conduct their research.

73. Dr. Muhammed supported the idea of matching financial contributions from host countries to APN funds in support of developing young scientists' capacity.

74. Ms. Soytavanh Mienmany, nFP alternate for Lao PDR, asked whether there were measures in place to ensure broad dissemination of APN information on opportunities for young scientists.

75. Dr. Ngo stated that the SEA SRCOM has been considering the issue in its meetings. She agreed that seed grants specifically allocated to young scientists would be an effective way forward, however noted that conditions must be clearly defined in order to effectively develop capacities for cross-country collaboration which requires further deliberation.

76. In the interest of time management, Dr. Takemoto suggested that the topic could be further discussed in the SC meeting to be held on the following day.

77. The Vice-Chair made a summary of the suggestions and comments so far. He thanked participants for their inputs and requested the SC to continue discussion on this issue with a view of developing a conceptual framework for measures to provide more opportunities to young and early-career scientists using the funding mechanism of APN.

Item 11: APN Future Development

78. Mr. Imanari made a presentation on this item. He recalled the active and important role of APN in the region in the past two decades by supporting collaborative research, capacity development and science-policy interfacing. He also presented the increased recognition of APN by international organisations such as IPCC, IPBES and UNFCCC for its work in supporting scientists, particularly in developing countries in the region. He noted, however, on the evolving global change community, Mr Imanari asked the IGM to engage in discussion on the pressing issue of APN's future direction in the changing outlook. He referred members to paper IGM/SPG-21-11 and its appendix and stressed that the presentation was designed to initiate broader discussions in the coming months. He provided few examples of what the IGM could consider in terms of developing new activities/collaboration and strengthening the financial basis of APN, among other strategic issues. To this end, he proposed that a task force be formed to discuss specific issues related to the future development of APN, including plans to flexibly respond to the various specific needs and high priority matters of member countries. He expressed his hope that, by consolidating the discussions at the IGM and the work of the proposed Task Force, an initial plan could be presented to the SC at its intersessional meeting to be held in autumn 2016.

79. Dr. Matthews stressed that the IGM provided a platform for interaction between SPG Members and nFPs, and was a dialogue in itself, which is very important and useful to individual member countries and to APN as a whole. Hence, shortening the duration of the IGM should not be simply interpreted as a measure to streamline the work of APN for the purpose of conserving financial resources.
80. Dr. Takemoto acknowledged the governments of the Republic of Korea and New Zealand for their continued financial contribution, however expressed his concern regarding the unhealthy composition of contributions to APN as an international organisation, since more than 90% of APN’s financial resources are provided by Japan through the Ministry of the Environment and Hyogo Prefectural Government. He mentioned that the Government of Japan expects financial contribution of international organisations to come from all member countries. Additionally, he noted the Ministry of Finance of Japan requires all ministries to report on specific terms and deadlines for all projects, including APN which is not an official international organisation in a strict sense. He added that the APN mechanism made it difficult to show tangible outcomes and it was difficult to ascertain how much contributions are made to the development of scientific capacity in developing countries, for example. In this regard, he highlighted the importance of bilateral project-based activities which would incentivise member countries to take charge as owners of the Network. While acknowledging the uniqueness of APN’s call for proposals and funding mechanisms, he expressed concern that such uniqueness seemed to have prevented partners from effectively joining APN activities. Therefore, he suggested that APN would need to create a new programme to address this problem, wherein APN could, for example, enter into bilateral agreements with member countries or interested organisations that could jointly finance contracted activities and provide strong leadership in such activities. In doing so, the contents, terms, expected outcomes of projects, as well as the amount of funds to be contributed by each country could be clearly identified. He stated that for this purpose, Japan would develop a concept paper for such programme in order to be reflected in the programme of work for FY 2017. He expressed his full understanding that the current programme structure of APN could not be drastically changed within a short period, and asked the SC and the task force to continue discussions towards that direction.

81. Dr. Pulhin stated that the creation of a task force to address this issue would be timely and necessary. He said it was high time that APN which has existed for the past 20 years looked both internally and externally, and consider investing in the evolvement of APN, including finding a niche for its activities. He suggested that it would be useful for APN to seek input from external perspectives on this matter.

82. Dr. Matthews commented that a smaller group would be more effective and suggested that the task force should start with the concept paper from Japan as a basis for discussion. He acknowledged the efforts by all members to keep APN active for more than 20 years despite turbulences in political and treasury cycles, and echoed the need for strong incentives for partnership with member countries. He volunteered to be part of the task force on this issue.

83. The Chair commented that there is an option to establish two task forces, one which assesses the core value of APN based on activities in the past 20 years and the other on the establishment of partnership and programmes with member countries. He suggested that the SC continue the discussion to define the mandate of the task forces and invite members to join the task forces.

84. Professor Roland Fuchs, invited Member to the SC, reminded that the SC was also mandated to address resource development issues and suggested that the task forces present their progress of work to the SC in its intersessional meeting for consideration and action. Dr. Matthews expressed his support, adding that the SC could recommend candidates of NAIE to the Secretariat Director.

85. The IGM agreed to ask the SC to continue the discussion on the following day on the establishment and plan of work for the task force, or task forces, if necessary.

Item 12: Confirmation of SC Procedures and Members for 2016 and Beyond

86. Mr. Xiaojun Deng, Programme Officer for Communication and Development, APN Secretariat presented on this item. He reminded participants of the changes in the nFP for Indonesia and Pakistan which necessitated a process where the IGM would need to decide on nominating either the new nFPs from these countries or other nFPs to serve as SC Members for the rest of the current term of 2015-2017. He referred members to the relevant paragraph of the Framework Document and requested the IGM to consider and decide on two nominations to fill the vacant positions, noting the absence of both new nFPs from Indonesia and Pakistan in the present Meeting.

87. Ms. Hewawasam proposed on behalf of the SA SRCom that the nFP for Pakistan be selected as a full member of the SC to serve until the end of the present term. Dr. Sem stated that the SEA SRCom in its meeting on the previous day agreed and decided to propose the nFPs for Malaysia and the Philippines as new SC members. This made the number of nominations three and hence a vote became necessary. Mr. Helmi Bin Abdullah expressed the intention of Malaysia to withdraw from the vote and his support for the SEA proposal of nominating the nFP of the Philippines. The IGM welcomed the proposal from Mr. Bin Abdullah and accepted, by acclamation, the nFPs for Pakistan and the Philippines as members of the SC to serve until the end.
of FY 2016, with the understanding that the Second Vice-Chair would be decided by the SC after the IGM.

88. Welcoming the nFPs of Pakistan and Philippines on board to the SC, Mr. Deng continued to seek IGM endorsement of a proposed approach to start a staggered election system as described in the newly adopted amended Framework Document, for example, the SC would agree on which two nFPs from the current elected SC members would continue to serve for one more year upon completion of the current term in early 2017 in order for the staggered system to begin as early as possible by electing three new members in 2017. The IGM approved the proposed mechanism by acclamation.

Item 13: Hosts for Future IGM/SPG Meetings

89. Mr. Imanari reminded members the need to consider the host country of the 22nd IGM/SPG, noting that to date, there are no candidates identified. He invited the IGM to initiate discussions on this issue. He mentioned that although it was not a strict rule, the hosting of past IGMs followed a pattern of rotation among sub-regions of Southeast Asia, South Asia and Temperate East Asia and if we were to continue to follow such a pattern, the 22nd IGM could be hosted by a member country in Southeast Asia.

90. The Vice-Chair asked members to consider the opportunity of hosting the next IGM and communicate their intention to the Secretariat before the intersessional SC meeting to be held in autumn 2016.

Item 14: IGM Action Points

91. A draft list of action points was circulated for consideration and adoption. A number of edits were proposed. The draft list of action points was adopted ad referendum. The list of action points is included as Appendix 2.

Item 15: AOB, Final Remarks and Closing

92. Dr. Takemoto requested elected, ex officio and donor members of the SC to gather, for practical purposes, for a brief meeting following the conclusion of the IGM to consider the necessity of co-opting experts in accordance with the Framework Document and, if so, whom to co-opt.

93. Professor Dong, on behalf of the local host, thanked all members for their participation in the Meeting and expressed his appreciation to the Chair and Vice-Chair for their professional leadership. The Vice-Chair congratulated members on the fruitful discussions and thanked the Chair for his leadership and guidance. Mr. Amaro Jr. thanked members for accepting him as a member of the SC and, on behalf of the Philippines and the SEA SRCom, he thanked the host for the excellent arrangement of the Meetings and hospitality. Dr. Takemoto thanked the Government of China for hosting the Meeting and expressed his appreciation for the hospitality bestowed from colleagues in Henan. He further expressed his appreciation to the Secretariat for their preparations and support. Dr. Moten expressed his thanks to the host and volunteers for their arrangement, and to the Secretariat for their support and preparations.

94. Mr. Tsujihara expressed his appreciation on behalf of the Secretariat to the Government of China and to everyone for the intensive discussion. He reiterated the need to address the issue of maintaining APN’s active role in the areas of global change research and sustainable development in changing situations. He noted the importance of NAIE in this regard and invited members to contact the Secretariat if they were interested in being nominated as NAIE for discussion of the future development of APN.

95. In closing the Meeting, the Chair, speaking on behalf of the host country, congratulated members on their fruitful discussions at the Meeting. He thanked the Vice-Chair and Secretariat for the efforts and support and wished all participants a pleasant trip back home.
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## Appendix 2: Action Points

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item description</th>
<th>Action #</th>
<th>Action description</th>
<th>Action by</th>
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<tbody>
<tr>
<td>Item 1</td>
<td>Election of Chair</td>
<td>Action 1</td>
<td>The IGM elected Dr. Zhang Jiutian of China as Chair, and Dr. Luis M. Tupas of USA as Vice-Chair of the 21st IGM/SPG Meeting.</td>
<td>IGM, Chairs</td>
</tr>
<tr>
<td>Item 1</td>
<td>Adoption of the Draft Agenda</td>
<td>Action 2</td>
<td>The draft agenda was adopted as presented. No items of any other business were raised.</td>
<td>IGM</td>
</tr>
</tbody>
</table>

### Item 2. Reports from Steering Committee (SC) & Secretariat

| Action 3 | The IGM approved the SC Chair’s report with the condition that:  
» Additional information on the Science-Policy Dialogue be included in the Chair’s Summary;  
» Co-funding in Cambodia for PDTW to be included in the Chair’s Summary;  
» Courtesy calls to Sida, USAID and USGCRP be included in the Chair’s Summary;  
» An error in the Annual Report related to SC elected member for Pakistan is to be corrected in the electronic version of the report. | IGM |

| Action 4 | Secretariat will continue its communications with Myanmar and provide an update at the 22nd IGM. | Secretariat |
| Action 5 | The IGM approved the Final Financial Report for FY 2014. | IGM |
| Action 6 | The Financial Status Report for FY 2015 was accepted by the IGM. The Secretariat will finalise the Report and present it to the SC during the next intersessional meeting for endorsement by the SC and to the 22nd IGM meeting for approval. | IGM, SC, Secretariat |
| Action 7 | Secretariat will document and include all in-kind contributions for APN operations. | Secretariat |
| Action 8 | APN is to work on a full cost accounting procedure with the assistance of Dr. Matthews and Dr. Tupas in the process of defining the metrics of in-kind contributions. | Dr. Matthews, Dr. Tupas and Secretariat |
| Action 9 | Secretariat will add country breakdowns to the in-kind contributions section of the financial reports. | Secretariat |
| Action 10 | The amount of time and financial resources APN Member countries provide to APN meetings should to be recorded in figures. | Secretariat |

### Item 3. APN Framework Document IGM, SC, Secretariat (PART I)

| Action 11 | The Framework Document Task Team will collect further input on the Draft Proposed Amendments to the Framework Document and prepare a finalised suggestion for IGM adoption under Item 7 of the Meeting. | FD Task Team, IGM |
| Action 12 | Secretariat will use the current model of email communication with national Focal Points for the nomination process which will open in mid-November. | Secretariat |
### Item 5. Activities for FY 2016

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<tr>
<th>Action #</th>
<th>Action description</th>
<th>Action by</th>
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</thead>
<tbody>
<tr>
<td>Action 13</td>
<td>The IGM endorsed the report on core programmes and science frameworks (IGM-SPG/21/05-01).</td>
<td>IGM, SPG, Secretariat</td>
</tr>
</tbody>
</table>

**Action 14** Secretariat will take necessary steps to organise the scoping workshop on technology transfer as presented in IGM-SPG/21/05-02 and share its outcomes in the next IGM, with the following understanding:

- Dr. Lance Heath will provide contact details of an APEC work group on technology transfer to seek synergies and build potential network;
- Dr. Stevenson serves as contact person on ideas/concepts about other scoping activities;
- Secretariat will circulate more detailed ideas about the scoping workshop to members and stakeholders, for example the specific areas of technology transfer;
- The intersessional SC Meeting will review and further discuss the plan and arrangement for the scoping meeting on technology transfer.

**Action 15** Secretariat will work with Hyogo Prefectural Government to organise an international workshop on Satoyama in the latter half of 2016 as presented in paper IGM-SPG/21/05-03.

**Action 16** Secretariat will send and assist selected researchers (listed in paper IGM-SPG/21/05-03) to participate effectively in the 11th EMECS Conference.

**Action 17** Secretariat will make necessary arrangements to ensure the active engagement of APn in major international science-policy processes including UNFCCC SBSTA, COP meetings and IPBES sessions as presented in paper IGM-SPG/21/05-04.

**Action 18** Secretariat will further communicate with LoCARNet/LCS-RNet with a view to hold a joint activity in FY 2016 to increase visibility of the Low Carbon Initiatives framework of APn, inter alia.

**Action 19** Secretariat will communicate with organisers of the Asia-Pacific Adaptation Forum to secure the presence of APn in the Forum through organising/co-organising interactive sessions with the possibility of holding booth exhibitions.

**Action 20** The SA-SRCCom will report to the IGM under Item 8 with details of a suggested approach to collaborate with organisations in South Asia.

### Item 6. Proposed Work Programme, Budget and Risk Management Strategies for FY 2016

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<thead>
<tr>
<th>Action #</th>
<th>Action description</th>
<th>Action by</th>
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</table>
| Action 21 | The IGM approved the proposed work programme and budget for FY 2016 by taking the following points into consideration:
- The IGM is to consider developing capacity building activities in support of the IPCC AR6 process, the implementation of the Paris Agreement and the realisation of SDGs;
- The IGM agreed to close out the project ARCP2009-Schaefer. | IGM, Secretariat |
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<th>Item #</th>
<th>Item description</th>
<th>Action #</th>
<th>Action description</th>
<th>Action by</th>
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<tbody>
<tr>
<td>Item 7</td>
<td>APN Framework Document</td>
<td>Action 22</td>
<td>The IGM adopted the draft amendments to the Framework Document which was presented by Dr Subramaniam Moten on behalf of the Framework Document Task Team.</td>
<td>IGM, Secretariat, FD Task Team</td>
</tr>
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</table>

Action 23 Amendments on the election of the next SC will take effect at the following IGM.

| Item 8 | Sub-Regional Committee Reports and Discussions | Action 24 | The IGM endorsed reports from the South Asia (SA), Southeast Asia (SEA) and Temperate East Asia (TEA) Sub-Regional Committees, and requested the committees to follow up on the proposed actions presented, including those indicated as action points below. | IGM, Secretariat, SRComs |

Action 25 South Asia SRC:
- The SA-SRC elected Chair is the nFP for Sri Lanka and Vice-Chair is the SPG member for Bangladesh;
- A cover letter from APN and nFP/SPG member will be drafted and sent to the 22 organisations identified; contact persons will be identified and invited to the collaboration workshop;
- A virtual meeting will be conducted on the activity between May and September 2016;
- The SA-SRC will seek financial partnerships with collaborating organisations;
- The SA-SRC meeting will be conducted back-to-back with the collaboration workshop and PDTW in October 2016 at Pakistan;
- SA-SRC nominated the nFP for Pakistan, currently observer in SC, to serve the SC for a one year term;
- If Pakistan cannot host the SA-SRC meeting and associated meetings, Sri Lanka will host these back-to-back meetings.

Action 26 Southeast Asia SRC:
- The elected Chair is SPG Member for Viet Nam and Vice-Chair is nFP for Cambodia;
- Training under the second year of the CAPaBLE project will be held in Bangkok, followed by a synthesis workshop in Ho Chi Minh City;
- Tentatively, members agreed to hold the 9th SEA-SRC meeting in 7-10 November 2016 at Viet Nam as a back-to-back event with the synthesis workshop;
- Following a recent successful meeting in Hanoi on Waste Management and the 3Rs, SEA-SRC wishes to conduct a similar international workshop involving private sector and communities;
- Undertaking efforts to establish a Mountain Research Initiative in Southeast Asia;
- The SRC will nominate two members from SEA (nFP of Malaysia and Philippines) to serve in the SC for a two-year term;
- The Secretariat is to provide terms of reference for SEA-SRC for ASEAN collaboration.
Appendix 2 • Action Points

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item description</th>
<th>Action #</th>
<th>Action description</th>
<th>Action by</th>
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<tbody>
<tr>
<td>22</td>
<td>Action Points</td>
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<td></td>
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<td>Action 27</td>
<td>Temperate East Asia:</td>
<td>TEA, Secretariat</td>
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<td></td>
<td></td>
<td></td>
<td>» Dr. Wenjie Dong is elected TEA Chair and Dr Soojeong Myeong Vice-Chair;</td>
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<td></td>
<td>» The TEA-SRC is to continue supporting and encouraging young scientists from TEA to submit proposals to APN;</td>
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<td>» It was proposed to establish an APN young scientists’ platform or network in the region;</td>
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<td>» Consider developing a co-financing system between APN and member countries;</td>
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<td>» Biodiversity is decided as the theme of focus for FY 2016;</td>
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<td>» The SRCom will further communicate by email in order to develop a clear topic for training young scientists during the SRC Meeting;</td>
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<td></td>
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<td></td>
<td>» China or Korea will host the next TEA meeting. Detailed venue, time and agenda will be discussed by members via email after the IGM.</td>
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<thead>
<tr>
<th>Item 9</th>
<th>SPG Report: Topics of Interest and CRRP Recommendations for Funding</th>
<th>Action 28</th>
<th>Actions from Report by SPG Co-Chair</th>
<th>Secretariat</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>» Two ARCP multi-year projects were accepted for continued funding;</td>
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<td>» 12 multi-year CAF projects were approved, four were conditionally approved based on progress report submission, recommendation and approval at the interim SC meeting;</td>
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<td>» 10 new proposals for CRRP were approved: eight new projects and two seed grant awards.</td>
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<tr>
<th>Item 9</th>
<th>SPG Report: Topics of Interest and CRRP Recommendations for Funding</th>
<th>Action 29</th>
<th>On the brainstorming of the proposals and review process to ensure efficiency, transparency and fairness, the following actions were noted:</th>
<th>SPG, CDC, Secretariat</th>
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<td></td>
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<td>» Work will continue on a renewed skeletal revised process with the intention of implementing a pilot proposal and review process in 2016. Results are to be presented at the next IGM;</td>
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<td>» More discussions on capacity development are to take place under Item 10 of the present IGM.</td>
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<tr>
<th>Item 9</th>
<th>SPG Report: Topics of Interest and CRRP Recommendations for Funding</th>
<th>Action 30</th>
<th>Emerging issues, topics and priorities for the 2016 call for proposals were listed and accepted with the following add-ons:</th>
<th>Secretariat</th>
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<td>» It was made clear by the IGM that the list presented is not exhaustive;</td>
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<td>» Policy implementation and sustainable development goals has to be emphasised as well.</td>
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<tr>
<th>Item 9</th>
<th>SPG Report: Topics of Interest and CRRP Recommendations for Funding</th>
<th>Action 31</th>
<th>The new SPG Sub-Committee (SPG-SC) and SPG Co-Chairs were elected:</th>
<th>IGM</th>
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<td></td>
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<td></td>
<td>» Dr. Kensuke Fukushi, SPG Member for Japan will act as Co-Chair for one more year;</td>
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<td>» Dr. Giashuddin Miah, SPG Member for Bangladesh is elected as SPG Co-Chair for a two-year term;</td>
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<td>» Dr. Tsogbaatar Jamsran, SPG Member for Mongolia will serve one additional year as SPG-SC Member;</td>
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<td>» Dr. Fariza Yunus, SPG Member for Malaysia will serve one additional year as SPG-SC Member;</td>
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<td>» Dr. Louie Tupas, SPG Member and nFP for USA is elected as a new SPG-SC Member.</td>
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<td>Item #</td>
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<tr>
<td>Item 10</td>
<td>CDC Report: Topics of Interest and CAPaBLE Recommendations for Funding</td>
<td>Action 32</td>
<td>Actions from Report by the CDC:</td>
<td>CDC</td>
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<td></td>
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<td></td>
<td>- One CAPaBLE multi-year project was approved and another conditionally approved based on successful submission of a progress report that will be presented to the interim SC Meeting for endorsement;</td>
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<td>- Eight new proposals under CAPaBLE were approved for funding.</td>
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<td>Action 33                                                                                               The work on the definition of Capacity Development in the context of APN, as well as the development of the conceptual framework was approved.</td>
<td>CDC</td>
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<td>Action 34                                                                                               The new Capacity Development Committee (CDC) was elected:</td>
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<td>- Dr. Kensuke Fukushi, SPG Member for Japan and SPG Co-Chair (ex-officio);</td>
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<td>- Dr. Giashuddin Miah, SPG Member for Bangladesh as new SPG Co-Chair (ex-officio);</td>
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<td>- Ms. Peldon Tshering, SC Chair (ex-officio);</td>
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<td>- Donor Member (Japan);</td>
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<td>- Dr. Andrew Matthews, invited expert;</td>
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<td>- Prof. Roland Fuchs, invited expert;</td>
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<td>- Dr. Srikantha Herath, invited expert;</td>
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<td>- Dr. Juan Pulhin, invited expert.</td>
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<td>Action 35                                                                                               A session ensued on developing the capacity of young/early career scientists, some of the action points generated for further discussion by the SC include:</td>
<td>IGM, SC,</td>
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<td></td>
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<td>- Secretariat is to remind young scientists who participated in PDTW in Mongolia to submit proposals to APN;</td>
<td>Secretariat</td>
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<td></td>
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<td>- Young scientists should be referred by senior scientists or introduced to senior scientists when submitting proposals. This context, APN is to explore a mentoring system for young scientists, explore with countries which have resources on a co-financing mechanism which will benefit these countries in the review process. In doing so, consideration is to be given to the thematic priorities of countries engaged in such co-funding mechanisms;</td>
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<td>- APN is to consider reserving a small portion of funds for young scientists who submitted proposals. The funds does not have to be a large amount – in the range of US$10,000 and it would be considered as “Early Career Awards”;</td>
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<td>- Be conscious to involve young scientists in science-policy dialogues and other activities in APN;</td>
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<td>- Online networking is very important and should be strengthened within the mechanism of APN;</td>
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<td>- APN is to further develop its mechanisms to advertise the availability of training to young scientists;</td>
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<td>- SC will discuss all of the above issues with the aim of possible implementation.</td>
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<td>Item #</td>
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<tr>
<td>Item 11</td>
<td>APN Future Development</td>
<td>Action 36</td>
<td>In the discussion that ensued on APN Future Development, the following points were noted for further consideration by the SC.</td>
<td>IGM, SC</td>
</tr>
</tbody>
</table>

> The IGM may establish two task forces: one to work on activities to assess the core value of APN based on experiences of the past 20 years, and the other, to work on a partnership approach that could be discussed with member countries in order to solve some of the technical aspects of APN’s operations and consider the potential barriers for creating such partnerships;
> Japan and Dr. Matthews would like to participate in these task forces;
> A concept paper to be developed by Japan will be shared with the taskforces, circulated among national Focal Points in the final draft stage and introduced to the IGM. The work will start as soon as possible;
> The mandate of SC is well laid out in the Framework Document and is responsible for resources development. The SC can nominate suitable candidates who the Secretariat Director will invite to join the Task Force as NAIEs;
> The SC will make an action plan for the task forces.

Additional Discussion that can be incorporated into the action points above:
> It is important to streamline APN. However, we should not have a 2-day meeting for the IGM without considering the significance of the Meeting;
> Discuss a strategy to ensure that a full contingent of national Focal Points attend the IGM;
> Discuss the concern on recent financial contribution unbalance of which 90% of income is contributed by Japan. All member countries should make a financial contribution – this is an expectation of the Ministry of Finance of Japan;
> We need to see more tangible outputs from APN projects to ensure the continuation of funding;
> Bilateral-based projects would be a good mechanism that APN could undertake;
> The uniqueness of APN seems to prevent other partners from donating to APN;
> Need to create a new programme that would develop strong ownership through co-financing;
> Access to Green Climate Fund would be good for APN;
> Bilateral-based projects/mechanisms could send a clear signal on projected outputs to policy makers;
> Japan will develop a concept paper on this for FY 2017;
> The SC can form co-opt groups within the SC to work on specific tasks.
## Chairpersons’ Summary

### Item 12. Confirmation of Steering Committee Procedures and Members for 2016 and Beyond

Action 37. The IGM confirmed the SC membership as outlined below. The SC will discuss and select co-opted members in a meeting after the present IGM. The host country of the next IGM will be announced under Item 13 or upon official communication by the host country after the IGM.

**Elected nFPs**
- Ms. Peldon Tshering, Bhutan (Chair)
- Dr. Chengyong Sun, China (First Vice-Chair)
- Mr. Marcial Amaro, Philippines
- Mr. Muhammad Irfan Tariq, Pakistan
- Dr. Andrey V. Adrianov, Russian Federation

(Discussion on the Second Vice Chair to be made at the 33rd Steering Committee)

**Ex-officio members (SPG Co-Chairs)**
- Dr. Kensuke Fukushi, SPG Member for Japan
- Dr. Giashuddin Miah, SPG Member for Bangladesh

**Donor members**
- Dr. Akio Takemoto, nFP for Japan
- Mr. Beom-Sik Yoo, nFP for the Republic of Korea

- **Host of the next IGM (1 year term)**
  - To be announced

- **Co-opted members (1 year term)**
  - To be announced after co-option

Action 38. Based on the new amendments to the Framework Document, the staggered SC election system will begin from April 2017 by electing 2 or 3 members depending on the year.

### Item 13. Hosts for 22nd and 23rd IGM/SPG Meetings

Action 39. No decision was made on the host country for the 22nd Joint SPG-IGM Meeting. Members will consider and contact the Secretariat.

### Item 14. 21st IGM Action Points: Budget (Part I) and Others (Part II)

Action 40. The IGM Chair and Secretariat will revise the draft action points based on input from participants under the current agenda item.

### Item 15. AOB, Final Remarks, Closing and Housekeeping

Action 41. The “APN Mitra Award for Global Change Research” was awarded to Dr. Lu Heli for his work on “A Spatially Explicit Modelling Framework of Cost-Benefit and Carbon Emissions from Land Use Coverage Changes for Implementing REDD+ in Southeast Asia.”

Action 42. The “L. B. Brown Memorial Photography Award” was given to Mr. Mohammad Rakibul Hasan, Bangladesh for his photo themed “Water for Sustainability” which was submitted to the monthly contest for August 2015.

Action 43. The IGM may consider establishing a Sub-Regional Committee for Oceania.
### Resources Available

<table>
<thead>
<tr>
<th>Source</th>
<th>Available</th>
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<tbody>
<tr>
<td>MOEJ (JPY 268,446,000)</td>
<td>2,165,000</td>
</tr>
<tr>
<td>Hyogo (JPY 21,773,000)</td>
<td>175,500</td>
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<tr>
<td>NZ (NZ$ 30,000)</td>
<td>19,900</td>
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<tr>
<td>ROK</td>
<td>50,000</td>
</tr>
<tr>
<td>Projected Resources, Committed and Uncommitted from past FYs</td>
<td>2,286,428</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,286,428</strong></td>
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</tbody>
</table>

Exchange Rates in FY 2016:

US$ 1 = JPY 124

US$ 1 = NZ$ 1.60

All figures in US $.

### Use of Resources

<table>
<thead>
<tr>
<th>Ongoing Projects from Past Fiscal Years</th>
<th>Reserved Resources (A)</th>
<th>Reallocation for FY 2016 Activities (B)</th>
<th>Allocation of New Resources (C)</th>
<th>Total (D) = (A)+(B)+(C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAF 2015</td>
<td>484,371</td>
<td></td>
<td></td>
<td>484,371</td>
</tr>
<tr>
<td>CAF 2014</td>
<td>56,575</td>
<td></td>
<td></td>
<td>56,575</td>
</tr>
<tr>
<td>CAF 2013</td>
<td>9,500</td>
<td></td>
<td></td>
<td>9,500</td>
</tr>
<tr>
<td>LCI 2013</td>
<td>24,840</td>
<td></td>
<td></td>
<td>24,840</td>
</tr>
<tr>
<td>ARCP (CRRP) 2015</td>
<td>376,200</td>
<td></td>
<td></td>
<td>376,200</td>
</tr>
<tr>
<td>ARCP 2014</td>
<td>204,000</td>
<td></td>
<td></td>
<td>204,000</td>
</tr>
<tr>
<td>ARCP 2013</td>
<td>68,334</td>
<td></td>
<td></td>
<td>68,334</td>
</tr>
<tr>
<td>ARCP 2012</td>
<td>9,000</td>
<td></td>
<td></td>
<td>9,000</td>
</tr>
<tr>
<td>ARCP 2009</td>
<td>7,854</td>
<td></td>
<td></td>
<td>7,854</td>
</tr>
<tr>
<td>CAPaBLE 2015</td>
<td>83,500</td>
<td></td>
<td></td>
<td>83,500</td>
</tr>
</tbody>
</table>
## Chairpersons' Summary

**IGM–SPG/21/06: Work Programme and Resources Allocation, Action:** For approval

**Created:** 05 April 2016

### All figures in US $

<table>
<thead>
<tr>
<th>Resources Available</th>
<th>MOEJ (JPYen 268,446,000)</th>
<th>2,165,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyogo (JPYen 21,773,000)</td>
<td>175,500</td>
<td>175,500</td>
</tr>
<tr>
<td>NZ (NZ$ 30,000)</td>
<td>19,900</td>
<td>19,900</td>
</tr>
<tr>
<td>ROK</td>
<td>50,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

### Projected Resources, Committed and Uncommitted from past FYs

- Total 2,286,428
- 2,410,400
- 4,696,828

### Use of Resources

1. **Reserved Resources (A)**
   - Reallocation for FY 2016 Activities (B)
   - Allocation of New Resources (C)
   - Total (D) = (A) + (B) + (C)

### Ongoing Projects from Past Fiscal Years

- CAF 2015: 484,371
- CAF 2014: 56,575
- CAF 2013: 9,500
- LCI 2013: 24,840
- ARCP (CRRP) 2015: 376,200
- ARCP 2014: 204,000
- ARCP 2013: 68,334
- ARCP 2012: 9,000
- ARCP 2009: 7,854
- CAPaBLE 2015: 83,500
- CAPaBLE 2014: 27,876
- CAPaBLE 2013: 18,400
- AOA 2012: 6,000
- 21st IGM/SPG: 111,856

### Sub Total 1,488,306

### Projects and other Activities in FY 2016

- **ARCP (CRRP)**
- **CAPaBLE**: 72,000
- **CAF (including APAN Forum (12k), Mortgage for CAF Projects (25k))**: 482,750
- **LCI (Low Carbon Technology Transfer Scop WS (50k), LoCARNet (50k))**: - 24,795 75,000
- **PDTW**: - 8,177 17,000
- **Science Policy Linkage (SBSTA, IPBES, COP22)**
- **Hyogo Activities**: - 20,139 10,000
- **Future Collaborative Approach**: - 15,000
- **20th Anniv. (Media Visit, PROVIA)/Other**: 38,000 91
- **Annual Reports & Other Publications**: - 10,000

### Sub Total New Projects and Other Activities 592,750

### Administration and Operational Costs

- **22nd IGM/SPG & 32nd SC**: - 130,000 130,000
- **SRC-SA**: - 6,000 9,000
- **SRC-SEA**: - 15,000
- **SRC-TEA**: - 15,000
- **APN Members/Secretariat Travel**: - 50,000
- **Personnel**: - 520,000
- **General Maintenance & Operational Cost**: - 55,000
- **Contingency**: 121,170

### IGES Administrative Overhead (3% of MOEJ Contribution)

| 121,170 | 64,950 |

### Sub Total Administration and Operational Costs 211,170

### Total

| 2,202,226 | 2,410,400 | 4,696,828 |

| 2,286,428 | 2,410,400 | 4,696,828 |
**Annotation to Work Programme with Resources Allocation FY 2016**

1. The exchange rates USD 1 = JPYen 124 and USD 1 = NZD 1.60 were calculated by adding 5% on the average value of the exchange rates from the end of December 2015, and the end of January and February 2016.

2. Based on the exchange rates the total income of APN through direct financial contributions in FY 2016 is around USD 2.4 Mio.

3. From FY 2015 an amount of approximately USD 2.3 Mio. is carried over to FY 2016.

4. In total, the amount that is available for APN operation in FY 2016 is around USD 4.7 Mio.

5. From the reserved resources that are carried over from FY 2015, substantial amounts are reserved for projects that are underway, not completed yet or have not drawn their contracts yet (Column A). Furthermore, some funds are allocated for other activities in FY 2016 (Column B). The amount in these columns totals USD 2.3 Mio.

6. Column C (marked in pale pink) shows the proposed allocation of new income of USD 2.4 Mio.

7. Column D shows by project programmes and operational line items how the total available resources in FY 2016 of USD 4.7 Mio. are allocated.
## Appendix 4(a): Continuing Multiyear ARCP Projects, Fiscal Year 2016

<table>
<thead>
<tr>
<th>Full Proposal/Project Reference Number</th>
<th>Project Reference Number</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Country</th>
<th>Project Summary</th>
<th>Regional Collaboration Countries Involved</th>
<th>Project Duration</th>
<th>Budget Allocation</th>
<th>Total Funding Recommended</th>
<th>SPG Recommendation to the IGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCP2014-14NY(B&amp;ES)-Salmo</td>
<td>ARCP2016-01CMY(B&amp;ES)-Salmo</td>
<td>Influence of Mangrove Biodiversity on Accumulation of Carbon and Resilience to Sea Level Rise: A Comparative Assessment Among Disturbed, Restored and Intact Mangrove Systems</td>
<td>Dr. Severino G. Salmo III, Ateneo de Manila University, Quezon City, PHILIPPINES</td>
<td>Mangroves provide vital ecological and socio-economic services such as supporting fisheries and forestry products, stabilizing 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 standardized 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.</td>
<td>Philippines, Malaysia, Singapore, Australia, USA, Indonesia</td>
<td>3 Years</td>
<td>40,000 (Retained from 2014/2015 fund)</td>
<td>20,000</td>
<td>85,000</td>
</tr>
</tbody>
</table>

| ARCP2014-15NY-Wu/ARC2015-06CMY-Wu | ARCP2016-02CMY-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, Vietnam, Lao PDR, Japan, USA | 3 Years | 45,000 (Retained from 2014/2015 fund) | 20,000 | 45,000 | 110,000 | The project itself is still in its first year. The SPG recommends conditional funding continuation, provided that project needs to submit updated progress report prior to the next IGM. **CONDITIONAL FUNDING CONTINUATION IS RECOMMENDED.** |
### Appendix 4(b): Continuing Multiyear Projects under the CAF Framework, Fiscal Year 2016

<table>
<thead>
<tr>
<th>Full Proposal/Project Reference Number</th>
<th>Project Reference Number</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Country</th>
<th>Regional Collaboration Countries Involved</th>
<th>Project Duration</th>
<th>Budget Allocation</th>
<th>Total Funding Recommended</th>
<th>SPG Recommendations to the IGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAF2015-RR01-CMY-Basnayake</td>
<td>CAF2016-RR01-CMY-Basnayake</td>
<td>Developing Climate Inclusive Potential Loss and Damage Assessment Methodology for Flood Hazards</td>
<td>Dr. Senaka Basnayake, Asian Disaster Preparedness Centre (ADPC), Bangkok, THAILAND</td>
<td>Thailand, Nepal, Sri Lanka, Australia</td>
<td>3 years</td>
<td>$45,000  $42,750  $38,000</td>
<td>$125,750</td>
<td>The project is entering its 2nd year, contract is not yet drawn. Funding has been secured from 2013/2014 budget for 3 years of the project. Project will be requested to submit updated report prior to SC Meeting in autumn. CONDITIONAL FUNDING CONTINUATION IS RECOMMENDED</td>
</tr>
<tr>
<td>CAF2015-RR02-CMY-Singh</td>
<td>CAF2016-RR02-CMY-Singh</td>
<td>Developing and promoting a people-centred approach to assess and address impacts of climate change induced loss and damage</td>
<td>Harjeet Singh, ActionAid International for Asia, INDIA</td>
<td>Bangladesh, Cambodia, Myanmar, Nepal and Vietnam, UK, South Africa (SA and SEA)</td>
<td>3 years</td>
<td>$50,000  $40,850  $11,400</td>
<td>$102,250</td>
<td>The project is entering its 2nd year, contract is not yet drawn. Funding has been secured from 2013/2014 budget for 3 years of the project. Project will be requested to submit updated report prior to SC Meeting in autumn. CONDITIONAL FUNDING CONTINUATION IS RECOMMENDED</td>
</tr>
<tr>
<td>CAF2015-RR03-CMY-Pereira</td>
<td>CAF2016-RR03-CMY-Pereira</td>
<td>Integrating CCA, DRR and L+D to address emerging challenges due to slow onset processes</td>
<td>Professor Joy Jacqueline Pereira, Universiti Kebangsaan Malaysia, Selangor, MALAYSIA</td>
<td>Malaysia, Cambodia, The Philippines, Vietnam, Myanmar, Japan (Southeast Asia)</td>
<td>3 years</td>
<td>$50,000  $42,750  $42,750</td>
<td>$135,500</td>
<td>The project is at the beginning of its second year. Funding has been secured from 2013/2014 budget for 3 years of the project. Project will be requested to submit updated report prior to SC Meeting in autumn. CONDITIONAL FUNDING CONTINUATION IS RECOMMENDED</td>
</tr>
<tr>
<td>Full Proposal/ Project Reference Number</td>
<td>Project Reference Number</td>
<td>Proposal Title</td>
<td>Proponent, Institution and Country</td>
<td>Regional Collaboration Countries Involved</td>
<td>Project Duration</td>
<td>Budget Allocation</td>
<td>Total Funding Recommended</td>
<td>SPG Recommendations to the IGM</td>
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<tr>
<td>CAF2015-RR07-CMY-Wang</td>
<td>CAF2016-RR04-CMY-Wang</td>
<td>Integrated flood modeling and Pre-Disaster Loss Estimation in Asian countries</td>
<td>Dr Yi Wang, Asian Disaster Preparedness Center (ADPC), Bangkok, Thailand</td>
<td>Thailand, Japan, China, Myanmar</td>
<td>3 years</td>
<td>$35,000 $35,000 $45,600</td>
<td>$115,600</td>
<td>The project is still in its first year. Funding has been secured from 2013/2014 budget for 3 years of the project. Project will be requested to submit updated report prior to SC Meeting in autumn. CONDITIONAL FUNDING CONTINUATION IS RECOMMENDED</td>
</tr>
<tr>
<td>CAF2015-RR10-NMY-Neef</td>
<td>CAF2016-RR05-CMY-Neef</td>
<td>Climate Change Adaptation in Post-Disaster Recovery Processes: Flood-Affected Communities in Cambodia and Fiji</td>
<td>Prof. Andreas Neef Human Sciences Building, 10 Symonds Street, Rm. 8368, Auckland 1142, NEW ZEALAND Tel: +64-9-9233486; Fax: +64-9-3737439</td>
<td>New Zealand, Fiji, Cambodia, Australia, UK</td>
<td>3 Years</td>
<td>$45,000 $35,000 $40,000  $120,000</td>
<td>The project's progress is considered satisfactory. Funds for 2 years was secured from FY2015/2016 budget. Mortgage of US$40,000 will be allocated from the budget allocation in FY2016/2017. SPG RECOMMENDS FUNDING CONTINUATION TO 2ND YEAR.</td>
<td></td>
</tr>
<tr>
<td>CAF2015-RR11-NMY-Siswanto</td>
<td>CAF2016-RR06-CMY-Siswanto</td>
<td>Developing High Spatiotemporal Resolution Datasets of Low-Trophic Level Aquatic Organism and Land-Use/ Land-Cover in the Asia-Pacific Region: Toward an Integrated Framework for Assessing Vulnerability, Adaptation, and Mitigation of the Asia-Pacific Ecosystems to Global Climate Change</td>
<td>Dr. Eko Siswanto Japan Agency for Marine-Earth Science and Technology (JAMSTEC) 2-15 Natsushima-cho, Yokosuka, Kanagawa 237-0061 JAPAN Tel: +81 46 867 9822 Fax: +081 46 867 9455</td>
<td>Japan, Korea, China, Thailand, Viet Nam, Malaysia, Indonesia, USA</td>
<td>3 Years</td>
<td>$45,000 $45,000 $34,000  $124,000</td>
<td>The project's progress is considered satisfactory. The outputs presented in the report are very significant and important for climate adaptation. Funds for three years project duration was secured from FY 2015/2016 budget. SPG RECOMMENDS FUNDING CONTINUATION TO 2ND YEAR.</td>
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</tr>
<tr>
<td>CAF2015-RR12-NMY-Shaheen</td>
<td>CAF2016-RR07-CMY-Shaheen</td>
<td>Climate smart agriculture through sustainable water use management: Exploring new approaches and devising strategies for climate change adaptation in South Asia</td>
<td>Nuzba Shaheen, Global Change Impact Studies Centre, National Centre for Physics (NCP) Complex, Shadara Road, Quaid-i-Azam University Campus, Islamabad (44000), PAKISTAN</td>
<td>Sri Lanka, Bangladesh, Cambodia, UK, Pakistan</td>
<td>2 Years</td>
<td>$45,000</td>
<td>$44,000</td>
<td>$89,000</td>
</tr>
<tr>
<td>CAF2015-RR13-NMY-Dautova</td>
<td>CAF2016-RR08-CMY-Dautova</td>
<td>Developing life-supporting marine ecosystems along the East Asia’s coasts - a synthesis of physical and biological data regarding coral reef ecosystems for the science-based management and socio-ecological policy making in terms of Global Sustainability</td>
<td>Dr. Tatiana N. Dautova A.V. Zhirmunsky Institute of Marine Biology, Far East Branch of the Russian Academy of Sciences Palcheyevsky Street 17, Vladivostok 690041, Russia; tel.: 7 (4232) 310-905, Fax 7 (4232) 310-900</td>
<td>Russia, Viet Nam, Philippines</td>
<td>2 Years</td>
<td>$38,000</td>
<td>$38,000</td>
<td>$76,000</td>
</tr>
<tr>
<td>CAF2015-RR14-NMY-Odeh</td>
<td>CAF2016-RR09-CMY-Odeh</td>
<td>Monitoring grassland degradation in North/Central Asia: Deciphering the impacts of climate change and government policies at different spatial-temporal scales using remote sensing and expert knowledge</td>
<td>Associate Prof. Inakwu Odeh Centre for Carbon, Water and Food, Faculty of Agric. &amp; Envr., The Univ of Sydney, Australian Technology Park, 1, Central Avenue, Eveleigh NSW 2015, AUSTRALIA; Telephone/ Fax: +61 2 8627 1055/ F: +61 2 8627 1099</td>
<td>Australia, China, Mongolia, Uzbekistan</td>
<td>2 Years</td>
<td>$28,000</td>
<td>$28,000</td>
<td>$56,000</td>
</tr>
<tr>
<td>Full Proposal/Project Reference Number</td>
<td>Proposal Title</td>
<td>Proponent, Institution and Country</td>
<td>Regional Collaboration Countries Involved</td>
<td>Project Duration</td>
<td>Budget Allocation</td>
<td>Total Funding Recommended</td>
<td>SPG Recommendations to the IGM</td>
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</tr>
<tr>
<td>CAF2015-RR15-NMY-Marambe</td>
<td>Building Climate Resilience in Farming Systems in Sloping Lands of South Asia</td>
<td>Prof. Buddhi Marambe, Faculty of Agriculture, University of Peradeniya Old Galaha Road, Peradeniya 20400, SRI LANKA, Tel: +94812395100; Fax: +941812395110</td>
<td>Sri Lanka, Bangladesh, Pakistan, Nepal</td>
<td>2 Years</td>
<td>$60,000</td>
<td>$25,000</td>
<td>$85,000</td>
<td>The project started late. Funds for 2 years was secured from FY 2015/2016 budget. PROJECT LEADER WILL BE REQUESTED TO SUBMIT UPDATED PROGRESS REPORT PRIOR TO SC MEETING IN AUTUMN.</td>
</tr>
<tr>
<td>CAF2015-RR16-NMY-Pham</td>
<td>Utilizing geospatial technology to assess health vulnerability to climate change for rural population in Vietnam and Philippines</td>
<td>Dr. Pham Thi Thanh Nga Vietnam National Satellite Center, Vietnamese Academy of Science and Technology Floor 9th, Main Building, 18 Hoang Quoc Viet, Cau Giay district, Ha Noi, VIET NAM Tel: (+84) 04-37917675 Fax: (+84) 04-37627205</td>
<td>Viet Nam, Philippines, Japan</td>
<td>2 Years</td>
<td>$40,000</td>
<td>$40,000</td>
<td>$80,000</td>
<td>Activity in a collaborating country experienced slight delay, however, overall progress is considered satisfactory. Funds for 2 years was secured from FY 2015/2016 budget. SPG RECOMMENDS FUNDING CONTINUATION TO 2ND YEAR.</td>
</tr>
<tr>
<td>CAF2015-RR17-NMY-Arifwidodo</td>
<td>Understanding Urban Heat Island Effect and Its Implications to Climate Change Adaptation Strategies in Major Southeast Asian Cities</td>
<td>Sigit Dwiananto Arifwidodo, PhD Faculty of Architecture, Kasettart University, Thailand 50 Phaholyothin Road, Jatujuk, Bangkok 10900 Thailand Tel: +6629428960 ext 314 fax. +662 9405413</td>
<td>Indonesia, Thailand, Japan</td>
<td>2 Years</td>
<td>$40,000</td>
<td>$40,000</td>
<td>$80,000</td>
<td>The project activity started late. Funds for 2 years was secured from FY 2015/2016 budget. PROJECT LEADER WILL BE REQUESTED TO SUBMIT UPDATED PROGRESS REPORT PRIOR TO SC MEETING IN AUTUMN.</td>
</tr>
</tbody>
</table>

$180,000 | $502,350 | $407,750 | $25,000 | $34,000 | $40,000 | $1,189,100 |
## Appendix 4(c): New CRRP Projects, Fiscal Year 2016

<table>
<thead>
<tr>
<th>Full Proposal Reference Number</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Country</th>
<th>Collaborating Countries</th>
<th>Project Duration</th>
<th>Total Funding Requested (Original)</th>
<th>In kind and/or cash contribution</th>
<th>Funding Recommendation (to be secured from FY 2016/2017 budget)</th>
<th>Total APN Funding Recommended</th>
<th>SPG Recommendation to IGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRRP2015-FP03-Park</td>
<td>Anthropogenic perturbations to carbon export and greenhouse gas evasion from Asian river systems</td>
<td>Prof. Ji-Hyung Park, Ewha Womans University, Seoul, Republic of Korea</td>
<td>Bangladesh, Cambodia, China, India, Nepal, Republic of Korea, Singapore, United States of America, Viet Nam</td>
<td>3 years</td>
<td>$138,000</td>
<td>$154,000</td>
<td>$43,000 $43,000 $43,000 $129,000</td>
<td>The proposal sits in the first rank. AWARD IS RECOMMENDED AT A LEVEL OF US$129,000 FOR THE THREE YEARS PROJECT DURATION.</td>
<td></td>
</tr>
<tr>
<td>CRRP2015-FP01-Zhen</td>
<td>Assessing land use functions for sustainable land management in Asia countries</td>
<td>Prof. Lin Zhen, Institute of Geographic Science and Natural Resources Research, Chinese Academy of Sciences, Beijing, PR China</td>
<td>Bangladesh, China, Japan</td>
<td>2 years</td>
<td>$88,955</td>
<td>$75,000</td>
<td>$42,000 $42,000 $84,000</td>
<td>The proposal scored high above the cut off line, shows strong collaboration and adequate expertise within the project team. AWARD IS RECOMMENDED AT A LEVEL OF US$84,000 FOR TWO YEARS PROJECT DURATION.</td>
<td></td>
</tr>
<tr>
<td>CRRP2015-FP09-Kumar</td>
<td>Development of new water supply strategies in two watersheds of India and Sri Lanka in the context of climate change, rapid urbanization and population growth: a vulnerability assessment approach</td>
<td>Dr. Manish Kumar, Tezpur University, Assam, India</td>
<td>India, Japan, Sri Lanka</td>
<td>2 years</td>
<td>$81,000</td>
<td>$24,000</td>
<td>$42,000 $33,000 $75,000</td>
<td>The proposal scored high above the cut-off line. Proposal reviews are satisfactory. AWARD IS RECOMMENDED AT A LEVEL OF US$75,000 FOR TWO YEARS PROJECT DURATION.</td>
<td></td>
</tr>
<tr>
<td>Full Proposal Reference Number</td>
<td>Proposal Title</td>
<td>Proponent, Institution and Country</td>
<td>Collaborating Countries</td>
<td>Project Duration</td>
<td>Total Funding Requested (Original)</td>
<td>In kind and/or cash contribution</td>
<td>Funding Recommendation (to be secured from FY 2016/2017 budget)</td>
<td>Total APN Funding Recommended</td>
<td>SPG Recommendation to IGM</td>
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</tr>
<tr>
<td>CRRP2015-FP08-Rowlings</td>
<td>Managing organic amendments to reduce greenhouse gas emissions and supplement fertiliser nitrogen inputs in tropical Indian and Sri Lankan agricultural soils</td>
<td>Dr. David Rowlings Queensland University of Technology (QUT) 2 George Street, Brisbane, 4001, Australia</td>
<td>Australia, India, Sri Lanka</td>
<td>2 years</td>
<td>$88,800</td>
<td>$325,595</td>
<td>Year 1 $40,000 Year 2 $40,000 Year 3 $120,000</td>
<td>$80,000</td>
<td>The SPG agreed that information about collaborator's engagement in the project needs to be improved. Funding is awarded with condition that clarification on collaborators' engagement is to be provided. CONDITIONAL AWARD IS RECOMMENDED AT A LEVEL OF US$80,000 FOR 2 YEARS PROJECT DURATION.</td>
</tr>
<tr>
<td>CRRP2015-FP14-Santisrisomboon</td>
<td>Southeast Asia Phase 2: High-resolution analysis of climate extremes over key areas in Southeast Asia</td>
<td>Dr. Jerasorn Santisrisomboon Division of Energy Engineering, Faculty of Engineering, Ramkhamhaeng University Ramkhamhaeng Road, Hua Mak, Bang Kapi, Bangkok, Thailand 10240</td>
<td>Indonesia, Malaysia, Philippines, Thailand, Viet Nam</td>
<td>3 years</td>
<td>$135,000</td>
<td>$320,000</td>
<td>Year 1 $40,000 Year 2 $40,000 Year 3 $120,000</td>
<td>$120,000</td>
<td>SPG reviews are satisfactory in terms of both technical and non-technical criteria. AWARD IS RECOMMENDED AT THE LEVEL OF US$120,000 FOR THREE YEARS PROJECT DURATION.</td>
</tr>
<tr>
<td>CRRP2015-FP11-Ishigaki</td>
<td>Appropriate Solid Waste Management Towards Flood Risk Reduction Through Recovery of Drainage Function of Tropical Asian Urban Cities</td>
<td>Dr. Tomonori Ishigaki National Institute for Environmental Studies (NIES) 16-2, Onogawa, Tsukuba, Ibaraki, 305-8506, Japan</td>
<td>Japan, Thailand, Viet Nam</td>
<td>2 years</td>
<td>$90,000</td>
<td>$25,000</td>
<td>Year 1 $35,000 Year 2 $45,000 Year 3 $80,000</td>
<td>$80,000</td>
<td>SPG recommends this proposal for funding with consideration that no proposal under the solid waste management theme has been considered for funding, while APN is moving towards exploring more research on technology transfer and solid waste management. AWARD IS RECOMMENDED AT THE LEVEL OF US$80,000 FOR TWO YEARS PROJECT DURATION.</td>
</tr>
<tr>
<td>CRRP2015-FP06-Kuyama</td>
<td>Water-Energy-Food nexus perspective: Path making for Sustainable Development Goals (SDGs) to country actions in Asia.</td>
<td>Mr. Tetsuo Kuyama Institute for Global Environmental Strategies 2108-11 Kamiyamaguchi, Hayama, Kanagawa 240-0115 Japan</td>
<td>Bangladesh, Japan, Viet Nam, India</td>
<td>2 years</td>
<td>$85,085</td>
<td>$71,000</td>
<td>Year 1 $40,000 Year 2 $40,000 Year 3 $80,000</td>
<td>$80,000</td>
<td>Theme water-food-energy nexus is an emerging issue and proposal is linked to the recent established SDGs. AWARD IS RECOMMENDED AT US$80,000 FOR TWO YEARS PROJECT DURATION.</td>
</tr>
<tr>
<td>Full Proposal Reference Number</td>
<td>Proposal Title</td>
<td>Proponent, Institution and Country</td>
<td>Collaborating Countries</td>
<td>Project Duration</td>
<td>Total Funding Requested (Original)</td>
<td>In kind and/or cash contribution</td>
<td>Funding Recommendation (to be secured from FY 2016/2017 budget)</td>
<td>Total APN Funding Recommended</td>
<td>SPG Recommendation to IGM</td>
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<tr>
<td>CRRP2015-FP02-Nunn</td>
<td>Risk and Resilience in the Pacific: Influence of Peripherality on Exposure and Responses to Global Change</td>
<td>Prof. Patrick Nunn, University of the Sunshine Coast (Sustainability Research Centre) Locked Bag 4, Maroochydore, Queensland 4558, Australia</td>
<td>Australia, Fiji, Federated States of Micronesia</td>
<td>3 years</td>
<td>$163,520</td>
<td>$310,000</td>
<td>$50,000 $45,000 $45,000 $140,000</td>
<td>Considering regional balance, the SPG recommends to award funds to project conducted in the Pacific. The project also fits the theme of RRR in APN's 4th Strategic Phase. However, the project needs to establish collaboration with SPC as condition of the award. CONDITIONAL AWARD IS RECOMMENDED AT LEVEL OF US$140,000 FOR THREE YEARS PROJECT DURATION.</td>
<td></td>
</tr>
<tr>
<td>CRRP2015-SG01-Lokupitiya</td>
<td>Identification of the best agricultural management practices with better greenhouse gas benefits in salinity affected areas of South Asia</td>
<td>Dr. Erandathie Lokupitiya, Department of Zoology, Faculty of Science, University of Colombo, Colombo 03, Sri Lanka</td>
<td>Sri Lanka, Pakistan, Bangladesh, India, USA</td>
<td>2 years</td>
<td>$91,705</td>
<td>$74,000</td>
<td>$40,000 $40,000 $80,000</td>
<td>This is a result from the seed grant project funded in 2014. The proposal scored high with satisfactory review. However, need improvement on providing detailed matrix analysis in the proposal. This will be included as condition for the award. CONDITIONAL AWARD IS RECOMMENDED AT LEVEL OF US$80,000 FOR TWO YEARS PROJECT DURATION.</td>
<td></td>
</tr>
<tr>
<td>CRRP2015-SG02-Huang</td>
<td>Assessing the health effects of extreme temperatures and the development of adaptation strategies to climate change in the Asia-Pacific region</td>
<td>Dr. Cunrui Huang, Sun Yat Sen University 74, Zhongshan Road #2, Guangzhou 510080, China</td>
<td>China, Vietnam, Thailand, Bangladesh, Australia</td>
<td>2 years</td>
<td>$90,000</td>
<td>$60,000</td>
<td>$49,000 $33,000 $82,000</td>
<td>This is a result from the seed grant project funded in 2014. The proposal scored highly and has been given considerable investment already through the seed grant. The travel component is too high. Conditional award is to be given provided that travel budget is to be reduced, better communication and dissemination of the results is to be provided, and better data management plan that is in line with APN's policy is to be provided. CONDITIONAL AWARD IS RECOMMENDED AT A LEVEL OF US$82,000 FOR TWO YEARS PROJECT DURATION.</td>
<td></td>
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</table>

TOTAL FUNDS AWARDED TO NEW CRRP PROJECTS $950,000

CONTINGENCY FUNDS $27,650

TOTAL AVAILABLE FUNDS FOR CRRP $977,650
### Appendix 4(d): Continuing Multiyear CAPaBLE Projects, Fiscal Year 2016

<table>
<thead>
<tr>
<th>Project Reference Numbers</th>
<th>Proposal Title</th>
<th>Project Summary</th>
<th>Proponent, Institution and Country</th>
<th>Regional Collaboration Countries Involved</th>
<th>Project Duration</th>
<th>Award Details 2015/2016 Awarded</th>
<th>2016/2017 Expected</th>
<th>Fund Recommended</th>
<th>CDC recommendations to IG</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBA2016-01CMY-Pushpakumara</td>
<td>Scientific Capacity Development to Strengthen Informal Decision Making for Improved Climate Policy Formulation and Implementation in South Asian Countries</td>
<td>The proposed project will conduct regional and national workshops and seminars focusing on comprehensive assessment of the existing climate policies and strategies, building capacity on policy formulation and implementation, updating scientific information (i.e., climate change and variability, ecosystems and ecosystem services, biodiversity and land use, resources utilisation and pathways for sustainable development), and developing research agenda for the regions gap filling. The project will network policy makers, and senior &amp; young scientists in the SA to build new generation of trainers and decision makers to support combating climate change issues in the region and the world.</td>
<td>Prof. Gamin Pushpakumara, Faculty of Agriculture, University of Peradeniya, Old Galaha Road, Peradeniya, Sri Lanka,</td>
<td>Sri Lanka, Bangladesh, Nepal, Bhutan</td>
<td>2 Years</td>
<td>32,000 (Retained from 2015/2016 fund)</td>
<td>32,000 (Retained from 2015/2016 fund)</td>
<td>$32,000</td>
<td>First year progress report will be evaluated by CDC before the 34th SC Meeting (September 2016). Funds are secured from 2015/2016 Budget. WILL BE CONSIDERED AT THE 34th SC.</td>
<td></td>
</tr>
<tr>
<td>CBA2016-02CMY-Adiningsih</td>
<td>Building Capacity for Urban Climate Change Adaptation in Southeast Asia</td>
<td>It is expected that the proposed project should have the scope to promote educational activities in urban planning, research in climate change adaptation strategies in urban planning, and community service to adapt climate change in urban areas. We propose to organize a series of one week summer school (training of the urban planners or training of trainers) on building capacity for urban climate change adaptation in South-East Asia (SEA) region. Each training will comprise of 3 components; the first module is the review of interaction between climate change and SEA region, from the science perspective, to the development of policy options for responses to climate variability and impacts. The second component is the field visit to coastal cities to observe impacts of extreme events and adaptive measures. The third component is the hands-on experiences on the model output or lesson learned of urban planning to solve the real problems and needs in climate change adaptation, based on the output of SEA regional climate downscaling exercise for future climate projection and implementations for short, medium and long term adaptive capacity in SEA cities.</td>
<td>Dr. Erna Sri Adiningsih Remote Sensing Technology and Data Center, Indonesian National Institute of Aeronautics and Space (LAPAN) Jl. Lapan no 70, Pekanbaru, Indonesia</td>
<td>Indonesia, Thailand, Viet Nam, Philippines, Cambodia, Lao PDR, Malaysia, USA</td>
<td>2 Years</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
<td>$40,000</td>
<td>CDC Committee satisfy with the progress made by the project team and recommended continuing APN Support. CDC Suggested continue the close collaboration with Kem Lowry and utilized the outcome of East – West centre project that has developed similar training of trainers' materials on urban climate adaptation. Funds are secured from 2015/2016 Budget. RECOMMENDED FOR FUNDING.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 4(e): New CAPaBLE Projects, Fiscal Year 2016

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Proposal Title</th>
<th>Proponent</th>
<th>Collaborative countries</th>
<th>Duration and Funding</th>
<th>2016/2017 Fund recommended</th>
<th>CDC Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA2015-FFP17-Kang</td>
<td>Facilitating the attendance, interaction and training of young and developing nation scientists from Asia Pacific at the International Conference on Regional Climate - CORDEX 2016 (ICRC-CORDEX 2016)</td>
<td>Dr. Hyun-Suk Kang National Institute of Meteorological Research, Korea Meteorological Administration 33 Seohubuk-ro, Seogwipo-si, Jeju, Republic of Korea; Phone: +82-64-780-6653; Fax: +82-64-834-9705; Email: <a href="mailto:hyunsuk306.kang@gmail.com">hyunsuk306.kang@gmail.com</a></td>
<td>Australia, Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pacific Island States, Pakistan, Philippines, ROK, Russian Federation, Sri Lanka, Thailand, USA, Viet Nam, Maldives</td>
<td>6 months</td>
<td>$24,926</td>
<td>$24,926</td>
</tr>
<tr>
<td>BA2015-FFP11-Luong</td>
<td>Enhancing perception and capacity for national and provincial leaders and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Vietnam</td>
<td>Dr. Quang Huy Luong Department of Meteorology, Hydrology and Climate Change (DMHCC), Ministry of Natural Resources and Environment No 10 Ton That Thuyet street, Nam Tu Liem district, Hanoi city, Vietnam; Phone: +84902870505; Email: <a href="mailto:huytlq98@gmail.com">huytlq98@gmail.com</a></td>
<td>Vietnam</td>
<td>2 years</td>
<td>$39,175</td>
<td>$44,300</td>
</tr>
<tr>
<td>BA2015-FFP01-Qiao</td>
<td>CLIVAR Open Science Conference</td>
<td>Dr. Fangli Qiao First Institute of Oceanography / SOA 6 Xian-xia-ling Road, Qingdao, China, 266061; Phone: +86-532-88960055; Fax: +86-532-88965544; <a href="mailto:qiaof@fio.org.cn">qiaof@fio.org.cn</a>; Email: <a href="mailto:valery.detemmerman@clivar.org">valery.detemmerman@clivar.org</a></td>
<td>China, New Zealand, Republic of Korea, USA, France, Germany</td>
<td>1 year</td>
<td>$40,375</td>
<td>$40,375</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Proposal Title</td>
<td>Proponent</td>
<td>Collaborative countries</td>
<td>Duration and Funding</td>
<td>2016/2017 Fund recommended</td>
<td>CDC Remarks</td>
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<tr>
<td>CBA2015-FF06-</td>
<td>Capacity Development of Agrarian Research-Policy-Technology Personnel in Sri Lanka on 'Global Change and Sustainability’</td>
<td>Mrs. Priyanjanie Renuka Weerakkody Hector Kobbekaduwa Agrarian Research and Training Institute; P.O. Box 1522, No.114, Wijerama Mawatha, Colombo 7, Sri Lanka; Phone: +94 112 696981; Fax: +94 112 678135; Email: <a href="mailto:renukaweerakkody28@gmail.com">renukaweerakkody28@gmail.com</a></td>
<td>Sri Lanka</td>
<td>1 year $21,934.50 $21,934.50 $22,000</td>
<td></td>
<td>CDC recommends to request additional justification from the proponent on why the HARTI is not able to develop the capacity of HARTI's researchers with its own institutional efforts. Further, proponent must answer additional comments raised by reviewers at the Stage II Step II review process. CONDITIONAL FUNDING RECOMMENDED</td>
</tr>
<tr>
<td>Weerakkody</td>
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<tr>
<td>CBA2015-FF03-</td>
<td>Adapting groundwater of Asian cities to climate change: bridging the science and policy interface</td>
<td>Dr. Sangam Shrestha Asian Institute of Technology (AIT) PO. Box 4, Klong Luang, Pathumthani 12120, Thailand; Phone: +6625246055; Fax: +665246425; Email: <a href="mailto:sangam@ait.asia">sangam@ait.asia</a></td>
<td>Indonesia, Pakistan, Thailand, Viet Nam</td>
<td>1 year $40,000 $40,000 $40,000</td>
<td></td>
<td>Proponent successfully completed an APN funded CAPABLE project in 2013. Proponent should answer the comments that addressed by reviewers at Step II Stage II. RECOMMENDED FOR FUNDING</td>
</tr>
<tr>
<td>Shrestha</td>
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<tr>
<td>CBA2015-FF15-Dutta</td>
<td>Mainstreaming weather and climate information application for agro-ecosystem resilience in a changing climate</td>
<td>Dr. Rishiraj Dutta Asian Disaster Preparedness Center (ADPC) SM Tower, 24th Floor, 979/69 Paholyothin Road, Samsen Nai, Phayathai, Bangkok-10400, Thailand; Phone: +66 (0) 22980681-92; Fax: +66 (0) 22980012; Email: <a href="mailto:rishiraj@adpc.net">rishiraj@adpc.net</a></td>
<td>Nepal, Sri Lanka, Thailand, Viet Nam, India</td>
<td>2 years $42,500 $30,000 $72,500 $72,000</td>
<td></td>
<td>CONDITIONAL FUNDING RECOMMENDED following the assurance of APN fund is going to be spent to cover the participation cost of the trainees only and not cover the registration fee.</td>
</tr>
<tr>
<td>CBA2015-FF14-NGO</td>
<td>Ecosystem Based Adaptation approach for Sustainable Management and Governance of Coastal Ecosystems (ENGAGE)</td>
<td>Dr. Tho Hung Ngo Asian Institute of Technology in Vietnam Building B3, University of Transport and Communication, Lang Thuong, Dong Da, Hanoi, Vietnam; Phone: +84913586886;Fax: +844 37669492; Email: <a href="mailto:ngothohung@gmail.com">ngothohung@gmail.com</a></td>
<td>Cambodia, Indonesia, Malaysia, Philippines, Republic of Korea, Thailand, Viet Nam, UNU INWEH - Canada</td>
<td>1 year $39,950 $39,950 $35,000</td>
<td></td>
<td>CONDITIONAL FUNDING RECOMMENDED: Proponent is requested to answer the Step II Stage II review comments. The response will be communicated with reviewers to further strengthen the proposal.</td>
</tr>
<tr>
<td>CBA2015-FF10-</td>
<td>Rapid mapping technique for disaster observation and environmental change data acquisition</td>
<td>Prof. Dewayanuty Sutrisno Indonesian Society For Remote Sensing (ISRS) or Masyarakat Ahli Penginderaan Jauh Indonesia (MAPIN) Executing Secretariat 2nd Floor F Building, Jalan Raya Jakarta Bogor km 46 Cibinong 16911 Indonesia; Phone: +6221 87906041; Fax: +6221 87906041; Email: <a href="mailto:dewayanuty@gmail.com">dewayanuty@gmail.com</a></td>
<td>Indonesia, Malaysia, Taiwan and Netherland</td>
<td>1 year $37,279 $37,279 $35,000</td>
<td></td>
<td>CONDITIONAL FUNDING RECOMMENDED: Proponent's institution legitimation is questionable thus it is recommended to check the project's administrative capabilities of institution before awarding the APN grant.</td>
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Interactive Session I: Study on Climate Change Adaptation Strategy for Science and Technology Development in China

Dr. Xiaojia He
Assistant Research Professor
The Administrative Centre for China's Agenda 21 (ACCA21), Ministry of Science and Technology, China

This presentation aims to share the latest research results in a publication named "Study on Climate Change Adaptation Strategy of Science and Technology Development in China". In this study, based on analysis of domestic and international progress and trends on climate change adaptation, the model, principle and objective of adaptation were discussed and a Climate Change Adaptation Framework for Science and Technology Development in China was constructed. Within the framework, strategy study on adaptation technology (as the core), adaptation policy (as the guarantee) and adaptation methodology (as the basis) were carried out. Finally, suggestions on climate change adaptation strategy for science and technology development in the next 5 to 15 years were proposed, which can provide an essential reference to the relative national strategic planning and policy making in China.

Prof. Yinlong Xu
Institute of Environment and Sustainable Development in Agriculture (IEDA)
Chinese Academy of Agricultural Sciences (CAAS)
No. 12, Zhong-Guan-Cun South Street, Haidian District, Beijing 100081, China

The presentation first reviewed the research process for national climate change adaptation and policy in China. The concept of climate change adaptation is firstly proposed in the white paper of China's Agenda 21 in 1994, and the adaptation measures for key vulnerable sectors were firstly summarised in the People's Republic of China Initial National Communication on Climate Change in 2004. There are 3 times of National Assessment Report on Climate Change issued in 2007, 2011, and 2015, respectively; meanwhile, some policy documents were published, typical ones as China's National Programme on Climate Change in 2007, and National Adaptation Strategy on Climate Change in 2013. Secondly in the presentation, the MOST report entitled as Studies on National Strategy of Climate Change Adaptation was introduced. There are totally 5 parts of the report, including the background, guideline, demands and aims towards 2020 and 2050; the action plans were clarified as sectoral—including agriculture, water resources, forestry, coastal zone, human health, ecosystems and biodiversity, major projects, energy, and social sectors as urban development, the second & tertiary industries, environmental protection, infrastructure, as well as social lives, and 9 regional—Northeast China, North China Plain, East China, Central China, South China, Northwest China, Southwest China, Qinghai-Tibet Plateau, and China's Sea. For each sector or region, main challenges and tasks for adaptation were firstly clarified, and then the action plan was proposed. In the last part of the report, the national synthesis adaptation tasks in China were also summarised, and the measures to ensure the implementation of the sectoral and regional action plans were proposed. Finally in the presentation, it is briefed the policy on the capacity building, coordination mechanism, financial mechanism, R&D for science and technology, international collaboration to ensure the implementation the adaptation actions.

Dr. Jiansheng Qu, Liping Dong, Jingjing Zeng
Lanzhou Information Center, Chinese Academy of Sciences

The current situation, demands and future strategy of data, methods, and theories in the fields of climate change adaptation are analysed in this research. So much climate science data is accumulated, but the adaptation related data is still not enough and not systemic for the efforts of research, policy-making, and social practices. The research methods and academic theories of climate
change adaptation are rapidly developed in the past years with the increasing demands from the fields of science and society. As the adaptation research is expanded from the related natural/social sciences in the past decades of years, the data, methods and theories are fragmented generally. It is very urgent to develop a scientific support system with comprehensive data, reliable methodologies, and systemic theories. A discussion on the main tasks is put forward for the developing strategies on the data/methods/strategies of climate change adaptation as follows. The main tasks for data efforts are proposed as: (i) to construct climate change adaptation data integration platform with multi-scales mass data and big data service function; (ii) to develop specialised data analysis tools and to realize the integration of natural resource management into government decision making; (iii) to discover a new adaptation paradigm which is coordinated to precise control, multi-parties cooperation, and social well-being. The main tasks for method development are suggested as: (i) to integrate the advanced technologies into the climate change adaptation research methods to service the adaptation scientific/social demands; (ii) to support case studies of climate change to gain experience and data; (iii) to develop early warning system and the tools of climate change risk management; (iv) to develop comprehensive evaluation model with the data fusion capabilities; (v) to exploit earth system dynamics model with the full-scale factors of climate change adaptation. The theoretical innovation of climate change adaptation is closely connected to the methodological innovation and scientific data accumulation. Integration of interdisciplinary theories, and encouragement for emerging theoretical research are necessary for the adaptation theory development.

**Climate Change Impact and Adaptation Technology in China-A Case Study of Forest**

**Dr. Yunhe Yin**  
Associate Professor  
Key Laboratory of Land Surface Pattern and Simulation, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, No. 11A Datun Road, Beijing 100101 P.R. China.  
E-mail: yinyh@igsnr.ac.cn

Forest ecosystem plays an important role in regional and global carbon and water cycles, however, it has been confronted with significant impacts and risks under climate change. This study focused on a quantitative assessment of climate change impact on forest structure and production in China, and provided a brief review of adaptation strategies of forest in future as well. Based on the China's national forest inventory (CNFI) data and Normalised Difference Vegetation Index (NDVI) during the period 1982-2010, we identified forest cover changes by combining CNFI and NDVI, in order to assess the impact of climate change on forest leaf area index (LAI) for the last 30 years. Furthermore, potential future impacts were projected by the modified Lund-Potsdam-Jena model based on climate change scenarios. Results show that LAI had significant increasing trends in forest stable regions in 1982-2010, of which about 31% was contributed to changes in key climatic factors. In future, net primary production of forest would generally increase with significant regional differences due to climate change in China. Finally, we summarised the principle technologies for forest ecosystem to adapt to climate change in China.

**Research & development for climate change adaptation in China: International experience and cooperation opportunities**

**Dr. Fu Sun**  
Assistant professor  
School of Environment, Tsinghua University

As a contribution to the Study on Science and Technology Development Strategy for Climate Change Adaptation in China, this presentation reviews the international experience in research and development (R&D) for climate change adaptation (CCA), in terms of the significance of R&D in CCA action, the existing R&D programs related to CCA, the current and future R&D priorities for CCA, and the enabling environment for CCA R&D. Based on this review, the implications to China’s R&D for CCA are then provided, and the opportunities for China to cooperate with other countries in CCA R&D are also discussed.

**Interactive Session 2: Henan Province Scientists undertaking Research in Global Environmental Change**

An APN-Henan Networking Session was organised on Day 1 on the IGM. Speakers from Zhengzhou University and Yellow River Engineering Consulting Co., Ltd. shared their latest research results in the area of climate change that are conducted by local scientists from Henan Province. Poster presentations by young scientists were organised as part of the Networking Session to provide an opportunity for young scientists from universities and institutions based in Henan, China to present their work to distinguished scientists and policy makers from the APN community.
Dr. Lu Heli, College of Environment and Planning, Henan University was awarded the Mitra Award for Global Change Research in recognition of his outstanding work on “A Spatially Explicit Modelling Framework of Cost-Benefit and Carbon Emissions from Land Use Coverage Changes for Implementing REDD+ in Southeast Asia”.

Below is a list of oral presentations made at the interactive session. A table showing all posters presented by young scientists from Henan Province is presented on the following page.

### Interactive Session 3: Strategic Partnerships with APN

#### Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES)

**Prof. Yi Huang**  
Professor, Centre of Environmental Sciences, Peking University, China  
Member of Multidisciplinary Expert Panel (MEP) of IPBES

The objective of the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) is to provide policy relevant knowledge on biodiversity and ecosystem services to inform decision making. IPBES produces assessment reports and undertakes activities related to capacity building, indigenous and local knowledge, policy support tool, and catalysing new knowledge. So far, IPBES has produced two assessments, on pollination and pollinators associated with food production, and on scenarios and models of biodiversity and ecosystem services, respectively. A summary for policy makers was developed for each of the assessment reports. Ongoing assessments include a thematic assessment on land degradation and restoration and four regional/subregional assessments to be completed by mid 2018. Work on new global assessment was approved by IPBES at its fourth session held in February 2016. The new assessment builds on the Millennium Ecosystem Assessment (2005) and will form a core part of the Fifth Global Biodiversity Outlook of the Convention on Biological Diversity. An open call for nomination of experts is ongoing and IPBES welcomes governments and stakeholders like APN to submit nominations. The assessments were truly a global collaborative effort involving hundreds of authors and reviewers and over 10,000 individual comments. Peer reviews for the ongoing assessments will start in June 2016 and IPBES is inviting experts to participate in this global effort.

#### Climate Change and Water Resources Evolution in Yellow River Basin

**Dr. Peng Shaoming**  
Yellow River Engineering Consulting Co., Ltd.

#### Characterisation of air pollution and control measures of Central Plains Economic Zone

**Prof. Ruiqin ZHANG**  
Zhengzhou University

#### LoCARNet and APN — A Strategic Partnerships Past and Present

**Dr. Shuzo Nishioka**  
Director, LoCARNet/LCS-RNet  
Institute for Global Environmental Strategies, Japan

The LCS-RNet/LoCARNet is an open network of researchers, research organisations and relevant stakeholders that facilitates the formulation and implementation of science-based policies for low-carbon transition, currently composed of seven countries and 16 research institutes. Adhering to the principle of networking, science-policy dialogue, knowledge ownership by individual countries and regional collaboration, the Network regularly conducts workshops and consultations in Asian countries, providing a platform for researchers and policy makers from different countries to learn from each other on the potential greenhouse gas (GHG) reduction options and best practices. The annual LoCARNet meetings also provide opportunities to share the knowledge and showcase Asian countries work in GHG reduction. A conceptual framework was developed to guide it work on catalysing real progress in supporting the cycle of policy formulation, evaluation, implementation, monitoring and feedback, by involving multiple stakeholders using a participatory approach. LoCARNet and APN have been working together since 2012 on issues of common interest. LoCARNet has been active in engaging with APN in various knowledge sharing and capacity building activities and vice versa. In 2015, at the annual meeting of LoCARNet, APN shared a set of policy briefs covering various topics that has potentials to contribute to a low carbon society. A number of observations and suggestions were made with regards to the selection of topics, emphasis on solution and knowledge accumulation, and on elements of south-south-north cooperation. For future APN-LoCARNet cooperation, focus could be given to fostering the research community in Asia via capacity building workshops and introducing Asia’s efforts in low carbon development in global forums on
low carbon development, including ESCAP, IPCC, UNFCCC, G20, ASEAN+3, among others, with potential funding from GCF, CTCN, GEF, JICA, etc. With limited funding, research could be more focused and should be policy-oriented using an integrated approach. South-south-north cooperation should move beyond parallel work, and while policy briefs are well-aimed at policy makers, more targeted flagship outputs, such as a special issue of APN report, are necessary.

Global Change, Sustainable Development and Combating Poverty: Areas for Sida/APN collaboration in Asia-Pacific?

Dr. Anna-Karin Norling
First Secretary, Research Advisor
Development Cooperation Section – Regional Asia
Embassy of Sweden, Thailand

The Swedish International Development Cooperation Agency (Sida) works to create opportunities for people living in poverty and under oppression to improve their living conditions. Guided by the strategy for research cooperation and research in development cooperation 2015–2021, Sida works to build capacity for research, primarily in low-income countries and regions, create new knowledge of relevance to low-income countries and regions and sustainable development, and promote research that can contribute to poverty reduction and sustainable development. To this end, it has established bilateral cooperation with country governments and regional and international organisations, by channeling funds to partners that organise open calls, capacity building, workshops, results dissemination, etc. In the Asia-Pacific region, Sida’s future work will focus on environment and climate, sustainable management of natural resources, disaster risk reduction, human rights and democracy, as well as gender issues. Sida’s current work seeks to develop networks in the thematic areas of environmental economics, small-scale farming systems, environmental sustainability and human rights, particularly in South Asia, Southeast Asia and the Mekong region.

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<thead>
<tr>
<th>Presenter</th>
<th>Organisation</th>
<th>Poster Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Li Shuangquan</td>
<td>Institute of Geographical Sciences, Henan Academy of Sciences</td>
<td>Dynamic Process of Aeolian Fluvial Interactions on Sand Dunes in the Middle Reach of Baerdong River in Ten watershed, Inner Mongolia of China</td>
</tr>
<tr>
<td>Dr. Zhongling Yang</td>
<td>Henan University</td>
<td>Nighttime warming enhances drought resistance of plant communities in a temperate steppe</td>
</tr>
<tr>
<td>Dr. Wang Ting</td>
<td>College of Forestry, Henan Agricultural University</td>
<td>Spatial pattern of Pinus tabulaeformis forest and its relation to global warming in the southern Funiu Mountains</td>
</tr>
<tr>
<td>Ms. Liu Hongzheng</td>
<td>Yellow River Engineering Consulting Co, Ltd.</td>
<td>Yellow River runoff and flood variations, dualistic water cycle, precipitation and contribution rate</td>
</tr>
<tr>
<td>Dr. Zhao Mahuan</td>
<td>Yellow River Engineering Consulting Co, Ltd.</td>
<td>Cascade reservoirs Operation for Drought in the main stream of Yellow River</td>
</tr>
<tr>
<td>Mr. Wei Yiming</td>
<td>iTwater Engineering</td>
<td>“Simulation 3+” Control System</td>
</tr>
<tr>
<td>Dr. Liu Yinhan</td>
<td>College of Life Sciences, Henan University</td>
<td>Mowing affects interactions between nitrogen and phosphorus addition on soil respiration in a temperate steppe</td>
</tr>
<tr>
<td>Dr. Song Hongquan</td>
<td>Henan University</td>
<td>Spring and temporal variations of spring dust emissions in northern China over the last three decades</td>
</tr>
<tr>
<td>Dr. Wang Ke</td>
<td>College of Chemistry and Molecular Engineering, Zhengzhou University</td>
<td>Evaluation of Energy Efficient Technologies of Coal fired Power Sector in Henan Province, China: Consideration of Environmental Benefits</td>
</tr>
<tr>
<td>Mr. Song Jian</td>
<td>College of Life Sciences, Henan University</td>
<td>A synthesis of global change manipulative experiments: What have we learned?</td>
</tr>
<tr>
<td>Dr. Hu Chanjuan</td>
<td>Institute of Geographical Science, Henan Academy of Sciences</td>
<td>Soil Carbon Stock and Flux in Plantation Forest and Grassland Ecosystems in Loess Plateau, China</td>
</tr>
<tr>
<td>Dr. Lu Heli</td>
<td>Henan University</td>
<td>A Spatially Explicit Modeling Framework of Cost Benefit and Carbon Emissions from Land Use Coverage Changes for Implementing REDD+ in Southeast Asia</td>
</tr>
<tr>
<td>Dr. Shuhong Zhang</td>
<td>Shangqiu Normal University</td>
<td>Preliminary research on dominant bacterial population affected by the retreat of Laohugou Glacier No.12 in Qilian Mountain</td>
</tr>
<tr>
<td>Dr. Jiang Guiying</td>
<td>Henan Agricultural University</td>
<td>Soil organic carbon sequestration in upland soils of northern China under variable fertilizer management and climate change scenarios</td>
</tr>
<tr>
<td>Ms. Song Min</td>
<td>College of Life Sciences, Global Change Ecology Lab, Henan University</td>
<td>Effects of carbon input pathway changes on soil nematode abundance and community composition</td>
</tr>
</tbody>
</table>
Welcome and Opening Remarks

Welcome Remarks by Dr. Konstantin Lutaenko, nFP Alternate for Russian Federation

Good morning, ladies and gentlemen.

On behalf of the APN Steering Committee, I would like to extend my warm welcome to all distinguished delegates of the 21st APN IGM/SPG Meeting, invited guests, observers, and the APN Secretariat. First of all, I would like to thank and express my deep gratitude to the Chinese Government and the Ministry of Science and Technology of China, our host. This is the second time for APN to hold the IGM/SPG Meeting in China (first time in 1998, in Beijing), and I know that our host and the Secretariat worked hard to organise the meeting here, in the beautiful city of Zhengzhou.

The fiscal year 2015 has been an important year for APN as the network celebrated its 20th anniversary after two decades of successful operation and this year, since the last IGM in Nepal, has seen significant accomplishments. Over the last year, APN funded nearly 50 projects under two core programmes, CRRP and CAPaBLE, and two frameworks, LCI (Low Carbon Initiative) and CAF (Climate Adaptation Framework). These activities focused on knowledge sharing, capacity development and science-policy linkages. APN activities also included conducting Science-Policy Dialogues and Proposal Development Writing Workshops, Sub-Regional Committee Meetings, participation of APN members in various events. The IGM/SPG Meeting is invited to review all these activities.

I wish all the participants of the meeting good health, a pleasant stay in Zhengzhou and fruitful work during the IGM/SPG. We need your expertise and experience to improve and advance APN works and activities. Once again, I extend my appreciation to our host and local organisers for giving us an opportunity to meet in China. Thank you.

Welcome Remarks by Mr. Hiroshi Tsujihara, Director, APN Secretariat

H.E. Dr. Zhang Zhenyu, Director General, Henan Science and Technology Department; Distinguished Mr. Jiutian Zhang, APN national Focal Point Alternate for China; Distinguished national Focal Points, members of the Scientific Planning Group and Capacity Development Committee of APN; Invited Experts, ladies and gentlemen, good morning.

At the opening of APN’s 21st Joint Inter-Governmental Meeting and Scientific Planning Group Meeting, I would like to express my special appreciation to all participants who have travelled far and wide to visit Zhengzhou.

I also would like to express my sincerest gratitude to the Ministry of Science and Technology for hosting this important meeting. This is the first Joint IGM and SPG meeting here in China. I would like to congratulate the host for the successful opening of this monumental meeting.

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

Ladies and gentlemen, this year APN is entering its 3rd decade of operation and I am delighted to say that APN is growing from strength to strength as an important regional network for global environmental change with support from all stakeholders. I hope that APN will be able to carry on with its increasingly important role in transforming global change and sustainability science into solution-oriented knowledge that informs decision- and policy-making.

I am very happy to note that APN members’ sense of ownership of the network has grown. The close communications between the nFPs and the SPG Members through the formation of Sub-Regional Cooperation Committees has helped achieve an encouraging trend. The SRCs have provided a unique platform for countries at the sub-regional level to address common problems.

Ladies and Gentlemen, the Asia-Pacific region is home to more than half of the world’s population that challenges the sustainability of natural resources, communities and their cultural heritage. Achieving sustainable development of this region is further complicated by the impacts of natural and anthropogenic changes in the Earth’s bio-geophysical system.

According to the 5th IPCC Assessment Report, warming of the climate system is unequivocal. In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans.

The fifth assessment report has also pointed out that we will witness severe impact of climate change on food production, water resources, ecosystems and biodiversity, human health and infrastructures. It is also highlighted in AR5 that substantial emissions reductions over the next few decades can reduce climate risks in the 21st century and beyond and contribute to climate-resilient pathways for sustainable development.

Based on these scientific findings, at COP 21 held in Paris last year, the world reached a historic agreement to combat climate change and to accelerate and intensify actions and investments needed for a sustainable low carbon future.

In this regard, APN must work harder to support member countries facing such serious environmental problems and future challenges for sustainable development. APN has been actively engaging in regional research and capacity development activities thorough competitive funding programmes—CRPP and CAPABLE in the last 20 year. However, for this purpose, I believe APN has to scale up its activities with ownerships and cooperation of every member countries, international agencies and research institutions based in developed and developing countries. I believe such partnerships will accelerate to provide wide opportunity for researchers in the Asia-Pacific region and enable better policy making with science.

Before closing, I would like to thank the Department of Science and Technology, Henan Province for their support in organising this meeting. Finally, 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.

**Opening Address by the Guest of Honour:**

**Dr. Zhang Zhenyu, Director General, Department of Science and Technology, Henan Province**

Distinguished guests, ladies and gentlemen,

Good morning. First of all, on behalf of Henan Science and Technology Department, I would like to convey warm congratulations to the opening of this meeting, and extend warm welcome to all the distinguished guests.

Henan Province is located in the central and eastern part of China, middle and lower reaches of the Yellow River, since most part of the province lies to the south of the Yellow River, hence its name. Being situated in the transitional area between Warm Temperate Zone and Subtropical Zone, Henan is the boundary of the two different climates of south and north China with 4 distinct seasons and diverse characteristics. The province goes across 4 river basins like Changjiang River, Huaihe River, Yellow River and Haihe River. As the important birthplace of Chinese nation and Huaxia civilization, Henan Province boasts long history and is the key joint of “one belt one road”. In the long history rivers, more than 20 dynasties built its capital or moved its capital here successively. Therefore, Henan Province e political, economic and cultural center of the nation for a long time. Henan province occupies 4 among the 8 ancient capitals in China, which are Luoyang, the ancient capitals of 9 dynasties, Kaifeng, the ancient capitals of 7 dynasties, Anyang , the ancient capitals of Yinshang Dynasty and Zhengzhou, the capital of Shang Dynasty. With splendid culture, Henan is a propitious place...
and many historical eminent persons were born here, it is also the origin of Chinese family names; with abundant natural resources, it is the national major farm product producing area and mineral resource province. Being the most populous province in China, Henan province is rich in labour resources and has huge consumer market. Besides, it is also the important transportation hub of the nation and material distribution center.

With the implementation of the 3 State strategies of “Building Food Core Area”, “Central Plain Economic Area” and “Zhengzhou Air Port Economic Comprehensive Experimental Zone”, Henan has witnessed prosperous economic development and remarkable increase of economic strength. At present, Henan has become an economy-prosperous province, an emerging industrial province as well as a modern agricultural province.

In recent years, by implementing an all-round strategy of innovation-driven development and integrating global network for innovation, Henan has expanded the scientific cooperation with the countries along silk road economic belt and maritime silk route, established a batch of international scientific cooperation bases, carried out a number of scientific cooperation projects and participated in some international key cooperation projects. The scientific innovation in a few fields is taking lead in the state and the overall innovation level has realised spanning development.

As the main theme of the world attention in the 21st century, the climate change has great impact on the social and economic development. Henan Science and Technology Department attaches much importance to and actively organises to conduct research on it. Achievements have been made on the studies of the climate change and the Yellow River utilisation and management, climate change and key crop growth. The comprehensive utilisation and management of the Yellow River and continuous growth of key crops have been realised.

APN is an influential scientific organisation in the field of climate change research in Asian-Pacific region, which has made significant achievements in promoting and strengthening the scientific study on global change in Asia Pacific region. It is our great honor to host the 21st APN Inter-governmental Meeting and Scientific Planning Group Meeting here in Henan. We will make great efforts to provide services for this meeting. At the same time, we will take this opportunity to strengthen our cooperation with APN member countries and enhance innovation capability of the province.

Finally, I sincerely wish the meeting a great success; and all the guests a pleasant stay in Henan and good health. Thank you very much.
Section 3

Main Item Papers of the 21st IGM/SPG Meeting
DRAFT AGENDA
APN Joint 21st Inter-Governmental Meeting (IGM)/Scientific Planning Group (SPG) Meeting
Zhengzhou, China 20–21 April 2016

Day One
Wednesday 20 April 2016

08:30–09:00  Registration of members and observers

09:00–09:30  Welcome Remarks
Dr. Zhang Jiutian, Director, Division of Global Environmental Affairs, The Administrative Centre for China’s Agenda 21, Ministry of Science and Technology of China
Dr. Konstantin Lutaenko, Head, Department of International Cooperation, A.V. Zhirmunsky Institute of Marine Biology, Far East Branch of the Russian Academy of Sciences, Russia
Mr. Hiroshi Tsujihara, Director, APN Secretariat

09:30–09:40  Opening Address by the Guest of Honour
Dr. Zhang Zhenyu, Director General, Department of Science and Technology, Henan Province

09:40–10:00  Group Photograph
All participants have a group photograph taken.

10:00–10:20  TEA/COFFEE BREAK (20 min)

10:20–10:30  Election of Chair and Vice-Chair
IGM delegates will elect a Chair and a Vice-Chair for the 21st IGM/SPG Meeting.
(SPG members, experts and guests observe this session)
Facilitator: Mr. Hiroshi Tsujihara, Secretariat Director

Item 1  Adoption of the Draft Agenda & Any Other Business
10:30–10:50  The Chair will seek adoption of the agenda. Additional agenda items may be suggested.
IGM Chair

Item 2  Reports from Steering Committee (SC) & Secretariat
10:50–11:40  
Item 2.1  Report on APN Activities in FY2015, especially those taken to follow up on Action Points from the 20th IGM.

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09:30–09:40  Opening Address by the Guest of Honour
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09:40–10:00  Group Photograph
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**Item 1**

**Day One**

**08:30-09:00**

Registration of members and observers

**09:00-09:30**

*IGM/SPG*

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Mr. Hiroshi Tsujihara, Director, APN Secretariat

**09:30-09:40**

*IGM/SPG*

Opening Address by the Guest of Honour

Dr. Zhang Zhenyu, Director General, Department of Science and Technology, Henan Province

**09:40-10:00**

Group Photograph

All participants have a group photograph taken.

**10:00-10:20**

**TEA/COFFEE BREAK (20 min)**

**10:20-10:30**

*IGM*

Election of Chair and Vice-Chair

IGM delegates will elect a Chair and a Vice-Chair for the 21st IGM/SPG Meeting.

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**Item 1**

**10:30-10:50**

*IGM/SPG*

Adoption of the Draft Agenda & Any Other Business

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

**10:50-11:40**

**Reports from Steering Committee (SC) & Secretariat**

**Item 2.1**

*25 min*  

*IGM/SPG*

Report on APN Activities in FY2015, especially those taken to follow up on Action Points from the 20th IGM.

Presenter: Dr. Konstantin Lutaenko

**Item 2**

**11:40-12:00**

*IGM/SPG*

APN Framework Document (PART I)

Amendments to the Framework Document, proposed by the Framework Document Task Team with input from member countries and SC, will be presented. Members may work with the Task Team to finalise the draft for approval on Day 2 under Item 7.

Presenter: Dr. Subramaniam Moten, Task Team Member

**12:00-13:00**

*LUNCH (60 min)*

**Item 3**

**13:00-14:30**

*SRCs*

Sub-Regional 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.

*Chairs and Rapporteurs to be assigned among the SRC Members*

**14:30-14:50**

**TEA/COFFEE BREAK (20 min)**

**Interactive Session I**

**14:50-16:20**

*Study on Climate Change Adaptation Strategy of Science and Technology Development in China*

Moderators: Dr. Linda Anne Stevenson, Dr. Yu Wang

**Interactive Session II**

**16:20-18:10**

**(1) Presentations from Henan Scientists**

a) Climate change and evolution of water resources in Yellow River Basin (Shaoming Peng)

b) Characterization of air pollution and control measures of Central Plains Economic Zone (Ruiqin Zhang)

c) Discussion, Question and Answer

**(2) APN-Henan Networking Session & L. B. Brown Memorial Photo Competition**

**19:00-21:00**

*Cultural Performance and Reception Dinner*  
*hosted by China*

--------------- END OF DAY ONE ------------------------------
Day Two
Thursday 21 April 2016

**Item 5**

08:30-09:10 (IGM/SPG)

Activities for Fiscal Year 2016
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.

**Item 5.1** Core Programmes and Science Frameworks
Presenter: Dr. Linda Anne Stevenson, Secretariat

**Item 5.2** Scoping Workshop on Technology Transfer
Presenter: Dr. Linda Anne Stevenson, Secretariat

**Item 5.3** Hyogo Activities (EMECS and Satoyama)
Presenter: Dr. Linda Anne Stevenson, Secretariat

**Item 5.4** Science Policy: SBSTA/COP, IPBES, and Policy activities
Presenter: Dr. Linda Anne Stevenson, Secretariat

**Item 5.5** Networking with LoCARNet/LCS-RNet
Presenter: Dr. Linda Anne Stevenson, Secretariat

**Item 5.6** Partnership Development /Conferences
Presenter: Dr. Linda Anne Stevenson

**Item 6**

09:10-10:00 (IGM/SPG)

Proposed Work Programme, Budget and Risk Management Strategies for Fiscal Year 2016
Presenter: Mr. Yukihiro Imanari, Secretariat

**Item 7**

10:00-10:30 (IGM)

APN Framework Document
The IGM will be asked to consider and adopt the final draft amendments to the Framework Document presented by the Task Team.
Presenter: Dr. Subramaniam Moten

10:30–10:50 TEA/COFFEE BREAK (20 min)

**Item 8**

10:50-11:30 (IGM/SPG)

Sub-Regional Committee Reports and Discussions
Each sub-regional Chair will provide a report based on their discussions in the parallel sessions held on Day 1.

**Item 9**

11:30-12:00 (IGM/SPG)

SPG Report: Topics of Interest and CRRP
Presenter: SPG Co-Chair

**Item 10**

12:00-12:30 (IGM/SPG)

CDC Report: Topics of Interest and CAPaBLE
Presenter: CDC Chair

12:30-13:30 LUNCH (60 min)

**Item 11**

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

Strategic Partnerships with APN
Interactive presentation and discussion session with the international community on strategic partnerships into the future.

Moderators: Dr. Luis Tupas, nFP for USA

**Item 12**

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

Mitra Awardee Presentation & Announcement of the L. B. Brown Memorial Award

15:00–15:20 TEA/COFFEE BREAK (20 min)

**Item 13**

15:20-16:00 (IGM/SPG)

APN Future Development
Presenter: Mr. Yukihiro Imanari, Secretariat

**Item 14**

16:00-16:30 (IGM/SPG)

Confirmation of Steering Committee Procedures and Members for 2016 and Beyond
Presenter: Mr. Yukihiro Imanari, Secretariat

**Item 15**

16:30-16:40 (IGM)

Hosts for 22nd and 23rd IGM/SPG Meetings
Presenter: Mr. Yukihiro Imanari, Secretariat

16:40-17:20 (IGM)

21st IGM Action Points: Budget (Part I) and Others (Part II)

17:20-17:40 (IGM/SPG)

AOB, Final Remarks, Closing and Housekeeping

18:00–21:00 Dinner hosted by APN

---------------------------- END OF 21st IGM/SPG Meeting ----------------------------
Item 9  
11:30-12:00  
SPG Report: Topics of Interest and CRRP  
Recommendations for Funding  
(IGM/SPG)  
Presenter: SPG Co-Chair

Item 10  
12:00-12:30  
CDC Report: Topics of Interest and CAPaBLE  
Recommendations for Funding  
(IGM/SPG)  
Presenter: CDC Chair

12:30-13:30  
LUNCH (60 min)

Interactive Session III

13:30-14:30  
Strategic Partnerships with APN  
Interactive presentation and discussion session with the international community on strategic partnerships into the future.  
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15:00–15:20  
TEA/COFFEE BREAK (20 min)

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(IGM/SPG)  
Presenter: Mr. Yukihiro Imanari, Secretariat

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(IGM)  
Presenter: Mr. Yukihiro Imanari, Secretariat

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Hosts for 22nd and 23rd IGM/SPG Meetings  
(IGM)  
Presenter: Mr. Yukihiro Imanari, Secretariat

Item 14  
16:40-17:20  
21st IGM Action Points:  
Budget (Part I) and Others (Part II)  
(IGM)

Item 15  
17:20-17:40  
AOB, Final Remarks, Closing and Housekeeping  
(IGM/SPG)

18:00–21:00  
Dinner hosted by APN

---------------------------- END OF 21st IGM/SPG Meeting ----------------------------
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<th>ACRONYM</th>
<th>FULL NAME</th>
<th>DESCRIPTION</th>
<th>More Information (URL)</th>
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<tbody>
<tr>
<td><strong>3Rs</strong></td>
<td>Reduce, Reuse and Recycle</td>
<td>An acronym for &quot;Reduce, Reuse, and Recycle&quot; widely used by governments, organisations and companies to promote a society that pursues environmental protection, resource efficiency as well as economic growth.</td>
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<tr>
<td><strong>4SP</strong></td>
<td>Fourth Strategic Phase</td>
<td>The fourth 5-year strategic phase of APN will start in April 2015.</td>
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<tr>
<td><strong>ARCP</strong></td>
<td>Annual Regional Call for Research Proposals</td>
<td>The ARCP is a core programme of the APN that supports regional-based global change research. It was renamed as CRRP (Collaborative Regional Research Programme) at the 20th IGM (2015).</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/arcp">www.apn-gcr.org/programmes-and-activities/arcp</a></td>
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<tr>
<td><strong>APCTT</strong></td>
<td>Asian and Pacific Centre for Transfer of Technology</td>
<td>A United Nations regional institution under the Economic and Social Commission for Asia and the Pacific (ESCAP) that promotes transfer of technology to and from small- and medium-scale enterprises (SMEs) in Asia and the Pacific.</td>
<td><a href="http://www.apctt.org">www.apctt.org</a></td>
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<td><strong>B&amp;ES</strong></td>
<td>Biodiversity and Ecosystem Services</td>
<td>B&amp;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&amp;ES through the launch of its new Framework in 2013.</td>
<td><a href="http://www.apn-gcr.org/bes">www.apn-gcr.org/bes</a></td>
</tr>
<tr>
<td><strong>CAF</strong></td>
<td>Climate Adaptation Framework</td>
<td>The CAF is a new framework, launched in 2013, to support activities related to climate change adaptation, disaster risk reduction and loss &amp; damage.</td>
<td><a href="http://www.apn-gcr.org/caf">www.apn-gcr.org/caf</a></td>
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<tr>
<td><strong>CANSa</strong></td>
<td>Climate Action Network South Asia</td>
<td>A network of Civil Society Organisations and NGOs in South Asia, established to support and empower civil society organisations to influence the design and development of an effective global strategy to reduce greenhouse gas emissions and ensure its implementation at international, national and local levels in the promotion of equity and sustainable development.</td>
<td><a href="http://www.cansouthasia.net">www.cansouthasia.net</a></td>
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<tr>
<td><strong>CAPaBLE</strong></td>
<td>Scientific Capacity Development</td>
<td>CAPaBLE is a core programme of the APN that supports capacity building activities in the Asia-Pacific region.</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/capable">www.apn-gcr.org/programmes-and-activities/capable</a></td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
<td>The Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has 3 main objectives: 1) the conservation of biological diversity; 2) the sustainable use of the components of biological diversity; and 3) the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.</td>
<td><a href="https://www.cbd.int">https://www.cbd.int</a></td>
</tr>
<tr>
<td>CDC</td>
<td>Capacity Development Committee</td>
<td>The CDC reviews and recommends capacity building activities for funding support.</td>
<td><a href="http://www.apn-gcr.org/about-apn/apn-structure/cdc-capacity-development-committee/">www.apn-gcr.org/about-apn/apn-structure/cdc-capacity-development-committee/</a></td>
</tr>
<tr>
<td>CDKN</td>
<td>Climate and Development Knowledge Network</td>
<td>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.</td>
<td><a href="http://www.cdkn.org">www.cdkn.org</a></td>
</tr>
<tr>
<td>CORDEX</td>
<td>Coordinated Regional Climate Downscaling Experiment</td>
<td>CORDEX is a WCRP project that provides global coordination of Regional Climate Downscaling for improved regional climate change adaptation and impact assessment.</td>
<td>wcrp-cordex.ipsl.jussieu.fr</td>
</tr>
<tr>
<td>CRRP</td>
<td>Collaborative Regional Research Programme</td>
<td>The Collaborative Regional Research Programme (CRRP), formerly known as Annual Regional Call for Research Proposals (ARCP), is one of the scientific pillars of the APN that supports regional-based global change research.</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/arcp">www.apn-gcr.org/programmes-and-activities/arcp</a></td>
</tr>
<tr>
<td>CTCN</td>
<td>Climate Technology Centre and Network</td>
<td>The CTCN is the operational arm of the UNFCCC Technology Mechanism, hosted by the UN Environment Programme (UNEP) and the UN Industrial Development Organization (UNIDO). The Centre promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries.</td>
<td><a href="https://www.ctc-n.org">https://www.ctc-n.org</a></td>
</tr>
<tr>
<td>EBLU</td>
<td>Ecosystem, Biodiversity and Land Use</td>
<td>One of the research theme under APN's Scientific Agenda (Reference: APN 2010-2015 Strategic Plan)</td>
<td><a href="http://www.apn-gcr.org/resources/items/show/1855">www.apn-gcr.org/resources/items/show/1855</a></td>
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<tr>
<td>EMECS</td>
<td>International Center for Environmental Management of Enclosed Coastal Seas</td>
<td>The International EMECS Center is an organisation based in Kobe, Japan, for promoting international exchanges on not only coastal but also catchment areas of the enclosed coastal seas in a wide range of fields including research, policy, civic action, education among others.</td>
<td><a href="http://www.emecs.or.jp">www.emecs.or.jp</a></td>
</tr>
<tr>
<td>FE</td>
<td>Future Earth</td>
<td>Future Earth is a research initiative on global environmental change and global sustainability.</td>
<td><a href="http://www.futureearth.org">www.futureearth.org</a></td>
</tr>
<tr>
<td>GEC</td>
<td>Global Environmental Change</td>
<td>Global Environmental Change (GEC) includes changes in the physical and biogeochemical environment, either caused naturally or influenced by human.</td>
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<tr>
<td>IAI</td>
<td>Inter-American Institute for Global Change Research</td>
<td>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.</td>
<td><a href="http://www.iai.int">www.iai.int</a></td>
</tr>
<tr>
<td>ICCCAD</td>
<td>International Centre for Climate Change and Development</td>
<td>The Centre is based in Dhaka, Bangladesh with a focus on 1) training future and current leaders on climate change and development, 2) conducting research to generate peer-reviewed publications on climate change and development, 3) building capacity, specifically for LDCs and 4) building and leading a network of partners, mainly consisting of South Asian based institutes.</td>
<td><a href="http://www.icccad.net">www.icccad.net</a></td>
</tr>
<tr>
<td>ICIMOD</td>
<td>International Centre for Integrated Mountain Development</td>
<td>The International Centre for Integrated Mountain Development (ICIMOD) is a regional intergovernmental learning and knowledge sharing centre serving the eight regional member countries of the Hindu Kush Himalayas.</td>
<td><a href="http://www.icimod.org">www.icimod.org</a></td>
</tr>
<tr>
<td>IIED</td>
<td>International Institute for Environment and Development</td>
<td>Founded in 1971, IIED builds bridges between policy and practice, rich and poor communities, the government and private sector, and across diverse interest groups. It contributes to many international policy processes and frameworks.</td>
<td><a href="http://www.iied.org">www.iied.org</a></td>
</tr>
<tr>
<td>IGES</td>
<td>Institute for Global Environmental Strategies</td>
<td>IGES is a public interest organisation headquartered in Hayama, Japan, that conducts innovative policy development and strategic research for environmental sustainability.</td>
<td><a href="http://www.iges.or.jp">www.iges.or.jp</a></td>
</tr>
<tr>
<td>IGM</td>
<td>Inter-Governmental Meeting</td>
<td>The IGM is APN’s decision-making body and approves APN’s strategies and activities, including the annual work programme and budget.</td>
<td><a href="http://www.apn-gcr.org/about-apn/apn-structure/igm-members/">www.apn-gcr.org/about-apn/apn-structure/igm-members/</a></td>
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<tr>
<td>IPBES</td>
<td>Intergovernmental Platform on Biodiversity and Ecosystem Services</td>
<td>IPBES is an intergovernmental body established in April 2012 by 94 governments to strengthen the science-policy interface for biodiversity and ecosystem services.</td>
<td><a href="http://www.ipbes.net">www.ipbes.net</a></td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
<td>The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change, established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.</td>
<td><a href="http://www.ipcc.ch">www.ipcc.ch</a></td>
</tr>
<tr>
<td>IRRI</td>
<td>International Rice Research Institute</td>
<td>The International Rice Research Institute (IRRI) is a research organisation dedicated to reducing poverty and hunger through rice science; improving the health and welfare of rice farmers and consumers; and protecting the rice-growing environment for future generations.</td>
<td>irri.org</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
<td>The International Union for Conservation of Nature and Natural Resources is an international organization working in the field of nature conservation and sustainable use of natural resources.</td>
<td><a href="http://www.iucn.org">www.iucn.org</a></td>
</tr>
<tr>
<td>IWMI</td>
<td>International Water Management Institute</td>
<td>The International Water Management Institute (IWMI) is a non-profit, scientific research organisation focusing on the sustainable use of water and land resources in developing countries.</td>
<td><a href="http://www.iwmi.cgiar.org">www.iwmi.cgiar.org</a></td>
</tr>
<tr>
<td>LCI</td>
<td>Low Carbon Initiatives</td>
<td>LCI is one of APN's Frameworks launched in 2012 and supported by earmarked contribution by the Ministry of Environment, Japan</td>
<td><a href="http://www.apn-gcr.org/lci">www.apn-gcr.org/lci</a></td>
</tr>
<tr>
<td>LoCARNet</td>
<td>Low Carbon Asia Research Network</td>
<td>LoCARNet is a network of researchers that facilitates the formulation and implementation of science-based policies for low-carbon development in the Asian region, aiming at facilitating science-based policies in order to realise a sustainable future based on a stabilised climate.</td>
<td>lcs-rnet.org</td>
</tr>
<tr>
<td>MOEJ</td>
<td>Ministry of the Environment, Japan</td>
<td>MOEJ is responsible for environmental conservation, pollution control, and nature conservation.</td>
<td><a href="http://www.env.go.jp">www.env.go.jp</a></td>
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<tr>
<td>nFP</td>
<td>National Focal Point</td>
<td>An nFP is a member of the Inter-Governmental Meeting, appointed by respective APN member countries.</td>
<td><a href="http://www.apn-gcr.org/about-apn/apn-structure/igm-members/">www.apn-gcr.org/about-apn/apn-structure/igm-members/</a></td>
</tr>
<tr>
<td>NIES</td>
<td>National Institute for Environmental Studies (JAPAN)</td>
<td>The National Institute for Environmental Studies was established in 1974 as a focal point for environmental research in Japan. In 2001 it became an Independent Administrative Institution.</td>
<td><a href="http://www.nies.go.jp">www.nies.go.jp</a></td>
</tr>
<tr>
<td>NSF</td>
<td>National Science Foundation</td>
<td>NSF is a United States agency that supports research and education in all the non-medical fields of science and engineering.</td>
<td><a href="http://www.nsf.gov">www.nsf.gov</a></td>
</tr>
<tr>
<td>PARR</td>
<td>Pan-Asia Risk Reduction fellowship programme</td>
<td>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.</td>
<td><a href="http://www.start.org/download/2013/ar-research-for-action.pdf">www.start.org/download/2013/ar-research-for-action.pdf</a></td>
</tr>
<tr>
<td>PDTW</td>
<td>Proposal Development Training Workshop</td>
<td>A workshop series offered by the APN to enhance research proposal development capacity of young scientists in the Asia-Pacific region.</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/pdtw/">www.apn-gcr.org/programmes-and-activities/pdtw/</a></td>
</tr>
<tr>
<td>RFCC</td>
<td>Regional Forum on Climate Change</td>
<td>A regional forum organised by the Asian Institute of Technology in collaboration with the French Ministry of Foreign Affairs and International Development, ASEAN Secretary General, and the European Union, seeking to propose interventions that would influence climate policy in the region, and inspire ASEAN position for climate change negotiations at the global scale.</td>
<td><a href="http://www.rfcc2015.ait.asia">www.rfcc2015.ait.asia</a></td>
</tr>
<tr>
<td>RRR</td>
<td>Risk Reduction and Resilience</td>
<td>A new thematic area under APN’s Research Agenda as set out in its Fourth Strategic Plan. Other areas are: 1) Climate change and climate variability, 2) Biodiversity and Ecosystems, 3) Changes in the atmospheric, terrestrial and marine domains, and 4) Resource utilisation and pathways for sustainable development.</td>
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<tr>
<td>RUSD</td>
<td>Resource Utilisation and Pathways to Sustainable Development</td>
<td>One of the research theme under APN’s Scientific Agenda (Reference: APN 2010-2015 Strategic Plan).</td>
<td><a href="http://www.apn-gcr.org/resources/items/show/1855">www.apn-gcr.org/resources/items/show/1855</a></td>
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<tr>
<td>SA</td>
<td>South Asia</td>
<td>APN’s SA membership includes Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka.</td>
<td><a href="www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/">www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/</a></td>
</tr>
<tr>
<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
<td>An association of South Asian nations, established to promote and strengthen collaboration in the economic, social, cultural, technical and scientific fields.</td>
<td><a href="www.saarc-sec.org">www.saarc-sec.org</a></td>
</tr>
<tr>
<td>SACEP</td>
<td>South Asia Co-operative Environment Programme</td>
<td>South Asia Co-operative Environment Programme (SACEP) is an intergovernmental organisation, established in 1982 by the governments of South Asia to promote and support protection, management and enhancement of the environment in the region.</td>
<td><a href="www.sacep.org">www.sacep.org</a></td>
</tr>
<tr>
<td>SBSTA</td>
<td>Subsidiary Body for Scientific and Technological Advice</td>
<td>SBSTA is an organ of UNFCCC mandated to provide the Conference of Parties with advice on scientific, technological and methodological matters.</td>
<td><a href="unfccc.int/bodies/body/6399.php">unfccc.int/bodies/body/6399.php</a></td>
</tr>
<tr>
<td>SC</td>
<td>Steering Committee</td>
<td>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.</td>
<td><a href="www.apn-gcr.org/about-apn/apn-structure/sc-steering-committee/">www.apn-gcr.org/about-apn/apn-structure/sc-steering-committee/</a></td>
</tr>
<tr>
<td>SEA</td>
<td>Southeast Asia</td>
<td>APN’s SEA membership includes Cambodia, Indonesia, Lao PDR, Malaysia, Thailand, Philippines and Viet Nam.</td>
<td><a href="www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/">www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/</a></td>
</tr>
<tr>
<td>SHD</td>
<td>Stakeholder Days (IPBES)</td>
<td>An event taken place prior to IBPES plenary sessions to engage an open-ended network of stakeholders in strengthening the science-policy interface of IPBES.</td>
<td><a href="www.ipbes.net/stakeholders">www.ipbes.net/stakeholders</a></td>
</tr>
<tr>
<td>SPD</td>
<td>Science-Policy Dialogue</td>
<td>SPDs are a series of events organised by the APN in collaboration with regional partners to provide a forum for science-policy interaction regarding GC issues.</td>
<td><a href="www.apn-gcr.org/resources/items/show/1880">www.apn-gcr.org/resources/items/show/1880</a></td>
</tr>
<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
<td>The Swedish International Development Cooperation Agency is a government agency of the Swedish Ministry for Foreign Affairs. Sida is responsible for organisation of Sweden’s official development assistance to developing countries.</td>
<td><a href="www.sida.se">www.sida.se</a></td>
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<tr>
<td>SPG</td>
<td>Scientific Planning Group</td>
<td>The SPG reviews and recommends proposals received to the IGM for approval of funding, among other mandates.</td>
<td><a href="http://www.apn-gcr.org/about-apn/apn-structure/spg-scientific-planning-group/">www.apn-gcr.org/about-apn/apn-structure/spg-scientific-planning-group/</a></td>
</tr>
<tr>
<td>SPG-SC</td>
<td>SPG Sub-Committee</td>
<td>The SPG-SC is a sub-organ of the SPG, elected by SPG members.</td>
<td><a href="http://www.apn-gcr.org/about-apn/apn-structure/spg-sc-spg-sub-committee/">www.apn-gcr.org/about-apn/apn-structure/spg-sc-spg-sub-committee/</a></td>
</tr>
<tr>
<td>SRC/SRCom</td>
<td>Sub-Regional Committee</td>
<td>The SRCs discuss and identify issues and research/capacity development needs that are common to respective subregions.</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/">www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/</a></td>
</tr>
<tr>
<td>START</td>
<td>SysTem for Analysis Research and Training</td>
<td>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.</td>
<td><a href="http://www.start.org">www.start.org</a></td>
</tr>
<tr>
<td>TEA</td>
<td>Temperate East Asia</td>
<td>APN’s TEA membership includes China, Japan, Mongolia, Republic of Korea and Russian Federation.</td>
<td><a href="http://www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/">www.apn-gcr.org/programmes-and-activities/sub-regional-cooperation/</a></td>
</tr>
<tr>
<td>TT:CLEAR</td>
<td>Technology Information Clearing House (UNFCCC)</td>
<td>TT:CLEAR, the UNFCCC’s Technology Information Clearinghouse, aims to enhance technology cooperation for action on climate change.</td>
<td>unfcc.int/ttclear</td>
</tr>
<tr>
<td>UNCRD</td>
<td>United Nations Centre for Regional Development</td>
<td>UNCRD was established in 1971 based on an agreement between the Government of Japan and the United Nations. UNCRD promotes sustainable regional development in developing countries.</td>
<td><a href="http://www.uncrd.or.jp">www.uncrd.or.jp</a></td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
<td>UNEP is a UN organisation mandated to be the leading global environmental authority that sets the global environmental agenda, that promotes the coherent implementation of the environmental dimensions of sustainable development within the United Nations system and that serves as an authoritative advocate for the global environment.</td>
<td><a href="http://www.unep.org">www.unep.org</a></td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
<td>The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro from 3 to 14 June 1992.</td>
<td>newsroom.unfccc.int</td>
</tr>
<tr>
<td>USAID</td>
<td>US Agency for International Development</td>
<td>USAID is the lead U.S. Government agency that works to end extreme global poverty and enable resilient, democratic societies to realise their potential.</td>
<td><a href="http://www.usaid.gov">www.usaid.gov</a></td>
</tr>
<tr>
<td>USGCRP</td>
<td>United States Global Change Research Program</td>
<td>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.</td>
<td><a href="http://www.globalchange.gov">www.globalchange.gov</a></td>
</tr>
<tr>
<td>WCRP</td>
<td>World Climate Research Programme</td>
<td>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.</td>
<td><a href="http://www.wcrp-climate.org">www.wcrp-climate.org</a></td>
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</tbody>
</table>
**Item 2: Steering Committee Report— 2015 APN Activities and Action Points**

This paper summarizes the work undertaken and the action points addressed since the 20th IGM/SPG Meeting held in March 2015 in Kathmandu, Nepal.

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1. **Project Management**

The Secretariat is supporting and managing the following projects in FY 2015:

**Core Programmes:**
- ARCP—Annual Regional Call for Research Proposals: 13 projects (all continuing multi-year projects);
- CAPaBLE—Scientific Capacity Development Programme: 9 projects (8 new and 1 continuing).

**Frameworks and focused activities:**
- LCI—Low Carbon Initiatives: 3 projects (all continuing projects);
- CAF—Climate Adaptation Framework: 23 projects (12 are continuing multi-year projects focused on Loss and Damage and 11 new projects).

Secretariat also managed several projects approved under previous fiscal years, which are not yet closed.

2. **Annual Calls for Proposals**

The 2015 APN call for proposals was launched on 16 June 2015, accepting proposals under Collaborative Regional Research Programme (CRRP) and CAPaBLE Programme. The Secretariat received 88 summary proposals under the CRRP and 59 summary proposals under CAPaBLE Programme, which were reviewed in an improved process in which all Scientific Planning Group (SPG) and Capacity Development Committee (CDC) members are involved in the Stage 1 review. This year’s submission of summary proposals has been the highest so far due to more efficient process by establishing an online submission system (https://www.apn-gcr.org/call/2015/).

After thorough review process, 17 full proposals under CRRP and 17 full proposals under CAPaBLE Programme are being considered for funding. Recommendation will be delivered under item 9 and 10, respectively, of the 21st IGM-SPG Meeting on Day 2.

This year, APN also implemented its “Advisory Service” as a year-round service. Refer to http://www.apn-gcr.org/programmes-and-activities/online-advisory-service/
3. **Frameworks**

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

**Biodiversity & Ecosystem Services (B&ES) Framework**
- 2 projects under the ARCP programme and three projects under CAPaBLE Programme were categorised under B&ES framework based on IPBES interested area.
- APN participated in the IPBES Capacity Building Forum in India, October 2015, and IPBES Stakeholder Forum and 4th Plenary in February 2016.

**Climate Adaptation Framework (CAF)**
- Member governments approved 11 new projects under CAF and project contracts have been drawn. All but two are multi-year projects. In addition, 12 continuing multi-year projects have also been granted funding continuation.

**Low Carbon Initiatives (LCI) Framework**
- Three projects (LCI2013-01CMY(R)-Vashist, LCI2013-02CMY(R)-Dhakal, and LCI2013-04CMY(R)-Macandog) are continuing its second year activities under the Low Carbon Initiative Framework. All these projects are expected to complete their activities by the end of September 2016.
- LCI projects’ synthesis activity that was approved at the 19th IGM has been completed and produced a policy brief series on low carbon development. Outcome of six policy briefs that shared by LCI project leaders were used to formulate the briefs.
- APN held a side event at the Regional Forum of Climate Change (RFCC) at AIT, Thailand, on 2 July 2015. Six APN project leaders (including LCI project leaders) provided evidences on how science have contributed to better understand issues of climate change and assist policy planning, implementation and evaluation.

4. **Sub-Regional Cooperation**

**South Asia**
The 7th South Asia Sub-Regional Committee Meeting was postponed due to prior commitment of the assigned host country (Pakistan) for a COP-related meeting. In addition, members were unavailable for other proposed dates.

**South East Asia**
SEA committee successfully conducted the 8th SEA-SRC meeting in Bogor, Indonesia on 7–8 September 2015.
Temperate East Asia
TEA Sub-Regional Science Policy Dialogue, TEA-Sub Regional Committee Meeting and annual proposal development training workshop was held in Ulaanbaatar, Mongolia from 5 to 7 November 2015.

5. Proposal Development Training Workshops (PDTWs)

The 2015 Annual PDTW was held in Ulaanbaatar, Mongolia with participation of 21 young scientists from the Temperate East Asia Region. The TEA members praised the outstanding performance of young scientists and requested the Secretariat to share this successful outcome with the IGM.

The following flowchart illustrates the outcome of PDTW that have been conducted since 2008.

With the above workshop, APN has expanded the PDTW alumni to 283 persons.

6. Hyogo Activities

APN-Hyogo International Symposium on Wild Boar Management in Urban Areas
1 August 2015, Hyogo, Japan

An international symposium on Wild Boar Management in Urban Areas was organised by APN and the Hyogo Prefectural Government at the Hyogo House, Kobe City, Hyogo Prefecture. The symposium, attended by about 300 participants, featured four presentations on wild boar management particularly highlighting the issue of human-wildlife conflict.

APN-Hyogo Hokusetsu Satoyama International Workshop
27-28 November 2015, Hyogo, Japan

The Hokusetsu SATOYAMA International Workshop, jointly organised by APN and the Hyogo Prefectural Government, was held in Takarazuka city and Itami city of Hyogo, Japan. The Workshop consists of two separate sessions: (1) International Workshop on SATOYAMA and (2) International Open Seminar on Satoyama, aimed to raise the awareness and efforts in sustaining Satoyama-like ecosystems/landscapes.
7. New publications

The following publications/information materials are published in FY 2015. Electronic copies are available online at APN E-Lib (www.apn-gcr.org/resources). A limited number of hard copies are also available from the Secretariat on members’ request.

<table>
<thead>
<tr>
<th>Publication</th>
<th>Date</th>
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<tr>
<td>APN Fourth Strategic Plan</td>
<td>May 2015</td>
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<tr>
<td>Japanese brochure on APN's work on biodiversity</td>
<td>July 2015</td>
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<tr>
<td>Proceedings of the 20th IGM/SPG Meeting</td>
<td>September 2015</td>
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<tr>
<td>Policy Brief: South Asia Science-Policy Dialogue</td>
<td>October 2015</td>
</tr>
<tr>
<td>Policy Brief: APN Global Change Perspectives (Low Carbon Initiatives)</td>
<td>November 2015</td>
</tr>
<tr>
<td>APN Third Strategic Phase Report</td>
<td>December 2015</td>
</tr>
<tr>
<td>Proceedings of the TEA Science-Policy Dialogue</td>
<td>December 2015</td>
</tr>
<tr>
<td>New tri-fold brochure for 4SP</td>
<td>February 2016</td>
</tr>
</tbody>
</table>

8. 20th Anniversary Celebration

8.1 Media Visit

The media visit was planned to be held in two regions, Southeast Asia and South Asia. However, due to limited interest from Southeast Asia, the media visit planned in the Philippines has been cancelled.

Preparations are in progress on the media visit to be held in South Asia region, which will take place in Sri Lanka. The announcement was made in March 2016, and by the time of writing this report, 89 people (64 male, 25 female) from 6 countries have submitted their applications. The media visit in Sri Lanka is planned to be held from 12 to 15 July 2016.

8.2 L.B. Brown Photo Contest

The L.B. Brown Memorial Photo Contest was held between May and December 2015, each month with a separate theme. A total of 100 photos were received by photographers from 14 countries. Nine monthly winners were selected based on reviews from 5 NFPs and 5 representatives from invited partner organisations.

The IGM is invited to vote for the best photo among the nine monthly winners to receive the final L. B. Brown Memorial Award. The voting will take place during Interactive Session II along with young scientist poster scoring. Please see separate scoring sheet for more information.

<table>
<thead>
<tr>
<th>Month</th>
<th>Theme of Contest</th>
<th>Thematic Area</th>
<th>Winner Country</th>
<th>Reviewers involved</th>
<th>Entries</th>
<th>Winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>Celebrating Biodiversity</td>
<td>B&amp;ES</td>
<td>Philippines</td>
<td>Bhutan, IPBES</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Jun</td>
<td>Promoting Sustainable Lifestyles</td>
<td>RUSD</td>
<td>India, Nepal</td>
<td>Indonesia, UNEP</td>
<td>33</td>
<td>2</td>
</tr>
</tbody>
</table>
9. Major Events

Below is a list of major events organised by APN or in which APN was represented in FY 2015:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2015</td>
<td>2nd 3Rs Conference on Waste Cycles and Waste Management, Daejon, Republic of Korea</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>3rd Workshop of the Southeast Asia Regional Climate Downscaling SEACLID/CORDEX SEA Project, Manila, Philippines</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>The 42nd session of the Subsidiary Body for Scientific and Technological Advice (SBSTA), Bonn, Germany</td>
</tr>
<tr>
<td>Jun 2015</td>
<td>23rd Conference of the Parties of the Inter-American Institute for Global Change Research (IAI), Lima Peru</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>Regional Forum on Climate Change: Low Carbon and Climate Resilient Societies - Science, Policy and Practice, Bangkok, Thailand</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>* International Symposium on Wildlife Management, Kobe, Japan</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>International Workshop that focuses that Land Cover/Land Use Change (LCLUC) and Atmospheric interactions, Bogor Indonesia</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>Sixth Regional 3R Forum in Asia and the Pacific, Maldives</td>
</tr>
<tr>
<td>Sept 2015</td>
<td>* APN 8th SEA-SRC Cooperation Meeting back to back with CBA Project Scoping Meeting, Bogor, Indonesia</td>
</tr>
<tr>
<td>Sept 2015</td>
<td>* APN 31st Steering Committee Meeting, Kobe, Japan</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>* Proposal Development Training Workshop, Cambodia</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>Belmont Forum Meeting, Oslo, Norway</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>IPBES Capacity Building Forum, Dehradun, India</td>
</tr>
</tbody>
</table>
10. New Member in APN

National Focal Points:

<table>
<thead>
<tr>
<th>Date</th>
<th>Country</th>
<th>Former member</th>
<th>New member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 15</td>
<td>USA</td>
<td>Dr. Maria Uhle</td>
<td>Dr. Luis M. Tupas</td>
</tr>
<tr>
<td>Jul 15</td>
<td>Pakistan</td>
<td>Mr. Sajjad Ahmad</td>
<td>Mr. Muhammad Irfan Tariq</td>
</tr>
<tr>
<td>Jul 15</td>
<td>Republic of Korea</td>
<td>Dr. Ho Yu</td>
<td>Mr. Joonki Kim</td>
</tr>
<tr>
<td>Aug 15</td>
<td>India</td>
<td>Dr. Subodh Sharma</td>
<td>Dr. J. R. Bhatt</td>
</tr>
<tr>
<td>Dec 15</td>
<td>Indonesia</td>
<td>Mr. Sabar Ginting</td>
<td>Dr. Henry Bastaman</td>
</tr>
<tr>
<td>Jan 16</td>
<td>Sri Lanka</td>
<td>Mr. Nihal Rupasinghe</td>
<td>Mr. Udaya R. Seneviratne</td>
</tr>
<tr>
<td>Feb 16</td>
<td>Republic of Korea</td>
<td>Mr. Joonki Kim</td>
<td>Mr. Beom-Sik Yoo</td>
</tr>
<tr>
<td>Feb 16</td>
<td>Bangladesh</td>
<td>Mr. Faiz Ahmed</td>
<td>Mr. Md. Abdul Hannan</td>
</tr>
<tr>
<td>Feb 16</td>
<td>Philippines</td>
<td>Mr. Eriberto C. Argete</td>
<td>Mr. Marcial C. Amaro Jr.</td>
</tr>
<tr>
<td>Mar 16</td>
<td>Nepal</td>
<td>Mr. Mahendra Kumar Thapa</td>
<td>Ms. Laxmi Kumari Basnet</td>
</tr>
</tbody>
</table>

SPG Member:

<table>
<thead>
<tr>
<th>Date</th>
<th>Country</th>
<th>Former member</th>
<th>New member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 15</td>
<td>New Zealand</td>
<td>Dr. Andy Reisinger</td>
<td>Dr. Andrew Tait</td>
</tr>
</tbody>
</table>

Secretariat:
- **Ms. Rieko TAMURA**: Programme Officer for Development and Institutional Affairs
- **Ms. Huong Long DINH**: Programme Fellow for Communication and Scientific Affairs

11. Action Points from the 20th IGM and Their Status

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The agenda was adopted with an additional agenda item included as Item 8-6, which was proposed by Ms. Yuko Hoshino, national Focal Point Alternate for Japan, on a co-financing mechanism in partnership with the University of Tokyo.</td>
<td>Completed</td>
</tr>
</tbody>
</table>

**SC REPORT TO THE IGM**
<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The report was welcomed and approved by the IGM. An edit suggested by the nFP Alternate for Malaysia related to the location of the 7th SEA-SRC Meeting and PDTW workshop will be incorporated.</td>
<td>Completed</td>
</tr>
<tr>
<td>3</td>
<td>The Final Financial Report for FY 2013 was approved by the IGM.</td>
<td>Completed</td>
</tr>
<tr>
<td>4</td>
<td>The Interim Financial Report for FY 2014, presented in an improved format, was accepted by the IGM. The final version will be provided to the SC during the next intersessional meeting and to be endorsed in the next IGM.</td>
<td>Completed</td>
</tr>
<tr>
<td>5</td>
<td>The Deficit Strategy proposed by the Secretariat was approved, taking note that the strategy should be reviewed and updated annually at every SC meeting and IGM until the deficit is eventually cleared.</td>
<td>An update on strategies for FY2016 will be reported under Item 06 of the 21st IGM</td>
</tr>
<tr>
<td>6</td>
<td>Mr. Chencho Tshering (SPG Alternate for Bhutan), Dr. Subra Moten (Invited Expert to the SPG), Dr. Andrew Matthews (Invited Expert to the CDC), Mr. Sajjad Haldram (nFP Alternate for Pakistan), and Mr. Ajith Silva (nFP Alternate for Sri Lanka) volunteered to work with Ms. Peldon Tshering remotely to prepare suggested amendments to the Framework Document for approval at the next IGM.</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Draft proposed amendments developed for IGM Approval</td>
</tr>
<tr>
<td>7</td>
<td>The SRC Committees are invited to discuss this issue if time allows at SRC parallel sessions.</td>
<td>Completed</td>
</tr>
<tr>
<td>8</td>
<td>The APN 3rd Strategic Phase Report 2015-2020 was approved.</td>
<td>Completed</td>
</tr>
<tr>
<td>9</td>
<td>The IGM approved the final draft of the 4th Strategic Plan, with the understanding that Appendix 2 of the Strategic Plan (research pathway), is an evolving and non-exhaustive list showing the areas of interest of APN. A number of additional topics were proposed as follows:</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>a. Sustainable energy related to greenhouse gases (Sabar Ginting, nFP for Indonesia);</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Mountain and coastal hazards (Mandira Shrestha, ICIMOD);</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Air resource management (Ajith Silva, nFP Alternate for Sri Lanka);</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Sustainable consumption and production and public green procurement (Chencho Tshering, nFP Alternate for Bhutan); and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Satellite/environmental accounting (Joyashree Roy, Jadavpur University).</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The IGM endorsed the reports from the South Asia (SA), Southeast Asia (SEA) and Temperate East Asia (TEA) Sub-Regional Committees, and approved the following action points:</td>
<td>Completed</td>
</tr>
</tbody>
</table>
### PROPOSED NEW AND ONGOING ACTIVITIES

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **SEA** | On initiating collaboration with the ASEAN Secretariat, Mr. Sabar Ginting will contact ASEAN Secretariat in Jakarta directly.  
2. The SEA Meeting is to be held in Indonesia in August back-to-back with the kick-off meeting of the project “Building Capacity in Climate Change Adaptation in Urban Planning” (given that the seed grant proposal from SEA is approved by the IGM for funding).  
4. Thailand will celebrate the 20th anniversary of APN back-to-back with the Climate Expo in Bangkok in June/July 2015. There will also be a number of other events to celebrate the Anniversary in Cambodia, Malaysia, Indonesia and Viet Nam. | 1. Contact established.  
2. Meetings scheduled 7-11 September 2015  
3. Updates will be reported under Item 7 |
| **SA** | Pakistan agreed to host the next SA-SRC Meeting.  
2. Mr. Chencho Tshering is to develop a concept note on sustainable consumption and production to be shared among the members for further improvement (concept note on paperless office or government).  
3. Outcomes of the recently held Science-Policy Dialogue will be further shared among stakeholders. | 1. 7th SA-SRC Meeting postponed due to COP preparations  
2. TBC  
3. Completed |
| **TEA** | The plan to hold a Science-Policy Dialogue in Mongolia on climate change and land management will be finalised further by the five TEA member countries.  
2. A Proposal Development Training Workshop (PDTW) is also planned to be organised in Mongolia.  
3. The TEA-SRC Meeting will take place back-to-back with the SPD and PDTW. | Completed |

### WORK PROGRAMME AND BUDGET PLAN FOR FY2015

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12</strong></td>
<td>The draft work programme and budget plan for FY 2015 was adopted.</td>
<td>Completed</td>
</tr>
<tr>
<td>No.</td>
<td>Action</td>
<td>Outcome</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>13</td>
<td>The IGM endorsed the following action points regarding the call for proposals process and project management:  &lt;br&gt;1. Topics of interest for 2015 call for proposals.  &lt;br&gt;3. The name of the ARCP Programme will be changed to CRRP (Collaborative Regional Research Programme).  &lt;br&gt;3. Logical framework analysis will be included as part of the proposal.  &lt;br&gt;4. An external expert database will be provided to the SPG.  &lt;br&gt;5. Proposals will be scored by criterion.  &lt;br&gt;6. Quantifiable indicators will be included in the progress report.</td>
<td>1. Completed 2. Completed 3. Will be incorporated for the full proposal stage 4. Ongoing 5. Ongoing 6. To be incorporated in the 2015 new proposals/continuing multi-year proposals</td>
</tr>
<tr>
<td>14</td>
<td>The new SPG Sub-Committee (SPG-SC) and its Co-Chairs were elected. The SPG-SC membership are as follows:  &lt;br&gt;a. Dr. Jariya Boonjawat, SPG Member for Thailand will act as Co-Chair and serve for one more year.  &lt;br&gt;b. Dr. Kensuke Fukushi, SPG Member for Japan as SPG Co-Chair and serve for a two-year term.  &lt;br&gt;c. Dr. Hemant Borgaonkar, SPG Member for India will serve one additional year as SPG-SC member.  &lt;br&gt;d. Dr. Tsogbaatar Jamsran, SPG Member for Mongolia as new SPG-SC member.  &lt;br&gt;e. Dr. Fariza Yunus, SPG Member for Malaysia as new SPG-SC member.</td>
<td>Completed</td>
</tr>
<tr>
<td>15</td>
<td>The new Capacity Development Committee (CDC) was elected:  &lt;br&gt;a. Dr. Jariya Boonjawat, SPG Member for Thailand and SPG Co-Chair (Ex-Officio).  &lt;br&gt;b. Dr. Kensuke Fukushi, SPG Member for Japan as new SPG Co-Chair (Ex-Officio).  &lt;br&gt;c. The new SC Chair (Ex-Officio, to be elected after SC election).  &lt;br&gt;d. Donor Member (Japan).  &lt;br&gt;e. Dr. Andrew Matthews, invited expert.  &lt;br&gt;f. Prof. Roland Fuchs, invited expert.  &lt;br&gt;g. Dr. Srikantha Herath, invited expert.  &lt;br&gt;h. Dr. Juan Pulhin, invited expert.</td>
<td>Completed</td>
</tr>
<tr>
<td>16</td>
<td>The IGM approved SPG recommendations for thirteen (13) continuing ARCP projects (US$ 295,000 secured in FY 2014 budget; US$ 145,200 secured from FY 2015 budget).</td>
<td>Contracts being drawn and awards being remitted</td>
</tr>
<tr>
<td>17</td>
<td>The IGM approved SPG recommendations of twelve (12) new proposals under the Climate Adaptation Framework</td>
<td>Contracts being drawn and awards being remitted</td>
</tr>
</tbody>
</table>
No. | Action | Outcome |
---|---|---|
| | (US$ 778,000), two of which are to be combined into one project, therefore, 11 new projects are approved for funding. | |

**RECOMMENDATIONS FOR CONTINUED FUNDING UNDER THE CLIMATE ADAPTATION PROGRAMME**

18 | The continuation of multi-year CAF projects will be decided during the intersessional SC Meeting in Autumn 2015. | Completed |

**RECOMMENDATIONS FOR CONTINUED FUNDING UNDER THE CAPABLE PROGRAMME**

19 | The IGM approved SPG recommendations for one (1) continuing CAPaBLE project (US$ 27,000) based on the presumption of successful review. | Completed |

**RECOMMENDATIONS FOR FUNDING UNDER THE CAPABLE PROGRAMME**

20 | The IGM approved SPG recommendation of eight (8) new proposals under the CAPaBLE programme (US$ 355,500). In addition, US$25,000 was approved as a contingency fund for CAPaBLE in FY 2015. | All contracts being drawn and awards being remitted |

**ELECTION OF THE STEERING COMMITTEE FOR 2015-2017**

21 | Five national Focal Points were elected by the IGM. The Chairpersons were elected, and three members were co-opted by the new SC as indicated below:  
**Elected National Focal Points**  
· Ms. Peldon Tshering, Bhutan (Chair)  
· Dr. Chengyong Sun, China (First Vice Chair)  
· Mr. Sabar Ginting, Indonesia (Second Vice Chair)  
· Mr. Sajjad Ahmad, Pakistan  
· Dr. Andrey V. Adrianov, Russian Federation  
**Ex-Official Members: New SPG Co-Chairs**  
· Dr. Jariya Boonjawat, SPG Member for Thailand  
· Dr. Kensuke Fukushi, SPG Member for Japan  
**Donor Member**  
· Dr. Akio Takemoto, nFP for Japan  
· (any other donor country willing to participate)  
**Host of the next IGM (one-year term)**  
· China (pending government clearance)  
**Co-Opted Members (one-year term)**  
· Dr. Roland Fuchs (USA)  
· Dr. Andrew Matthews (New Zealand)  
· Dr. Kazuhiko Takemoto (Japan) | Completed  
| New nFPs appointed during FY2015:  
· Indonesia: Mr. Henry Bastaman  
· Pakistan: Mr. Muhammad Irfan Tariq |

22 | The Secretariat is to contact the three co-opted members for their consent to serve on the SC. | Completed |
### Host of future IGMs

25. China indicated the willingness to host the 21st IGM. Thailand also indicated the readiness to host on the condition that China is eventually not ready to host the next meeting, also noting the need for regional rotation.  
   - Completed

26. China is to consult with Thailand and the Secretariat, and members will be informed of the host country in due course.  
   - Completed

27. The Secretariat is to send a formal invitation to the nFP for China, in order to obtain official clearance to host the 21st IGM meeting.  
   - Completed

### Mitra Award

28. “APN Mitra Award for Global Change Research” was awarded to Mr. Khanal Shiva for his work on “Integration of object-based image analysis with machine learning algorithm for forest type classification in Nepal”.  
   - Completed
Final Financial Report Fiscal Year 2014

Resources Available:

<table>
<thead>
<tr>
<th>Direct Financial Contributions</th>
<th>Initial Resources</th>
<th>Confirmed Resources Available, as of 31 March 2015</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
<td>c=b-a</td>
</tr>
<tr>
<td>Ministry of the Environment of Japan</td>
<td>2,183,000</td>
<td>2,191,850</td>
<td>8,850</td>
</tr>
<tr>
<td>Pyogo Prefectural Government</td>
<td>190,000</td>
<td>191,630</td>
<td>1,630</td>
</tr>
<tr>
<td>USCRP/NSF</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ministry of Environment of Republic of Korea</td>
<td>50,000</td>
<td>50,000</td>
<td>0</td>
</tr>
<tr>
<td>Ministry for the Environment of New Zealand</td>
<td>25,000</td>
<td>25,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Contribution to Specific Activity

- Climate and Development Knowledge Network (CDKN), Asia (GBP 8,000) | 0 | 12,000 | 12,000
- Operational Resources from FY 2013 and before | 2,427,130 | 2,427,130 | 0
- Returned Funds of Projects from April 2014 to March 2015 | 0 | 88,520 | 88,520

Total: 4,875,130 | 4,986,130 | 111,000

Use of Resources:

<table>
<thead>
<tr>
<th>Approved Allocation</th>
<th>Expenditure in FY 2014</th>
<th>Carried over to FY 2015</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2008 - FY 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D=A-(B+C)</td>
</tr>
<tr>
<td>ARCP &amp; AOA 2011-2013</td>
<td>30,000</td>
<td>22,440</td>
<td>6,000</td>
</tr>
<tr>
<td>ARCP 2008-2013</td>
<td>683,610</td>
<td>327,710</td>
<td>250,490</td>
</tr>
<tr>
<td>CAPABLE 2011-2013</td>
<td>276,250</td>
<td>154,290</td>
<td>58,000</td>
</tr>
<tr>
<td>LC 2012-2013</td>
<td>256,600</td>
<td>146,950</td>
<td>108,560</td>
</tr>
<tr>
<td>EBU 2012</td>
<td>15,400</td>
<td>7,370</td>
<td>7,060</td>
</tr>
<tr>
<td>RSSD 2011-2012</td>
<td>37,130</td>
<td>23,540</td>
<td>5,990</td>
</tr>
<tr>
<td>SCBCIA 2009</td>
<td>5,700</td>
<td>0</td>
<td>5,700</td>
</tr>
<tr>
<td>NSF Refunds Possible</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sub Total(2)</td>
<td>1,282,670</td>
<td>682,700</td>
<td>436,840</td>
</tr>
</tbody>
</table>

FY 2014

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>Expenditure in FY 2014</th>
<th>Carried over to FY 2015</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCP</td>
<td>1,200,660</td>
<td>436,000</td>
<td>748,000</td>
<td>16,660</td>
</tr>
<tr>
<td>CAPABLE</td>
<td>458,500</td>
<td>341,860</td>
<td>115,470</td>
<td>1,170</td>
</tr>
<tr>
<td>Low Carbon Initiatives Framework</td>
<td>20,000</td>
<td>5,890</td>
<td>14,110</td>
<td>0</td>
</tr>
<tr>
<td>Climate Adaptation Framework</td>
<td>1,313,000</td>
<td>485,770</td>
<td>800,770</td>
<td>26,460</td>
</tr>
<tr>
<td>Biodiversity and Ecosystems Services Framework</td>
<td>43,000</td>
<td>43,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>One Annual Sub-Regional PDTW</td>
<td>25,000</td>
<td>25,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Science-Policy Linkages</td>
<td>66,000</td>
<td>69,180</td>
<td>12,000</td>
<td>-15,180</td>
</tr>
<tr>
<td>Arrangement Programme Fellowships</td>
<td>30,000</td>
<td>30,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20th IGM &amp; 28th SC</td>
<td>120,000</td>
<td>117,700</td>
<td>0</td>
<td>2,300</td>
</tr>
<tr>
<td>4th Strategic Planning Workshop, 3R Scoping Workshop</td>
<td>36,000</td>
<td>34,410</td>
<td>21,590</td>
<td>0</td>
</tr>
<tr>
<td>Pyogo-Satoyma International Symposium</td>
<td>10,000</td>
<td>5,040</td>
<td>4,960</td>
<td>0</td>
</tr>
<tr>
<td>Pyogo-Zhuhai Expert Meeting on Air Pollution</td>
<td>50,000</td>
<td>39,270</td>
<td>10,730</td>
<td>0</td>
</tr>
<tr>
<td>SRC South Asia</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SRC South East Asia</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SRC Temperate East Asia</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Planned Travel for Secretariat to APN Meetings</td>
<td>35,000</td>
<td>32,390</td>
<td>0</td>
<td>2,610</td>
</tr>
<tr>
<td>20th Anniversary Science Conference in 2016</td>
<td>3,000</td>
<td>3,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 Framework Publications</td>
<td>4,000</td>
<td>1,080</td>
<td>2,920</td>
<td>0</td>
</tr>
<tr>
<td>CAPABLE 10 Years Publications</td>
<td>1,500</td>
<td>1,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Annual Reports and Other Publications</td>
<td>20,000</td>
<td>22,390</td>
<td>0</td>
<td>-2,590</td>
</tr>
<tr>
<td>Climate in AP: Book Review &amp; IPCC Connections</td>
<td>2,500</td>
<td>2,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IAB Food Travel for Scientific and Institutional Activities</td>
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<td>7,350</td>
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<tr>
<td>Personnel</td>
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<td>503,780</td>
<td>0</td>
<td>-57,780</td>
</tr>
<tr>
<td>General Maintenance and Operational Cost &amp; Equipment Upgrade</td>
<td>64,000</td>
<td>67,200</td>
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<td>-3,200</td>
</tr>
<tr>
<td>GeS Overhead</td>
<td>65,500</td>
<td>65,760</td>
<td>0</td>
<td>-260</td>
</tr>
<tr>
<td>Sub Total(2)</td>
<td>4,103,660</td>
<td>2,330,580</td>
<td>1,779,860</td>
<td>-6,780</td>
</tr>
</tbody>
</table>

Total: 5,386,330 | 3,013,280 | 2,216,700

Deficit as of 01st April 2014(3) | -511,200 |
Balance in the Differences of FY 2014(3) | + 267,350 |
Deficit as of 31 March 2015(3) | -243,850 |
**Financial Status Report Fiscal Year 2015**

As of 29 February 2016

<table>
<thead>
<tr>
<th>Resources Available:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>** Contributions**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry of the Environment of Japan</td>
<td>2,187,000</td>
<td>2,187,000</td>
</tr>
<tr>
<td>Hyogo Prefectural Government</td>
<td>167,200</td>
<td>167,200</td>
</tr>
<tr>
<td>Ministry of Environment of Republic of Korea</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Ministry for the Environment of New Zealand (NZ$ 30,000)</td>
<td>22,200</td>
<td>22,200</td>
</tr>
<tr>
<td>MOEJ Commissioned Contract Work</td>
<td>42,100</td>
<td>42,100</td>
</tr>
<tr>
<td><strong>Operational Resources from FY 2014</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Returned Funds from Completed Projects (including SRC activities)</td>
<td>35,500</td>
<td>35,500</td>
</tr>
<tr>
<td>Other Adjustments (exchange rate gains, etc.)</td>
<td>82,740</td>
<td>82,740</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,410,200</td>
<td>4,528,440</td>
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</table>

<table>
<thead>
<tr>
<th>Use of Resources:</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Approved Allocation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2009 - FY 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCP 2009</td>
<td>7,854</td>
<td>7,854</td>
</tr>
<tr>
<td>ARCP 2012</td>
<td>51,809</td>
<td>34,394</td>
</tr>
<tr>
<td>ARCP 2013</td>
<td>190,844</td>
<td>106,941</td>
</tr>
<tr>
<td>ARCP 2014</td>
<td>452,999</td>
<td>237,312</td>
</tr>
<tr>
<td>CAPaBLE 2013</td>
<td>58,000</td>
<td>32,741</td>
</tr>
<tr>
<td>CAPaBLE 2014</td>
<td>85,460</td>
<td>46,532</td>
</tr>
<tr>
<td>CAP 2013</td>
<td>9,500</td>
<td>9,500</td>
</tr>
<tr>
<td>CAP 2014</td>
<td>140,903</td>
<td>57,349</td>
</tr>
<tr>
<td>AOA 2012</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>LO 2012</td>
<td>8,000</td>
<td>1,450</td>
</tr>
<tr>
<td>LO 2013</td>
<td>61,060</td>
<td>24,840</td>
</tr>
<tr>
<td>RUSD 2012</td>
<td>5,985</td>
<td>5,985</td>
</tr>
<tr>
<td>BRU 2012</td>
<td>1,800</td>
<td>1,800</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td>1,087,211</td>
<td>552,821</td>
</tr>
</tbody>
</table>

| FY 2015 (Projects and Other Activities) |   |   |
| ARCP(GRRP) | 440,200 | 64,000 | 376,200 | 0 |
| CAPaBLE | 407,500 | 763,783 | 356,283 | 0 |
| Climate Adaptation Framework | 1,419,908 | 470,287 | 949,621 | 0 |
| Low Carbon Initiatives Framework | 33,110 | 8,315 | 24,795 | 0 |
| One Annual Sub Regional PDTW | 25,000 | 16,823 | 8,177 | 0 |
| Science-Policy linkages | 60,000 | 52,320 | 7,680 | 0 |
| Hyogo Activities | 40,000 | 13,643 | 26,357 | 0 |
| Partnership Activity with Cambodia | 18,000 | 18,000 | 0 |
| INF on Waste Management and the 3Rs, Hanoi, Vietnam | 29,000 | 29,000 | 0 |
| 20th Anniversary Activities in 2016 | 55,000 | 8,909 | 46,091 | 0 |
| 4th Strategic Plan and 3rd Strategic Phase Report & Publication | 5,000 | 4,237 | 763 | 0 |
| Annual Reports and Other Publications | 20,000 | 4,237 | 15,763 | 0 |
| **Sub Total** | 2,552,710 | 915,316 | 1,637,394 | 43,339 |

| FY 2015 (Administration) |   |   |
| 21st IGM/SPG & 31st SC | 130,000 | 18,144 | 111,856 | 0 |
| BR South Asia | 15,000 | 15,000 | 0 |
| BRC Southeast Asia | 15,000 | 15,000 | 0 |
| BR South East Asia | 15,000 | 15,000 | 0 |
| Secretariat Travel to APN Meetings and ad-hoc Science Meetings | 55,000 | 44,181 | 10,819 | 0 |
| Personnel | 508,100 | 500,331 | 7,769 | 0 |
| General Maintenance and Operational Cost | 70,000 | 41,477 | 28,523 | 0 |
| Contingency (5% from Projected Direct Financial Contributions in FY 2015) | 123,170 | 123,170 | 0 |
| Deficit Compensation | 50,000 | 50,000 | 0 |
| IGES Overhead (5% of MOEJ Contribution) | 66,000 | 65,100 | 900 | 0 |
| **Sub Total** | 1,045,270 | 699,233 | 348,037 | 98,011 |

| **Total** | 4,685,191 | 2,167,370 | 2,274,460 |   |
| **Deficit as of 01st April 2015** | -275,000 |   |   |   |
| **Balance in the Differences of FY 2015** | 361,600 |   |   |   |
| **Balance as of 31st March 2016** | 86,600 |   |   |   |

Ministry of Environment of Cambodia contributed USD 16,000 to the Proposal Development Training Workshop that was held in Siem Reap in October 2015.

In-kind support to APN funded projects by organisations of Project Leaders and Collaborators: approximately US$ 1,220,000.

Ministry of Science and Technology of China/Department of Science and Technology of Henan Province kindly provided some substantial in-kind support to the conduct of the 21st IGM/SPG Meetings.

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**Exchange Rates in FY 2015:**
- US$ 1 = JPY 126
- US$ 1 = NZ$ 1.35
Annotation to Financial Status Report FY 2015

1. The total amount of resources that was available for FY 2015 was USD 5,528,440 as of 29 February 2016, approximately USD 118,000 more than expected when the work programme for FY 2015 was presented to the 20th IGM/SPG Meeting, held in March 2015 at Kathmandu, Nepal. The difference appeared through returned funds from completed projects and other adjustments such as exchange rate gains, etc.

2. Column A shows the allocation of funds approved at the 20th IGM/SPG Meeting. As seen at the bottom of this column, the allocation of funds exceeds the total amount of initial resources by USD 275,000.

3. Column B shows how much of the approved and allocated funds were used. As of the end of February, the amount is approximately USD 2.17 Mio.

4. Column C shows how much funds are carried over to FY 2016 as reserved funds for ongoing or not yet conducted projects and activities, amounting around USD 2.3 Mio.

5. Column 5 shows the differences between approved and allocated funds (Column A) minus the sum of actual expenditures (Column B) and reserved funds for ongoing and not yet conducted projects and activities (Column D). It shows a positive balance of USD 360,000.

6. By utilising this positive balance, the deficit of USD 275,000 that APN had at the beginning of FY 2015 in April 2016 can be eliminated entirely. Although the books of FY 2015 have not been closed yet, approximately USD 86,000 can be reserved as a surplus and carried over to FY 2016.
Item 3: Suggested Amendments to the Framework Document

(Part I. Report from the Framework Document Task Team)

1. Purpose of this agenda item

The intention of this agenda item is (1) to provide a report to the IGM on the work undertaken in FY 2015 related to the Framework Document, and (2) to bring the attention of IGM to the latest version of the suggested amendments to the Framework Document (presented as IGM-SPG/21/03-App.1), which is expected to be approved by the IGM under Item 7 (Day 2) of this Meeting.

This arrangement is intended to provide the IGM with an opportunity to examine the proposed text before its approval on Day 2.


<table>
<thead>
<tr>
<th>Date</th>
<th>Activity undertaken</th>
<th>Action by</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Mar 2015</td>
<td>A Framework Document Task Team was established at the 20th IGM to develop draft amendments for approval at the 21st IGM, to address issues in particular related to the election of SC Members.</td>
<td>IGM</td>
</tr>
</tbody>
</table>
| 17-18 Sep 2015 | The 31st SC Meeting discussed the progress of work and recommended the Task Team to consider the following while drafting the proposed amendments:  
  * A draft text prepared by the Secretariat on “Non-Affiliated Invited Experts (NAIE)” to support the Secretariat in specific operations that their expertise is required.  
  * A list of questions prepared by the Secretariat that could serve as a starting point for the Task Team to draft texts that clarifies the procedures of electing members and Chairs of the SC.  
  * Additional suggestions sent by member countries.                                                                                                                                                                                                                         | SC, Secretariat |
| 7 Oct 2015  | The proposed text and recommendations that are resulted from the SC Meeting were forwarded to the FD Task Team for their information and action as appropriate.                                                                                                                                                                                  | FD Task Team |
| 26 Oct 2015 | The Task Team, led by Ms. Peldon Tshering (SC Chair) and Mr. Subramanian Moten (SPG Invited Expert), developed the zero draft of the suggested amendments to the Framework Document.                                                                                                                                                                                              | FD Task Team |
### Item 3: Suggested Amendments to the Framework Document

#### Part I. Report from the Framework Document Task Team

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<td>IGM</td>
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<td>SC, Secretariat</td>
</tr>
<tr>
<td>7 Oct 2015</td>
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<td>FD Task Team</td>
</tr>
<tr>
<td>26 Oct 2015</td>
<td>The Task Team, led by Ms. Peldon Tshering (SC Chair) and Mr. Subramanian Moten (SPG Invited Expert), developed the zero draft of the suggested amendments to the Framework Document.</td>
<td>FD Task Team</td>
</tr>
<tr>
<td>28 Dec 2015 – 15 Jan 2016</td>
<td>The draft was circulated among all Task Team members for additional input before its circulation to all nFPs two months before the IGM.</td>
<td>FD Task Team</td>
</tr>
<tr>
<td>11 Feb 2016</td>
<td>On behalf of the Task Team, Ms. Peldon Tshering sent out the revised draft to all national Focal Points, requesting for further input before the draft was finalised for presentation at the IGM. A response from Japan was received.</td>
<td>FD Task Team</td>
</tr>
</tbody>
</table>

#### Appendices:

- **IGM-SPG/21/03-App.1**: The latest version of suggested amendments prepared by the Framework Document Task Team, including inputs from member countries.
- **IGM-SPG/21/03-App.2**: The currently effective version of the Framework Document (approved by the 20th IGM). To reduce paper use, this document is available in electronic format only at: https://www.apn-gcr.org/restricted/2016/igm21/.
- **IGM-SPG/21/03-App.3**: The first draft suggested amendments circulated to all national Focal Points two months prior to the IGM, on 11 Feb 2016 (available as electronic only on https://www.apn-gcr.org/restricted/2016/igm21/).
Item 4-Sub-Regional Committee Meetings

Instructions for the parallel sessions

- In this parallel session SA, SEA and TEA Sub-Regional Committee members will group into their respective sub-regions to discuss SRC activities.
- The agendas and background papers of the parallel sessions are available under item 4.
- 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 8, preferably via PowerPoint PRESENTATION on Thursday 21, April 2016 at the IGM based on discussion at this parallel session.
  - 10:40 to 10:50 Report from South Asia
  - 10:50 to 11:00 Report from Southeast Asia
  - 11:00 to 11:10 Report from Temperate East Asia
  - 11:10 to 11:30 Discussion session
- The Sub-Regional Committee representatives should hand their presentation and report to the Secretariat before the coffee break on 21 April 2016.
- Please proceed to your respective sub-groups according to following table.

<table>
<thead>
<tr>
<th>Sub-Regional Groups</th>
<th>Member Countries</th>
<th>Room Assigned</th>
</tr>
</thead>
</table>
| South Asia             | • Bangladesh
                        • Bhutan
                        • India
                        • Nepal
                        • Pakistan
                        • Sri Lanka           | Redbud Hall       |
| Southeast Asia         | • Cambodia
                        • Indonesia
                        • Lao PDR
                        • Malaysia
                        • Philippines
                        • Thailand
                        • Viet Nam           | Narcissus Hall      |
| Temperate East Asia    | • China
                        • Japan
                        • Mongolia
                        • Republic of Korea
                        • Russian Federation | Magnolia Hall      |

Special Note: Sub-Regional Chairs Session has been not scheduled as an agenda item for the 21st IGM considering time limitation. However, chairs of SRC Committees may consider to hold an informal discussion as necessary.
APN South Asia Sub-Regional Committee Meeting  
20 April 2016, Zhengzhou, China  

(Rebud Hall: 13:00-14:30)  

Draft Agenda  

A RAPPORTEUR for the Meeting & PRESENTER of the outcomes to the IGM is to be assigned by the SRC Members  
(APN Secretariat is not available to take minutes or to make a report for the IGM)  

13:00-13:02  Welcome Remarks and Brief Introduction  
(2 min)  
Mr. Muhammad Irfan Tariq, nFP Member for Pakistan will deliver an opening remark and a short introduction of the meeting and its objectives.  

13:02-13:07  Self-Introduction and Election of Officers  
(5 min)  
Mr. Muhammad Irfan Tariq will facilitate the election of a new Chair and a new Vice Chair of the SA-SRCom for 2016/17. The newly elected Chair and Vice Chair will preside over the Sub-Regional Committee Meeting.  

13:07-13:10  Item 1. Adoption of the Draft Agenda  
(3 min)  
The Meeting Chair will seek adoption of the present draft agenda. Items of Any Other Business (AOB) may be raised.  

13:10-13:20  Item 2. Review and discussion of the action points of SA-SRC Meeting  
(10 min)  
Refer to draft action point document IGM-SPG/20/04-02: SA-SRCom Action points.  

13:20-14:00  Item 3. Collaborative activities of SA-SRC Committee  
(40 min)  
This discussion aims to shortlist organisations for collaboration and to identify suitable approaches for future collaborative activities.  

14:00-14:15  Item 4. 7th SA-SRC Meeting and South Asia Regional PDTW 2016  
(15 min)  
Members will discuss the host for PDTW and SRC Meeting. Considering the timeline of the APN annual call, holding PDTW before the summary proposal deadline (August 2016) would be more effective.  

14:15-14:25  Item 5. Any Other Business  
(10 min)  
Tentative plans will be made for future events. The discussion should be guided by the following:  
- Identify SA-SRC regional priorities for 2016/17;  
- SC membership and APN Framework Document suggested amendments;  
- Any Other Business (AOB).  

14:25-14:30  Closing and Final Remarks  
(5 min)  
The Chair will deliver a closing remark and a group photo will be taken with the participation of all participants.
Item 2: Actions points from 6th SA-SRC Meeting and 20th IGM sub-regional parallel session

Objectives: Review the action points and identify what needs to be completed

Membership information: Committee member of South Asia Sub-Regional Committee for 2015/2016
- Chair of the SA-SRC: nFP for Pakistan (Mr. Sajjad Haider Yaldram, nFP alternate represented at the 20th IGM/SPG and presently Mr. Muhammad Irfan Tariq, nFP for Pakistan, serving as Chair of the SA-SRC).
- Vice Chair of the SA-SRC: nFP of Sri Lanka (Mr. Ajith Silva, nFP alternate represented at the 20th IGM/SPG and Mr. Udaya R. Seneviratne, nFP for Sri Lanka, presently serving as Vice Chair of the committee).

The following list provides action points and updates from the South Asia sub-regional parallel session at the 20th IGM.

1. Partnerships with other regional networks

Action: Committee requests members to submit their respective list of organisations according to the format given by the APN Secretariat by 30 April 2015 and, at the same time, members who have submitted are also requested to revise the list with additional details.

Update:
- All members submitted a list of organisations that consists with 64 organisations based in South Asia.
- Currently members are shortlisting the organisations that share similar area of interest as of APN.
- Detailed discussion will take place under Item 3 of the present SRC meeting.

2. Science-Policy Dialogue

Action: SPG member of Bhutan informed the Committee that the Science-Policy Dialogue was successfully conducted in Bhutan on 19-21 January 2015.

Update:
- Policy brief of the South Asia Science-Policy dialogue was published on 1 October 2015. An electronic version of the brief is available at the APN website from the following link: http://www.apn-gcr.org/resources/items/show/2017
- Proceedings of the South Asia Science-Policy Dialogue was published on 12 January 2016. Electronic copy of the Proceeding can access from following link: http://www.apn-gcr.org/resources/items/show/2031
The printed copy of the brief has been distributed to members at the SC Meeting together with the IGM package.

3. South Asian Association for Regional Cooperation

**Action:** Committee recommended the APN Secretariat to write a letter to SAARC Secretariat with all details of APN and what APN is seeking in terms of collaboration with SAARC and its Secretariat.

**Update:**
- The invitation letter to the 20th IGM from APN to the Secretary General of SAARC on 17 February 2015, introduced APN activities and invited SAARC to explore possible collaboration. However, SAARC representatives could not attend the 20th IGM/SPG due to schedule conflict.
- During the last SRC parallel session, members did not identify possible collaborative approaches that could be established with SAARC. Therefore, APN Secretariat did not send an invitation letter to the 21st IGM to SAARC. The letter will be sent to SAARC after the discussion at the SRC parallel session.
- Detailed discussion will continue under item 3.

4. SRC and Cooperate Activities in the 4th Strategic Phase.

a. Focus Areas

**Action:** The Committee decided that it is best for APN to focus the activities in the 4th Strategic Phase towards Sustainable Development Goals (SDGs).

**Updates:** “Research that develops pathways and mechanisms to achieve sustainable development and develop adaptation strategies” was identified as a key area of interest in the 2015 APN annual call for proposals.

b. Membership

**Action:** Recommend the APN Secretariat to communicate with Indian authorities to appoint an nFP and SPG as soon as possible.

**Updates:** Dr. J. R. Bhatt, new national Focal Point member for India was appointed on 28 August 2015.

c. Financial Development

**Action:** The Committee decided to request the APN Secretariat to communicate with countries on co-financing. SA-SRC welcomed the arrangements that has been made on this regard with Cambodia and Sri Lanka.
Update: APN Secretariat is revising the co-financing partnership based on the comments and suggestions that were received from Sri Lankan partners. Updated documents will be shared with member countries later.

5. Sharing the outcome of 3rd Strategic Phase

Action: The Committee requested APN Secretariat to send a short presentation with the outcomes of the 3rd Strategic Phase that can be used at local level events to promote the 20th anniversary of APN.

Update: APN secretariat shared a short presentation on the achievements made by APN in the past 20 years on 27 May 2015 before the World Environment Day, and requested members to disseminate the information at local events.

6. Host of the 7th SA-SRC meeting

Action: The Chair of the Committee informed that the Government of Pakistan has agreed and approved to host the 7th SA-SRC Meeting. Possible time of the 7th SA-SRC Meeting will be decided later.

Update: The 7th SA-SRC Committee Meeting was postponed due to pre-commitments of the host institution of Pakistan and SA-SRC members. This decision was made on 25 August 2015 based on a Doodle poll conducted by the Secretariat and responses received from members.
Item 3: Collaborative Activities of South Asia Sub-Regional Committee

Objective of the discussion: To identify strategic partnership approaches and activities that will benefit the South Asia sub-region and APN.

Background information:
- During the 6th SA-SRC Meeting members discussed the importance of collaborative activities to further strengthen APN activities in South Asia. As a result of the discussion, members agreed to prepare a list of organisations based in South Asia that has the potential to collaborate with APN.
- Further discussion was held at the 20th IGM/SPG Meeting SA-SRC Committee Meeting. However, due to the lack of information from some of countries, a final list of organisations was not presented to the IGM.
- Members identified the importance of establishing close collaboration with the South Asian Association for Regional Cooperation (SAARC). The APN Secretariat, with the help from the nFP of Nepal, invited SAARC representative to the 20th IGM/SPG in Nepal. SAARC declined the invitation due to the unavailability of SAARC representative to attend the Meeting.

Suggested points for IGM-SA-SRC discussion:
- Shortlist the most relevant organisations that has the possibility to collaborate with APN (see Appendix 02).
- Identify suitable collaborative approaches and activities (refer to suggested approaches - Appendix 01).
- Discuss procedure of approaches.
- Identify a point of contact for each institution/organisation.
- Identify Sub-Regional Committee member to coordinate the process within their respective countries (i.e. SPG, nFP or both?).
- Identify expected outcomes of collaboration we expect to achieve through the partnership.
Appendix 01- Future Collaborative Approach with Organisations in South Asia

Regional partnership initiatives
Vision: To establish partnerships to address the research and Capacity Development (CD) need in South Asia.

Goals:
- Research: To support South Asian researchers and practitioners to cooperate, identity and assess the priority needs and problems that affect the region.
- Capacity development: Develop the capacities of scientists, practitioners and the public to collaborate, communicate and implement actions to answer global climate change issues in the South Asia region.

Expected outcomes (by December 2018):
- To identify current/ongoing efforts in global change research and CD in South Asia.
- Establish a partnership network among organisations in South Asia with similar areas of interest as APN (at least 2 organisations from each country).
- Conduct a pilot collaborative activity engaging all partners.
- Assess the collaborative achievement.
- Establish mechanism(s) for partnerships.

Why APN considers collaboration as a key element to APN’s future development?
1. Increasing demands of collaborative research and capacity development activities cannot be met with the limited resources of APN.
2. There are organisations based in South Asia that have similar areas of interest as APN. Short term initiatives from such organisations cannot be sustained in the long-term due to lack of resources.
3. Collaboration helps to provide effective results that are beyond individual efforts.
4. Build a stronger relationship among stakeholders.
5. Some organisations are experienced and equipped with resources and therefore could help APN in improving the outcomes of APN activities.
6. Greater visibility of APN activities.
7. Effective resource utilisation:
   a. Additional financial/in-kind resources through collaborative activities;
   b. Additional resources may be available in addition to APN resources for SRC activities through partnership activities.

What are the values and resources that APN can offer to the SA sub-regional level via the SA-SRC?
- Experience in coordinating and facilitating regional activities.
- Additional financial resources as indicated in 7.b. above.
- An open funding scheme for regional research and capacity development projects in which partners can invest and receive recognition.
- Co-organise science-policy dialogues, young scientists training workshops and synthesis workshops.
- Expertise of members (SPG/nFP).
Appendix 01- Future Collaborative Approach with Organisations in South Asia

Regional partnership initiatives

Vision:
To establish partnerships to address the research and Capacity Development (CD) need in South Asia.

Goals:
- Research: To support South Asian researchers and practitioners to cooperate, and assess the priority needs and problems that affect the region.
- Capacity development: Develop the capacities of scientists and the public to collaborate, communicate and implement actions to answer global climate change issues in the South Asia region.

Expected outcomes (by December 2018):
- To identify current/ongoing efforts in global change research and CD in South Asia.
- Establish a partnership network among organizations in South Asia with similar areas of interest as APN (at least 2 organizations from each country).
- Conduct a pilot collaborative activity engaging all partners.
- Assess the collaborative achievement.
- Establish mechanism(s) for partnerships.

Why APN considers collaboration as a key element to APN’s future development?
1. Increasing demands of collaborative research and capacity development activities cannot be met with the limited resources of APN.
2. There are organizations based in South Asia that have similar areas of interest as APN. Short-term initiatives from such organizations cannot be sustained in the long-term due to lack of resources.
3. Collaboration helps to provide effective results that are beyond individual efforts.
4. Build a stronger relationship among stakeholders.
5. Some organizations are experienced and equipped with resources and therefore could help APN in improving the outcomes of APN activities.
6. Greater visibility of APN activities.
7. Effective resource utilization:
   a. Additional financial/in-kind resources through collaborative activities;
   b. Additional resources may be available in addition to APN resources for SRC through partnership activities.

What are the values and resources that APN can offer to the SA sub-regional level via the SA-SRC?
- Experience in coordinating and facilitating regional activities.
- Additional financial resources as indicated in 7.b. above.
- An open funding scheme for regional research and capacity development projects in which partners can invest and receive recognition.
- Co-organise science-policy dialogues, young scientists training workshops and synthesis workshops.
- Experience of members (SPG/nFP).
- Data and knowledge from APN funded projects.
- Assistance in reaching to the wider community in the Asia-Pacific region and beyond.
- Data sharing through the APN website (such as E-Library project page).
- Friends of the APN forum (open forum to share information).

What are the limitations?
1. Time of members and commitments for collaboration.
2. Lack of sufficient financial resources.
3. Mechanism for regular communication.
4. No direct contacts with stakeholders.
5. Limited time for the Secretariat to facilitate.

The next page provides the work plan/timeline for implementation.
Work Plan (Timeline for Implementation)

- **Stage I (COMPLETED)**
  - Identify organisations that share similar interests with APN
  - Shortlist those organisations who have compatible programme goals with APN

- **Stage II**
  - Identify a collaborative plan that can be offered to potential partners - at the 21st IGM SA-SRC Committee Meeting (April 2016)
  - Send a collaboration invitation letter and request a meeting (via Skype or teleconference)
  - SRC members individually talk to organisations that are based in their respective countries and invite them to consider partnership (May – September 2016) (Skype, teleconference meeting, face to face meeting)

- **Stage III**
  - Invite the selected partners to the 7th SA-SRC Meeting (before October 2016)
  - During the Meeting, partners are invited to share their collaborative plan and identify potential collaborative activities that can be undertaken by partners and APN as well as available resources

- **Stage IV**
  - SA-SRC develops pilot project plan based on discussions to date
  - Share with potential partners identified at Stage III for their feedback and modification
  - Secure financial resources from partners (September 2016 – April 2017)
  - SA-SRC Committee presents the collaborative partnership plan to the 22nd IGM for approval

**Stage V**
- First collaborative activity after April 2017

- **Stage VI**
  - Assess collaborative achievement
  - Establish mechanism for partnerships with APN (alliance partners)

Estimated budget requested for SRC Meeting and partnership workshop 35,000 USD (30,000 USD from APN and 5,000 from member countries)
**Item 4: 7th SA-SRC Meeting and South Asia Regional PDTW 2016**

**Objectives:**
- Identify possible host country for the 7th SA-SRC and annual PDTW.
- Tentative time line for the meeting and workshop.
- Identify focus area of the PDTW in line with SA-SRC regional priorities for 2016-2017.

**Background information:**

**SRC**
- Pakistan expressed their willingness to host the 7th SA-SRC Meeting at the 20th IGM. However, due to unexpected circumstance the meeting was postponed.
- SA-SRCom Meeting to be conducted back-to-back with PDTW.
- If the collaborative plan (discussed under Item 3) is successfully agreed among the SRC members, members may consider holding a stakeholder’s workshop as back-to-back event with the above Meeting and PDTW.

**Annual Proposal Development Training Workshop (PDTW)**

- Preparation time for PDTW requires at least 4 months to select the participants through an open call. Based on the host country’s visa procedures, it may take up to 5 months for preparation.
- The deadline of APN annual call for summary proposals is mid August 2016.
- Target participation will be 22 young scientists and 2 or 3 project leaders together with SPG members, members may consider holding a stakeholder’s workshop as back-to-back event with the above Meeting and PDTW.
- Financial and in kind contribution for SRC and PDTW
  - Can funds be leveraged from SA countries?
  - Can in-kind contributions be considered? Expected participation is 40-45 people, therefore a stronger logistical participation is required.
  - Can members pay their own airfares? If the members can cover their own expenses, APN will be able to increase support to young scientists.

**List of Countries that have hosted SA-SRC meetings to date:**

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Host Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st SA-SRC Meeting</td>
<td>July 2009, Colombo, Sri Lanka</td>
</tr>
<tr>
<td>2nd SA-SRC Meeting</td>
<td>November 2010, Pune, India</td>
</tr>
<tr>
<td>3rd SA-SRC Meeting</td>
<td>January 2012, Paro, Bhutan</td>
</tr>
<tr>
<td>4th SA-SRC Meeting</td>
<td>January 2013, Kathmandu, Nepal</td>
</tr>
<tr>
<td>5th SA-SRC Meeting</td>
<td>October 2013, Wattala, Sri Lanka</td>
</tr>
<tr>
<td>6th SA-SRC Meeting</td>
<td>January 2015, Thimphu, Bhutan</td>
</tr>
</tbody>
</table>
**Item 5: Other Matters**

1. **Identify SA-SRC regional priorities for 2016-2017**

SRC committees’ mandate is to discuss and highlight scientific research, capacity development and other needs of the sub-region and recommend actions to the IGM to address those needs. Members discussed regional priorities as agenda items at the parallel session of the IGM since it was formally established under the APN Framework Document. Identified priorities have been integrated into the areas of interest of APN annual call for proposals.

Members identified research and capacity development activities related to Sustainable Development Goals (SDGs) as priorities topics in 2015-2016.

2. **SRC Item paper for Framework Document and SC Election**

**Purpose:** To discuss suggested amendments to the Framework Document that are related to SRC and regional balance (Refer to IGM Item 3 on the APN Framework Document)

1. It was suggested to add sub point V under the SRC procedure. (Lines 27-29, page 13)

   V. The SRC Chairs in consultation with their members shall prepare the agenda for the meetings. The secretariat will provide technical support.

2. Nominate new nFP member(s) for the APN Steering Committee and to represent SC until the next SC election, which will be conducted at the 22nd IGM
   - Two SC members presently serves as observers to the SC due to nFP changes. During the present IGM, two members will be elected for a one year term.
   - Mr. Sabar Ginting, nFP Indonesia, was elected as a SC member at the 20th IGM to represent SEA region. As he is no longer serving as nFP of Indonesia, Dr. Henry Bastaman is representing as observer to the SC.
   - Mr. Muhammad Irfan Tariq is serving as an observer to the present Steering Committee as Mr. Sajjad Ahmad, nFP Pakistan, resigned from the position.

**SA countries that served in APN Steering Committee from 2010 to 2015**

- **Bhutan**
  - 2013 Mr. Karma as an elected member of SC from 18th IGM
  - 2014 Ms. Tshering elected as a member of SC and continues to serve in the SC
  - 2015 Ms. Tshering was elected as the chair of the SC at the 20th IGM and will continue her term until the 22nd IGM

- **Nepal**
  - 2013 Mr. Duwadee was as an elected member of SC from at the 18th IGM
  - 2015 Mr. Thappa was as a member of the host country of 20th IGM
1. Identify SA-SRC regional priorities for 2016-2017

SRC committees’ mandate is to discuss and highlight research, capacity development and other needs of the sub-region and recommend actions to the IGM to address those needs. Members discussed regional priorities as agenda items at the parallel session of the IGM since it was formally established under the APN Framework Document. Identified priorities have been integrated into the areas of interest of APN annual call for proposals.

2. SRC Item paper for Framework Document and SC Election

Purpose:
To discuss suggested amendments to the Framework Document that are related to SRC and regional balance (Refer to IGM Item 3 on the APN Framework Document)

1. It was suggested to add sub point V under the SRC procedure (Lines 27-29, page 13)

V. The SRC Chairs in consultation with their members shall prepare the agenda for the meetings. The secretariat will provide technical support.

2. Nominate new nFP member(s) for the APN Steering Committee and to represent SC until the next SC election, which will be conducted at the 22nd IGM.

Two SC members presently serve as observers to the SC due to nFP changes. During the present IGM, two members will be elected for a one year term.

- Mr. Sabar Ginting, nFP Indonesia, was elected as a SC member at the 20th IGM to represent SEA region. As he is no longer serving as nFP of Indonesia, Dr. Henry Bastaman is representing as observer to the SC.

- Mr. Muhammad Irfan Tariq is serving as an observer to the present Steering Committee as Mr. Sajjad Ahmad, nFP Pakistan, resigned from the position.

SA countries that served in APN Steering Committee from 2010 to 2015

- Pakistan
  - 2015 Mr. Ahmad was elected as a member of SC at the 20th IGM
  - 2015 Mr. Tariq is presently serving as an observer to the SC until 21st IGM

- Sri Lanka
  - 2010 Mr. Samarathunga served on the SC as member of host country of the 16th IGM
  - 2011 Mr. Samarathunga was elected as SC member at the 16th IGM
  - 2012 Mr. Basnayake as a co-opted member to SC until SC election
  - 2013 Mr. Basnayake was re-elected as a SC member at the 18th IGM and served as the Chair from 2013 to 2014.

3. If time allows SRC members may consider other suggested amendments to the Framework Document that will then be discussed under Item 7 of the IGM.
APN Southeast Asia Sub-Regional Committee Meeting  
20 April 2016, Zhengzhou, China  
(Narcissus Hall: 13:00-14:30)

Draft Agenda  
A RAPPORTEUR for the Meeting & PRESENTER of the outcomes to the IGM is to be assigned by the SRC Members  
(APN Secretariat is not available to take minutes or make a report for the IGM)

13:00-13:02  Welcome Remarks and Brief Introduction  
(2 min) Mr. Henry Bastaman, nFP of Indonesia and Chair of 2015/2016 Southeast Asia Sub-Regional Committee will provide remarks and give a short introduction to the meeting.

13:02-13:07  Self-Introduction and Election of Officers  
(5 min) Mr. Henry Bastaman, will facilitate the election of a Chair and Vice Chair of the SEA-SRCom for 2016/2017 (a one year term). The elected Chair and Vice Chair will preside over the Sub-Regional Committee Meeting.

13:07-13:10  Item 1. Adoption of the Draft Agenda  
(3 min) The elected Chair of the Meeting will seek adoption of the agenda. Items of Any Other Business (AOB) may be raised.

13:10-13:25  Item 2. Review of the action points of 8th SEA-SRC Meeting  
(15 min) Refer to action points document [IGM-SPG/21/04-02: SEA-SRCom 02 -Action points]

(10 min) Dr. Erna Sri Adiningsih will share the outcome of the kick-off meeting and training workshop under the CAPaBLE programme. Further discussion will ensue on second year activities.

13:35-13:45  Item 4. ASEAN collaboration  
(10 min) Brief discussion on ASEAN engagement with APN, with more information should ASEAN representative be able to join the meeting.

13:45-13:55  Item 5. APN 20th Anniversary Celebration Activities  
(10 min) SEA member will share the progress of celebration of activities at the country level that conducted by the members. Outputs to be shared at the IGM.

13:55-14:20  Item 6. Future Plans/Activities  
(25 min) Tentative plans will be made for future events. The discussion should be guided by the following:  
– Myanmar engagement  
– Identify SEA-SRC regional priorities for the 2016-2017  
– Updates on MRI activities (if any)  
– SC members election (nominating one or two members from SEA to serve in SC for next two years term)  
– Suggested amendment to APN Framework Document  
– 9th SEA-SRC meeting  
– Any Other Business (AOB)

14:20-14:30  Closing and Final Remarks  
(10 min) The Chair will deliver the concluding remarks and all participants will have a group photograph taken.
Item 2: 8th SEA-SRC Meeting Action Points

Committee member of Southeast Asia Sub-Regional Committee for 2015/2016

- Chair of the SEA-SRC: nFP of Indonesia (Mr. Sabar Ginting served as the chair of the Committee until January 2016 and Dr. Henry Bastaman serving as the chair of the Committee from 8 January 2016)
- Vice Chair of the SEA-SEC: SPG of Philippines (Dr. Henry Adornado)

The 8th SEA-SRC Committee Meeting was held in Bogor, Indonesia on 7-8 September 2015. Following list indicates action points and update status of the action points.

1. Enhancing Collaborative Activities with ASEAN network

Actions: APN Secretariat will invite ASEAN Secretariat representative to attend the 21st IGM on their own cost.

Update: With help from Dr. Erna Adiningsih, APN sent an invitation to the ASEAN secretariat to attend the 21st IGM.

2. Update on Myanmar engagement in APN and SEA-SRC activities

Actions: Dr. Adiningsih and Dr. Boonjawat will coordinate to invite participants from Myanmar to the 2nd CAPaBLE Training of Trainers if the continuation of project funding is approved.

Update:
- Continue the communication with Ms. Khin Cho cho Shein, an identified contact point of the Ministry of Environmental Conservation and Forestry of Myanmar.

3. Mountain Research Initiative in Southeast Asia

Action: Dr. Nguyen The Hung, nFP alternate of Viet Nam will continue to correspond with MRI.

Update:
- Dr. Nguyen The Hung held discussions with possible Vietnam partners and agreed to establishing the South East Asia Network for Mountain Research Initiatives.
- Dr. Linda Anne Stevenson, together with Dr. Juan Pulhin submitted a pre-proposal to MRI to hold a synthesis workshop in February 2017 as a preliminary activity to establish an SEA Network for MRI. The pre-proposal results will be announced in October 2016.

4. APN 20th Anniversary Celebration Activities

Action: SEA-SRC members will share an update at the SRC parallel session and report to the IGM.

Update: Discussion will continue at the 21st IGM Sub-Regional parallel session.

5. Update of on SEA Project on “Building Capacity for Urban Climate Change Adaptation in Southeast Asia”

Action: Dr. Adiningsih in collaboration with Dr. Jariya Boonjawat and Dr. Ngo Kim Chi will prepare and
conducted the training of CAPaBLE project in Indonesia.

**Update:** The kick-off meeting and training workshop “training of trainers in urban climate adaptation in the SEA” was carried out and attended by 27 trainees and 16 trainers.

### 6. Other Sub-regional Activities

**Action:** nFP and SPG member for the Philippines, with the assistance from the APN Secretariat will organise the Media Visit on January 2016.

**Update:** The SEA media visit was rescinded due to lack of submission from SEA media representatives. The event will continue in Sri Lanka on July 2016.

### 7. The 9th APN SEA-SRC Meeting

**Action:** SEA-SRC members will discuss further at the committee Meeting during the 21st IGM to decide the host of the 9th SEA-SRC Meeting.

**Update:** Discussion will continue at the 21st IGM sub-regional parallel session.
Item 3: Update of SEA Project

Dr. Erna Sri Adiningringsih will provide information on the progress of CAPaBLE project “Building Capacity for Urban Climate Change Adaptation in Southeast Asia Region”

- Brief outcome of the kick off meeting and first training for the trainers workshop
- Future activities under the CAPaBLE projects

Item 4: ASEAN collaboration

Present discussion session is a continuation of the discussion from last discussion that was held at the 8th SEA-SRC Meeting.

IMPORTANT POINTS

SEA Committee has been discussing about the ASEAN collaborative activities since 6th SEA-SRC Meeting, but the Committee has been unable to make progress. Thus, it is a request to members to evaluate the process and identify the weakness of the approach, and explore new approaches to establish communication with ASEAN.

Present discussions should focus on following questions and identify answers

1. How can we successfully establish a communication channel with ASEAN?
2. What are similar areas of interest that exist between ASEAN and APN where there may be possibilities for potential collaboration?
3. What kind of activities can be implemented if an APN and ASEAN partnership is established?
4. What are the potential benefits from the collaboration of APN and ASEAN?
5. If the SEA-SRC suggests a proposal or activity to ASEAN, whom do we need to contact? (such as Secretariat, working group, ASEAN Standing Committee, ASEAN Committee of Permanent Representative)

Item 5: APN 20th Anniversary Celebration Activities

SEA members are requested to share the progress of 20th APN anniversary celebration activities that have been conducted at the country level by SRC members to promote APN activities.
Item 6. Future Plans/Activities

1. Myanmar Engagement
APN Secretariat continues to communicate with Ms. Shein on possible Myanmar engagement. Ms. Shein shared contact information of the Environmental Conversation Department, Ministry of Environmental Conservation and Forestry of Myanmar, and has requested APN to send an official letter explaining country membership of APN. APN Secretariat sent an official letter and supporting documents to the Department of Meteorology and Hydrology and the Ministry of Environmental Conservation and Forestry on 9 March 2016. The EMS delivery record indicates that the documents were delivered on 16 March 2016.

2. Identify SEA-SRC Regional priorities for 2016-2017
SRC Committees mandate is to discuss scientific research, capacity development and other needs of the sub-region and recommend actions to the IGM to address those needs. Members discussed regional priorities as agenda items at the parallel session of the IGM since it was formally established under the APN Framework Document. Identified priority areas have been integrated into areas of interest in APN annual call for proposals.

Members identified renewable energy and water security as the SEA research priorities in 2015-2016.

3. SRC Item paper for Framework Document and SC Election

Purpose:
To discuss suggested amendments to the Framework Document that are related to SRC and regional balance (Refer to Item 3 of the IGM - APN Framework Document).

1. It was suggested to add sub point V under the SRC procedure (Page 13, Line 27 to 29).

V. The SRC Chairs in consultation with their members will prepare the agenda for the meetings. The secretariat will provide technical support.

2. Nominate new nFP member/s to APN Steering Committee (SC) and to represent SEA region until next SC election which will be held at the 22th IGM.
   - Two SC members presently serves as observers to the SC due to nFP changes. During the present IGM, two members will be elected for one-year term.
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SEA countries that served in APN Steering Committee from 2010 to 2015:
   - Malaysia
1. Myanmar Engagement

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- Mr. Muhammad Irfan Tariq serving as observer to the present SC as Mr. Sajjad Ahmad, nFP Pakistan, resigned from the position.

SEA countries that served in APN Steering Committee from 2010 to 2015:

- Malaysia
  - 2010: Mr. Kok Seng Yap as elected member.
- Cambodia
  - 2011 & 2012: Mr. Sundara Sem as elected member.
  - 2013: Mr. Sundara Sem as member of the host of the 19th IGM.
- Indonesia
  - 2011: Ms. Liana Bratasina as member of the host of the 17th IGM.
  - 2012 & 2013: Ms. Hermien Rosita as elected member.
  - 2014 & 2015: Mr. Sabar Ginting as elected member.

3. If time allows the SRC members may consider other suggested amendments.

4. 9th SEA-SRC Meeting

Discussion at the 8th SEA-SRC, members suggested holding the 9th SEA-SRC Meeting back-to-back with training events of the CAPaBLE project. Thailand or Viet Nam will be the potential host of the 9th SEA-SRC Meeting.

Discussion:

- Confirm the host country;
- Tentative day of the meeting;
- Objectives and focus areas of the meeting.
APN Temperate East Asia Sub-Regional Committee Meeting  
20 April 2016, Zhengzhou, China  

(Magnolia Hall: 13:00-14:30)

A RAPPORTEUR for the Meeting and PRESENTER of the outcomes to the IGM is to be assigned by the SRC Members (APN Secretariat is not available to take minutes or make a report for the IGM)

Draft Agenda

13:00-13:05 Welcome Remarks and Brief Introduction  
(5 min) Dr. Tsogtbaatar Jamsran, Chair of the Temperate East Asia Sub-Regional Committee will provide remarks and give a short introduction.

13:05-13:10 Self-Introduction and Election of Officers  
(5 min) Dr. Tsogtbaatar Jamsran will facilitate the election of a Chair and Vice Chair of the TEA-SRC for 2016/2017 and the elected Chair and Vice Chair will preside over the Sub-Regional Committee Meeting.  
(n.b. At the first TEA meeting in Mongolia, it was suggested that Chair be Prof. Wenjie Dong and Vice-Chair be Dr. Soojeong Myeong.)

13:10-13:15 Item 1. Adoption of the Draft Agenda  
(5 min) The elected Chair of the Meeting will seek adoption of the agenda. Items of Any Other Business (AOB) may be raised.

13:15-13:20 Item 2. Review of the action points of 1st TEA-SRC Meeting  
(5 min) Please refer to document number IGM-SPG/20/04: TEA-SRCom 02.

(15 min) Members will identify outcomes from the TEA activities to present to the IGM.

13:35-14:20 Item 4. Future Plans/Activities  
(45 min) Tentative plans will be made for future events. The discussion should be guided by the following:  
— SRC proposal on capacity building activity targeting young scientists in the TEA region.  
— Collaborative opportunities in the TEA region.  
— Next TEA Sub-Regional Cooperation Meeting: identify host, venue, data and focus areas. Note- It was informed by CLVAR Secretariat that the stakeholders’ meeting was cancelled.  
— 2016/2017 Sub regional activities.  
— Any Other Business(AOB).

14:20-14:30 Closing and Final Remarks  
(10 min) The Chair will deliver concluding remarks and all participants will have a group photograph taken.
Item 2. Review of the action points of 1st TEA-SRC Meeting

Committee members of Temperate East Asia Sub-Regional Committee for 2015/2016
- Chair of the TEA-SRC: SPG of Mongolia (Dr. Tsogtbaatar Jamsran)
- Vice Chair of the TEA-SEC: SPG of Japan (Dr. Kensuke Fukushi)

The first TEA-SRC Committee meeting was held in Ulaanbaatar, Mongolia on 4 November 2015.

The following list indicates action points and update of the status of action points.

1. APN 3rd Science-Policy Dialogue

**Actions:** The Secretariat would provide an initial draft of the Science-Policy Dialogue brief and share with members of the TEA-SRC.

**Updates:** First draft of the dialogue proceeding and brief was shared with Mongolian nFP and SPG members on 8 February 2016 for their comments and suggestions. After receiving comments and suggestions from the nFP of Mongolia, reports were distributed among dialogue participants. Electronic copies of the proceeding and policy brief are available at the APN website: http://www.apn-gcr.org/resources/items/show/2032

The printed copy of the brief has been distributed together with the IGM package.

2. Sub-Regional Committee and Cooperation Activities in 4th Strategic Phase and the year ahead

**A. Actions:** Include an item paper for the next IGM on the proposal success rate of PDTW.

**Updates:** Summary of PDTW proposal success will be presented under Item 2.1 “2015 APN activities and Action Points” of the IGM.

**B. Actions:** Considering the research interest from China and geographical distribution, the TEA-SRC suggested to invite young scientists from Henan province to the IGM poster session.

**Updates:** Special session focusing on Henan scientists will take place in the afternoon of 20 April 2016 under Interactive Session II.

**C. Actions:** nFP for Mongolia may formulate a proposal on capacity building activity targeting young scientists in the TEA region.

**D. Actions:** Explore possible collaborative opportunities in the TEA region to partner with TEA Committee. Members highlighted Europe Horizon 2020 and Future Earth as possible collaborators.
E. **Actions:** Ministry of Environment of Japan will share updates on their initiative on collaborative research and co-financing within member countries.

**Updates:** Further discussion on action points: 2-C, 2-D and 2-E will continue under Item 4.

### 3. The 2nd APN TEA-SRC Meeting

A. **Actions:** The 2nd TEA-SRC Meeting was planned to be held back-to-back with the stakeholder forum of CLIVAR.

**Updates:** Stakeholder forum of CLIVAR was cancelled. Therefore, TEA-SRC is required to decide the host/venue of the 2nd TEA-SRC Meeting.

B. **Actions:** Prof. Wenjie Dong and Dr. Soojeong Myeong were identified as possible Chair and Vice-Chair of the TEA-SRC Committee for FY 2016. Further discussion will be made under Item 4.
Chairperson’s Summary

1. Opening, Introduction and Adoption of the Agenda
Mr. Bayarbat Dashzeveg, APN national Focal Point (nFP) for Mongolia welcomed all participants to the meeting. He noted that this was the first formal Temperate East Asia-Sub-Regional Committee (TEA-SRC) Meeting being convened in Ulaanbaatar, Mongolia. Dr. Tsogtbaatar Jamsran, APN SPG Member for Mongolia and Chair of the TEA-SRC welcomed everyone to Ulaanbaatar and expressed his appreciation to all members who were able to take time out of their schedules to attend.

Members of the Temperate East Asia Sub-Regional Cooperation Committee (TEA-SRC) introduced themselves and the participants were reminded that Dr. Tsogtbaatar Jamsran and Dr. Kensuke Fukushi were appointed Chair and Vice-Chair, respectively, at the 20th IGM SRC meeting (2015). Members and observers then introduced themselves. All participants are listed in the Participants’ List, available as Appendix One.

The Chair of the TEA-SRC sought adoption of the agenda, which was adopted by consensus. As items of Any Other Business (AOB), Dr. Fukushi noted that it may be better to discuss the succeeding Chair and Vice-Chair of the Temperate East Asia Sub-Committee for 2016/17 under Item 6. This was accepted by all.

2. Review of the action points of SRC session at the 20th IGM and related to TEA-SRC activities
The Vice-Chair, Dr. Fukushi, presented the highlights of the TEA-SRC parallel session held during the 20th IGM. He explained the background of the TEA-SRC starting with a proposal to discuss the formation of a TEA SRC at the 17th IGM held in Indonesia in 2012. At the 18th IGM, the TEA working group identified biodiversity and ecosystems change as a common and important issue and, at that time, suggested that they could write a proposal for the sub-region by having a training workshop that would focus on developing a proposal for submission to the APN. Unfortunately, this did not materialise due to lack of time. However, it was agreed to have three activities back to back in Mongolia: the 3rd APN Science-Policy Dialogue (SPD), the First TEA-SRC Meeting and the annual Proposal Development Training Workshop (PDTW) in November, 2015.

Prof. Wenjie Dong, SPG member for China, noted that although the TEA-SRC is new, it has already accomplished many activities thanks to the APN Secretariat and all Members. This included, too, a TEA Scoping Meeting and PDTW in Vladivostok, Russia, in January 2013.

3. Objectives of the TEA-SRC Meeting
Ms. Taniya Koswatta, Coordinator at the APN Secretariat, briefly explained the background of APN Sub-Regional Cooperation and the specific objectives of the 1st TEA-SRC Meeting. She also explained that a scoping meeting to discuss the possible formation of a TEA-SRC Committee was held in
Vladivostok, Russia; 25-26 February 2013 and, as a result, the TEA-SRC Committee was established at the 18th IGM of the same year.

Thanking all members for their cooperation, she noted the following points for discussion:
- Writing a good report from the Science-Policy Dialogue and a dissemination plan.
- Brainstorming cooperation among countries and ways to strengthen not only collaboration among countries but the funding base of APN as well.
- Activities for the year ahead (from 2015 to 2016 and beyond).
- Holding the 21st IGM in China and preparing for a TEA-SRC Committee meeting
- Improving TEA cooperation, communication and collaboration.

Dr. Alexander Sterin, APN SPG Member for Russia, asked about the PDTW and whether there would be an opportunity for the young scientists to actually develop real proposals for submission to the APN.

Dr. Fukushi responded and expressed his opinion and optimism that the young scientists were not only very keen and willing to develop proposals for submission to the APN, but they appear very well prepared and very communicative.

Dr. Sterin mentioned that having a Science-Policy Dialogue that effectively includes policy makers in Temperate East Asia, at least in Russia, is very difficult. He expressed his opinion that this may not change in the next year or two because of the internal structure of Government in Russia.

Prof. Dong noted that the next IGM will be in Henan province and noted that there will be a Sub-Regional Meeting at the IGM as well. We would be able to invite some policy makers as the Department of Science and Technology is located there and international meetings are usually held there. It would be a good opportunity to invite policy makers there.

4. **APN 3rd Science-Policy Dialogue**

Dr. Linda Anne Stevenson, Division Head of Science and Communication, APN Secretariat, presented a brief overview of the outcomes of the 3rd Temperate East Asia Science-Policy Dialogue. She highlighted eight main outcomes of the discussion, which are outlined below:

i. Enhanced communications between policy and science. We need to do this via simple language and local language as well

ii. Young scientists are the future for communications

iii. Media could be a good way to narrow the gap between the science and policy communities

iv. Social media is becoming more and more important as a communication tool

v. Cooperation at the regional level is becoming more and more important

vi. Traditional knowledge is crucial in decision making and we need to make sure that this knowledge is preserved

vii. Capacity building is needed for policy makers, scientists and society to be able to understand one another better

viii. Co-designing, co-production and action-oriented regional research is very important at local, national and regional levels
A short discussion ensued on members’ expectations and the output from the dialogue. All members agreed that the dialogue was a positive and active event. The uniqueness of the activity, with three rotating kiosks, games and rapid talk sessions added to the success of the dialogue and kept all participants actively engaged.

On the outputs, it was agreed that the Secretariat would provide an initial draft of a Science-Policy Dialogue brief and share with the members of the TEA-SRC. Following feedback and input from TEA-SRC members, the policy brief will be finalised and published in time for the 21st IGM to be held in China in April, 2016.

Dr. Stevenson noted, too, that there would be a synthesis of all three dialogues in SEA, SA and TEA, sometime in 2016. More information would be provided at the IGM in China.

5. Sub-Regional Committee and Cooperation Activities in 4th Strategic Phase and the year ahead

Members discussed their future ideas and goals to be accomplished according to the activities and goals outlined in the 4th Strategic Plan (2015-2020). Members were asked to consider the following points:

- Identifying TEA activities for the next year;
- Identifying possible collaborative partners that could also provide co-funding;
- Identifying potential partnership activities that would be mutually beneficial for APN and, at the same time, enhance regional activities in TEA while addressing APN goals.

Ms. Koswatta talked about uniqueness of South Asia and Southeast Asia regions in developing proposals with the former together with young scientists and the latter among Committee members. She noted their success in receiving funding from the APN.

Dr. Sterin expressed his thoughts that at the next IGM there should be an item on proposal success of the PDTW. He noted the need to activate activities in the sub-region. He also said that the TEA-SRC should share the success stories of the young scientists in terms of their eagerness to cooperate and collaborate.

Mr. Bayarbat said that he will try and finalise one proposal on capacity building of young scientists and that the TEA-SRC needs to think about the future development of successful proposals.

Dr. Jamsran also noted that successful partners in TEA are needed and that the TEA-SRC needs to think about this.

Dr. Sterin mentioned the European Commission initiative called Horizon 2020 and that their themes are closely linked to those of the APN. There may be an opportunity for collaborative work.

Dr. Kumamaru noted that the Ministry of Environment of Japan is extending
collaborative research and co-financing within the APN, particularly for capacity building and research in global change. We hope to be able to share some information on this in the future, he said.

In terms of partners in China, Prof. Deng noted that there is a chance to have some institutions to attend the next IGM and that he will discuss with the national Focal Point, Dr. Sun.

Dr. Stevenson shared information about a Stakeholder Forum that is being organised during the CLIVAR Open Science Conference in Qingdao in September 2016 and offered a suggestion in that the 2nd TEA-SRC Meeting could be held in China and, therefore, be engaged in the Stakeholder Forum as well. She noted that CLIVAR is very keen to partner with APN for this Forum, particularly in its organisation. Members were agreeable to this suggestion, but it would depend on availability of funding for sub-regional activities in 2016.

On topics for the Stakeholder Forum, members suggested that we should expand the topics to include Water systems and biodiversity and asked whether CLIVAR would agree to this. Dr. Fukushi noted that Future Earth may have some funds to contribute to the next TEA-SRC Meeting if we have it back-to-back with the CLIVAR Stakeholder Forum.

For the Poster Session at the 21st IGM, Dr. Sterin asked whether it would be possible to invite young scientists just from institutions in Henan Province due to the size of China and the large number of scientists. Prof. Dong noted that there are two universities and, in addition, there are some yellow river institutions.

Ms. Koswatta raised the issue of the Republic of Korea and New Zealand and whether they can contribute additional financial support to the APN. The nFP alternate for the Republic of Korea could not say at this moment but stressed that she would discuss with the national Focal Point of the Republic of Korea. Information was also shared that the Director of the APN Secretariat will pay a courtesy visit to the Ministry of Environment of Republic of Korea after the 21st IGM. In the context of financing, Dr. Fukushi explained a little about the co-financing mechanism that the University of Tokyo has with the APN.

6. The 2nd APN TEA-SRC Meeting & Any Other Business
For the next TEA-SRC Meeting, Members were asked to consider the following:

- Host country/institution
  - Members agreed that they could have the next TEA-SRC Meeting in China and Dr. Stevenson said that she will share the CLIVAR concept paper with the Members.
- Date/Venue
  - If the event is in Qingdao, then the timing would be mid-September. However, it was stressed again that the meeting itself, as well as engagement in a Stakeholder Forum would depend on funding availability.
- Objective(s) and expected outcome(s)
  - It was agreed that the objectives and expected outcomes would be discussed at the next meeting to be held at the 21st IGM.
• A short discussion on the report for the next IGM and issues that the TEA-SRC would like to discuss during the SRCom
  – Members agreed that the most important issues to share at the IGM are the results of the Science-Policy Dialogue and the Proposal Development Training Workshop. The Chair and Vice Chair agreed to draft a report for the IGM and circulate among the TEA-SRC members.
  – The TEA-SRC then discussed the next Chair and Vice Chair of the TEA-SRC. After some discussion, it was agreed by acclamation that Prof. Wenjie Dong would be Chair and Dr. Soojeong Myeong will potentially be Vice-Chair.

7. Final Remarks and Closing
The Chair, Dr. Jamsran delivered his concluding remarks stressing that the events so far had been very successful. He thanked all members for their active participation and dedication to expanding cooperation and collaboration in Temperate East Asia. The Meeting adjourned with a group photograph.
Item 3: Outcome of TEA-SPD/TEA-SRC/ PDTW

Objective of the discussion: Evaluate the outcomes of the 3rd APN Science-Policy Dialogue and identify important outcomes to present to the IGM

Main points to discuss:
- Identify main outcomes of the SPD
- Draft presentation is provided as appendix 1 and members are requested to have close look and identify a presenter to present the outcomes to the IGM
- Committee feedback on structure and product of the SPD

Additional information can access from following links:
Electronic copies of proceeding and policy brief are available in APN website: [http://www.apn-gcr.org/resources/items/show/2032](http://www.apn-gcr.org/resources/items/show/2032)

The printed copy of the brief has been distributed together with IGM package.
**Item 4: Future Plans/Activities**

1. **Develop a SRC proposal on capacity development to enhance the capacity of young scientists in Temperate East Asia region**
   During the 1st TEA-SRC Meeting, nFP of Mongolia expressed his willingness to formulate a proposal on capacity building activity targeting young scientists in the TEA region. If members are interested to conduct a capacity development activity, the discussion should focus on following points:
   a. Target area of capacity development
   b. Type of activity (e.g. similar activity to proposal development training workshop)
   c. Focused countries (lack of active collaboration of Mongolia, South Korea and Russia based on ongoing projects in TEA region)
   d. Selection of collaborators and partners
   e. Developing a proposal for APN

2. **Collaborative opportunities in the TEA region**
   1st TEA-SRC Meeting emphasised the importance of engaging possible partners with TEA Committee activities. Members highlighted Europe Horizon 2020 and Future Earth as potential collaboration partners of APN.
   a. Members are requested to brainstorm possible collaborative opportunities and approaches under this topic
   b. Ministry of Environment of Japan may share updates on their initiative on collaborative research and co-financing within the APN member countries.

3. **Next TEA Sub-Regional Cooperation Meeting: identify host, venue, date and focus areas**
   The CLVAR Secretariat informed APN that the stakeholders’ meeting was cancelled. Members are therefore requested to identify a new host, venue and focus area for the Meeting.

4. **Identify TEA-SRC Regional priorities for 2016-2017**
   - The SRC is mandated to discuss the scientific research, capacity development and other needs of the sub-region and recommend actions to IGM to address those needs. Members discussed regional priorities as agenda items at the parallel session of the IGM since it was formally established under the APN Framework Document. Identified priorities areas have been integrated into area of interest of APN annual call.
   - Members identified Land Use and Climate Change as the TEA research priorities in 2015-2016.

5. **Any Other Business (AOB)**
   Nil.
Item 5-1: Core Programmes and Science Frameworks

The IGM is asked to consider and discuss the Core Programmes and Science Frameworks of APN. Note that recommendations for funding new and continuing projects under the ARCP and CAPaBLE Core Programmes, and the Climate Adaptation Framework (CAF), will be considered on Day 2 under Items 9 and 10, respectively.

CORE PROGRAMMES

Annual Regional Call for Research Proposals (ARCP) Programme

During the fiscal year 2015, APN managed 13 Continuing Multi-Year (CMY) Projects. The status of these activities, and the awards allocated to them is attached as IGMSPG/21/05-01-Appendix1. Two ARCP projects are continuing to the third year and for this reason, progress reports were submitted for funding continuation of the third year. The progress reports are being reviewed by the SPG Sub-Committee and the SPG, and recommendations for continued funding will be made under Item 9 of the 21st IGM/SPG Meeting.

Collaborative Regional Research Programme (CRRP)

As agreed by 20th IGM, the call for proposal for regional research was launched under the new name, Collaborative Regional Research Programme (CRRP). The 2015 call for proposals under CRRP and CAPaBLE Programme was officially launched on 16 June 2015.

The Secretariat established an online submission system for the summary proposal stage to increase the efficiency of the screening process. An online advisory service was also made for potential proponent to consult with the secretariat about the proposal submission.

Advisory Service

A voluntary component of the calls for proposals to provide advice on the appropriateness of a proposal intended for submission to APN.

Stage 1

Submission of Summary Proposals (or EOI) to the APN Secretariat

Reviewer board (SPG-and CDC) to review and select summary proposals that will proceed to Stage 2.

Stage 2

Successful proponents from Stage 1 submit full proposals

Step 1. Review and ranking by APN internal reviewers and external reviewers

Step 2. Re-scoring by Internal Reviewers based on proponents’ responses to the reviews.

Stage 3

SPG Meeting and CDC to make a recommendation to the IGM based on the suggestion of the SPG-SC.

IGM to approve proposals for funding based of the recommendations of SPG/CDC

The Secretariat received 88 CRRP summary proposals at Stage 1. After reviewal by the SPG, 18 proponents were invited to submit a full proposal, from which only 15 submitted. Two additional proposals were submitted from the awardees of APN seed grant. In total, 17 full proposals are considered for funding recommendation. Please also refer to IGMSPG/21/09-01_CRRP_FP_Summary under Item 9 in your folder for a summary spreadsheet of the full proposals. Similar to the 2014 call for proposals, all full proposals was re-reviewed by the reviewers this year. All proposals also underwent reviews by the external reviewers.
**CAPaBLE Programme**

(a) The 20th IGM approved funding for 8 new projects under CAPaBLE Programme and 1 CMY project. Subsequently, the proponent of the CMY project withdrew, making the total number of projects for funding to 8 in FY2015. (please refer to IGMSPG/21/05-01-Appendix2). Two projects are continuing to the second year in 2016/2017 and the CDC has received the progress report for funding continuation consideration. Recommendation will be discussed under Item 10 of the 21st IGM/SPG Meeting.

(b) The call for proposals for CAPaBLE Programme was launched together with the call for CRRP on 16 June 2015. Proposal submission and review process will follow the procedures of CRRP.

During stage 1, the Secretariat received 56 summary proposals under CAPaBLE Programme. After reviewal by the SPG and CDC, 17 proponents were invited to submit full proposal, from which 16 proponents responded to the invitation.

In total, 16 full proposals are considered for funding recommendation. CDC recommendations for funding will be discussed separately under Item 10 of the 21st IGM/SPG Meeting Agenda. Please also refer to IGMSPG/21/10-01_CAPaBLE_FP_Summary under Item 11 in your folders for a summary spreadsheet of the full proposals.

**FRAMEWORKS**

**Climate Adaptation Framework**

During FY 2015, the Secretariat managed 23 projects under Climate Adaptation Framework (CAF), from which 12 are continuing multi-year projects and 11 are new projects awarded with approval from the 20th IGM. The status of these projects is provided under IGMSPG/21/05-01-Appendix3.

Twelve projects are continuing to second/third year, from which 8 projects have submitted progress reports for consideration. The progress reports for the other four projects will be provided prior to the SC Meeting in autumn. Recommendation for funding continuation will be provided under Item 9 of the 21st IGM/SPG Meeting.
<table>
<thead>
<tr>
<th>Full Proposal*</th>
<th>Project Reference Number</th>
<th>Project Title</th>
<th>Proponents, Institution and Country</th>
<th>Regional Collaborator Countries Involved</th>
<th>Project Duration</th>
<th>2015/2016 Awarded (based on 20th ESP recommendation)</th>
<th>2016/2017 Mortgage</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC2014-04CMY-Miyata</td>
<td>ARCP2015-01CMY-Miyata</td>
<td>Toward CarboAsia: integration and syntheses of terrestrial ecosystem flux data in tropics/subtropics and croplands in Asia by activating regional tower-based observation networks</td>
<td>Dr. Akira Miyata, National Institute for Agro-Environmental Sciences, JAPAN</td>
<td>Japan, Republic of Korea, China, Philippines, Vietnam, Thailand, Malaysia, Indonesia, Bangladesh, India</td>
<td>3 years</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
<td>-</td>
<td>Project is ongoing</td>
</tr>
<tr>
<td>ARC2014-05CMY-Alikun (previously Manton)</td>
<td>ARCP2015-02CMY-Alikun</td>
<td>Coordinated Regional Climate Downscaling Experiment (CORDEX) in Monsoon Asia</td>
<td>Professor Michael Manton, Chair Scientific Steering Committee for Monsoon Asia Integrated Regional Study (MAIRS), Monash University, AUSTRALIA</td>
<td>Australia, India, China, Republic of Korea, Nepal</td>
<td>3 years</td>
<td>4,500 (Retained from 2015/2016 fund)</td>
<td>-</td>
<td>Project is still in 2nd year</td>
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<tr>
<td>ARC2014-06CMY-Li</td>
<td>ARCP2015-03CMY-Li</td>
<td>Assessing Spatiotemporal Variability off NPP, NEP and Carbon Sinks of Global Grassland Ecosystem in respond off Climate Change in 1911-2011</td>
<td>Professor. Jianlong Li, Nanjing University, CHINA</td>
<td>China, Mongolia, Uzbekistan and technical support from USA and Australia</td>
<td>3 years</td>
<td>25,200 (Retained from 2015/2016 fund)</td>
<td>-</td>
<td>Project is ongoing</td>
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<tr>
<td>ARC2014-07CMY-Tangang</td>
<td>ARCP2015-04CMY-Tangang</td>
<td>Southeast Asia Regional Climate Downscaling Project (SEACLID)</td>
<td>Prof. Fredolin Tangang, University Kebangsaan Malaysia, MALAYSIA</td>
<td>Malaysia, Philippines, Indonesia, Thailand, Cambodia, Lao PDR, Vietnam</td>
<td>3 years</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
<td>-</td>
<td>Project is ongoing</td>
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<tr>
<td>ARC2014-14NMY(BaES)-Salmo</td>
<td>ARCP2015-05CMY-Salmo</td>
<td>Influence of Mangrove Biodiversity on Accumulation of Carbon and Resilience to Sea Level Rise: A Comparative Assessment Among Disturbed, Restored and Intact Mangrove Systems</td>
<td>Dr. Severino G. Salmo III, Ateneo de Manila University, Quezon City, PHILIPPINES</td>
<td>Philippines, Malayasia, Singapore, Australia, USA, Indonesia</td>
<td>3 Years</td>
<td>25,000 (Retained from 2014/2015 fund)</td>
<td>20,000</td>
<td>Project is still in its 1st year</td>
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<tr>
<td>ARC2014-15NMY-Wu</td>
<td>ARCP2015-06CMY-Wu</td>
<td>Comparative Analysis of Pollution Sources at the Hangzhou Bay &amp; Megong River Mouths</td>
<td>Professor Japing Wu, Institute of Islands and Coastal Ecosystems, Zhejiang, CHINA</td>
<td>Thailand, Vietnam, Lao PDR, Japan, USA</td>
<td>3 Years</td>
<td>20,000 (Retained from 2014/2015 fund)</td>
<td>45,000</td>
<td>Project is still in its 1st year</td>
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<tr>
<td>ARC2014-16NMY-Babel</td>
<td>ARCP2015-07CMY-Babel</td>
<td>Developing an operational water security index, and its application in selected diverse regions of Asia</td>
<td>Professor Mukand S. Babel, Asian Institute of Technology (Water Engineering and Management); Pathumthani, THAILAND</td>
<td>Thailand, Vietnam, India</td>
<td>2 Years</td>
<td>40,000 (Retained from 2014/2015 fund)</td>
<td>-</td>
<td>Project is still in its 1st year</td>
</tr>
<tr>
<td>ARC2014-17NMY-Dey</td>
<td>ARCP2015-08CMY-Dey</td>
<td>Impacts of Crop Residue Removal for Biomass Energy on Soil Function; Studies to recommend Climate Adaptive Agricultural Waste Management</td>
<td>Dr Dipayan Dey, South Asian Forum in Knowledge, Peradeniya, SRI LANKA</td>
<td>India, Bhutan, The Philippines</td>
<td>2 Years</td>
<td>30,000 (Retained from 2014/2015 fund)</td>
<td>-</td>
<td>Project is ongoing</td>
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<tr>
<td>ARC2014-18NMY-Heath</td>
<td>ARCP2015-09CMY-Heath</td>
<td>Development of an evidence-based climate change adaptation toolkit to help improve community resilience to climate change impacts in Uttarakhand, India</td>
<td>Dr Lance Heath, Australian National University, Climate Change Institute, Canberra, AUSTRALIA</td>
<td>Australia, India, China, Nepal, Bangladesh</td>
<td>2 Years</td>
<td>45,000 (Retained from 2014/2015 fund)</td>
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<tr>
<td>ARC2014-19NMY(BaES)-Liang</td>
<td>ARCP2015-10CMY-Liang</td>
<td>Coastal forest management in the face of global change based on case studies in Japan, Myanmar and the Philippines</td>
<td>Liang Luohui, United Nations University Institute for Sustainability and Peace (UNU-ISP), Tokyo, Japan</td>
<td>Philippines, Myanmar, Japan</td>
<td>2 Years</td>
<td>40,000 (Retained from 2014/2015 fund)</td>
<td>-</td>
<td>Project is ongoing</td>
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<tr>
<td>ARC2014-20NMY-Mishra</td>
<td>ARCP2015-11CMY-Mishra</td>
<td>Climate Change Adaptation through Optimal Stormwater Capture Measures: Towards a New Paradigm for Urban Water Security</td>
<td>Dr. Binaya Kumar Mishra, United Nations University - Institute for Sustainability and Peace (UNU-ISP), Tokyo, Japan</td>
<td>Japan, Thailand, Vietnam, Lao PDR</td>
<td>2 Years</td>
<td>30,000 (Retained from 2014/2015 fund)</td>
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<td>Project is still in its 1st year</td>
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<tr>
<td>ARC2014-21NMY-Sharp</td>
<td>ARCP2015-12CMY-Sharp</td>
<td>Integrated solid waste management system leading to zero waste for sustainable resource utilization in rapid urbanized areas in developing countries</td>
<td>Dr. Alice Sharp, Sirindhorn International Institute of Technology (SIIT), Thammasat University, Pathumthani, THAILAND</td>
<td>Thailand, Bhutan, Vietnam</td>
<td>2 Years</td>
<td>30,000 (Retained from 2014/2015 fund)</td>
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<td>Project is still in its 1st year</td>
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<tr>
<td>ARC2014-22NMY-Zhou</td>
<td>ARCP2015-13CMY-Zhou</td>
<td>Assessment of Climate-Induced Long-term Water Availability in Ganges Basin and Impacts on Energy Security in South Asia</td>
<td>Dr. Xin Zhou, Institute for Global Environmental Strategies (IGES), Hayama, Kanagawa, JAPAN</td>
<td>Bangladesh, India, Nepal</td>
<td>2 Years</td>
<td>35,000 (Retained from 2014/2015 fund)</td>
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<tr>
<td>Proposal Reference Number</td>
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<td>Proposed Title</td>
<td>Proponent, Institution and Country</td>
<td>Email Address</td>
<td>Regional Collaboration Countries involved</td>
<td>Project Duration</td>
<td>2015/2016 Awarded</td>
<td>2016/2017 Expected</td>
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<td>CBA2014-02NMYS-Singhruck</td>
<td>CBA201510CMYS-Singhruck</td>
<td>Strengthening the adaptive capacity of local agricultural communities through the development of seasonal climate prediction system</td>
<td>Dr. Palama Singhruck, Center of Excellence for Climate Change Knowledge Management (CCKKM), Chulalongkorn University, Bangkok, THAILAND</td>
<td><a href="mailto:palama@ckkm.or.th">palama@ckkm.or.th</a>, <a href="mailto:palama.cckkm@chula.ac.th">palama.cckkm@chula.ac.th</a></td>
<td>Thailand</td>
<td>2 Years</td>
<td>27,000 (Retained from 2014/2015 fund)</td>
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<td>CBA2014-FP20-Pushpakumara</td>
<td>CBA201542NMYM-Pushpakumara</td>
<td>Scientific Capacity Development to Strengthened Informed-decision Making for Improved Climate Policy Formulation and Implementation in South Asian Countries</td>
<td>Prof. Gami Pushpakumara, Faculty of Agriculture, University of Peradeniya, Old Galaha Road, Peradeniya, SRI LANKA</td>
<td><a href="mailto:gpushpakumara@pusn.ac.lk">gpushpakumara@pusn.ac.lk</a></td>
<td>Sri Lanka, Bangladesh, Nepal, Bhutan</td>
<td>2 Years</td>
<td>32,000 (Retained from 2015/2016 fund)</td>
<td>32,000 (Retained from 2015/2016 fund)</td>
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<td>CBA2014-21NSG-Adhirghosh</td>
<td>CBA201542NMYM-Adhirghosh</td>
<td>Building Capacity for Urban Climate Change Adaptation in Southeast Asia</td>
<td>Dr. Erna Sri Adhirghosh Remote Sensing Technology and Data Center, Indonesian National Institute of Aeronautics and Space (LAPAN) Jl. Lapang no. 70, Peckyuan, Pasar Rebo, Jakarta 13710, INDONESIA Telephone/Fax: +62-21-8710876/+62-21-8717715</td>
<td><a href="mailto:erin@lapang.go.id">erin@lapang.go.id</a>, <a href="mailto:erin@lapang.go.id">erin@lapang.go.id</a>, <a href="mailto:erin@yahoo.com">erin@yahoo.com</a></td>
<td>Indonesia, Thailand, Viet Nam, Philippines, Cambodia, Laos PDR, Malaysia, USA</td>
<td>2 Years</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
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<td>CBA2014-FP102-Arvat</td>
<td>CBA201542NSY-Arvat</td>
<td>Developing a Training Module to Monitor Forest Cover and Deforestation using Advanced Remote Sensing Techniques under UN-CECAR Framework in support of REDD+ MRV System</td>
<td>Dr. Ram Arvat, UNIJAS53-70, Jangmae 5-chome, Shibuya-kku, Tokyo, 150-8925, JAPAN</td>
<td><a href="mailto:arvat@unu.edu">arvat@unu.edu</a></td>
<td>Japan, Cambodia, Sri Lanka, India</td>
<td>1 Year</td>
<td>40,000 (Retained from 2015/2016 fund)</td>
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<tr>
<td>CBA2014-FP05-Seitzinger</td>
<td>CBA201542NSY-Seitzinger</td>
<td>International Geosphere-Biosphere Programme (IGBP) Landmark Synthesis Event</td>
<td>Dr. Sybila Pulunam Seitzinger International Geosphere-Biosphere Programme (IGBP). The Royal Swedish Academy of Sciences, Lilla Frescativägen 44, Box 50005, SE-104 05, Stockholm, SWEDEN</td>
<td><a href="mailto:seitzinger@igbp.kva.se">seitzinger@igbp.kva.se</a></td>
<td>APN Countries</td>
<td>1 Year</td>
<td>37,500 (Retained from 2015/2016 fund)</td>
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<td>CBA2014-FP12-Silva</td>
<td>CBA201542NSY-Silva</td>
<td>Escalating small hydropower development and aquatic biodiversity of mountain streams in Sri Lanka</td>
<td>Prof. Elina Silva Water Resources Science and Technology 772/2, Hettiyawatta, Stlapwila, Ragama, SRI LANKA</td>
<td><a href="mailto:els.wrd@gmail.com">els.wrd@gmail.com</a></td>
<td>Sri Lanka</td>
<td>1 Year</td>
<td>20,000 (Retained from 2015/2016 fund)</td>
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<td>CBA2014-FP14-Prasad</td>
<td>CBA201542NSY-Prasad</td>
<td>Biodiversity Conservation In Western Ghats, India. Capacity Building in harnessing geospatial data Management</td>
<td>Dr. S. Narendra Prasad Open Source Geospatial India, International Institute of Information Technology, Gachibowli, Hyderabad 500032, INDIA</td>
<td><a href="mailto:prasadnarendra@gmail.com">prasadnarendra@gmail.com</a></td>
<td>India</td>
<td>1 Year</td>
<td>33,000 (Retained from 2015/2016 fund)</td>
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<td>CBA2014-FP15-Sharifi</td>
<td>CBA201542NSY-Sharifi</td>
<td>Integrated, Resilience-based Planning for Climate Change Mitigation and Adaptation in Asia-Pacific Cities</td>
<td>Dr. Ayooob Sharifi Global Carbon Project National Institute for Environmental Studies (NIES), 16-2 Onogawa, Tsukuba, 305-8506, JAPAN</td>
<td><a href="mailto:sharifi.ayooob@nies.go.jp">sharifi.ayooob@nies.go.jp</a></td>
<td>Thailand, USA, Australia, China, Japan</td>
<td>1 Year</td>
<td>38,000 (Retained from 2015/2016 fund)</td>
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<tr>
<td>CBA2014-FP16-Comia</td>
<td>CBA201542NSY-Comia</td>
<td>On-the-ground Promotion of Climate Change Adaptation Strategies via Establishment of Local Agroforestry Learning Laboratories in Southeast Asia</td>
<td>Dr. Reynaldo A. Comia Philippine Agroforestry Education and Research Network (PAFERN) Inc. 2/F Tamies Hall, CFNRL-UBLP, College, Laguna, PHILIPPINES Phone: +63 (49) 536 3009</td>
<td><a href="mailto:comia@pafern.com">comia@pafern.com</a>, <a href="mailto:secrecy@pafern.org.ph">secrecy@pafern.org.ph</a></td>
<td>Viet Nam, Philippines, Indonesia</td>
<td>1 Year</td>
<td>43,000 (Retained from 2015/2016 fund)</td>
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**Remark:** The projects are ongoing as of the data provided.
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<tr>
<td>CAF2015-RR01-CMY-Basnayake</td>
<td>Developing Climate Inclusive Potential Loss and Damage Assessment: Methodology for Flood Hazards</td>
<td>Dr. Senaka Basnayake, Asian Disaster Preparedness Centre (ADPC), Bangkok, THAILAND</td>
<td>Thailand, Nepal, Sri Lanka, Australia</td>
<td>3 years</td>
<td>$42,750</td>
<td>$38,000</td>
<td>-</td>
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<td>Project is still ongoing in its 1st year</td>
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<tr>
<td>CAF2015-RR02-CMY-Singh</td>
<td>Developing and promoting a people-centred approach to assess and address impacts of climate change induced loss and damage</td>
<td>Harjeet Singh, ActionAid International for Asia, INDIA</td>
<td>Bangladesh, Cambodia, Myanmar, Nepal and Vietnam, UK, South Africa (SA and SEA)</td>
<td>3 years</td>
<td>$40,850</td>
<td>$11,400</td>
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<tr>
<td>CAF2015-RR03-CMY-Pereira</td>
<td>Integrating CCA, DRR and L+D to address emerging challenges due to slow onset processes</td>
<td>Professor Joy Jacqueline Pereira, Universiti Kebangsaan Malaysia, Selangor, MALAYSIA</td>
<td>Malaysia, Cambodia, Philippines, Vietnam, Myanmar, Japan (SOUTHEAST ASIA)</td>
<td>3 years</td>
<td>$42,750</td>
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<tr>
<td>CAF2015-RR04-CMY-Thomalla</td>
<td>An analysis of longer-term (5-10 years) recovery following major disasters in the Asia Pacific Region: Lessons for resilient development</td>
<td>Dr Frank Thomalla, Stockholm Environment Institute - Asia (SEI-Asia); 15th Floor, Whitbykit Building, 254 Chulalongkorn University, Bangkok 10330, THAILAND</td>
<td>Thailand, Myanmar, Cambodia, Indonesia (MEKONG-delta)</td>
<td>2 years</td>
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<tr>
<td>CAF2015-RR05-CMY-Lasco</td>
<td>Assessing the linkages between climate change adaptation (CCA), disaster risk reduction (DRR), and Loss and Damage (L&amp;D): Case studies in the floodplains of Cambodia, Indonesia, Philippines, Thailand and Vietnam</td>
<td>Dr Rodel Lasco, Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc, Pasig City, PHILIPPINES</td>
<td>Philippines, Cambodia, Indonesia, Thailand, Vietnam (SOUTHEAST ASIA)</td>
<td>2 years</td>
<td>$45,600</td>
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<tr>
<td>CAF2015-RR06-CMY-Wang</td>
<td>Integrated flood modeling and Pre-Disaster Loss Estimation in Asian countries</td>
<td>Dr. Yi Wang, Asian Disaster Preparedness Centre (ADPC), Bangkok, THAILAND</td>
<td>Thailand, Japan, China, Myanmar</td>
<td>3 years</td>
<td>$35,000</td>
<td>$45,600</td>
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<tr>
<td>CAF2015-RR07-CMY-Lotta</td>
<td>Methods toolbox for assessing loss and damage at local level</td>
<td>Dr. Hina Lotta, LEAD, Islamabaad, PAKISTAN</td>
<td>India, Republic of Korea, Nepal, Germany, Pakistan (ASIA)</td>
<td>2 years</td>
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<tr>
<td>CAF2015-RR08-CMY-Chiba</td>
<td>Addressing non-economic losses and damages associated with climate change: Learning from the recent past extreme climatic events for future planning</td>
<td>Mr. Youn Cho, Institute for Global Environmental Strategies, Kamiyamaguchi, Hayama, JAPAN</td>
<td>Japan, Bangladesh, India, Philippines, Thailand (ASIA)</td>
<td>2 years</td>
<td>$38,000</td>
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<tr>
<td>CAF2015-RR09-CMY-Huang</td>
<td>Climate change risk assessment and adaptation for loss and damage of urban transportation infrastructure (UTI) in Southeast Asia (SEA)</td>
<td>Ms. Cao Thi Thu Huong, Transport Development and Environment Centre (TEDEC), TDG5,Hano, VIETNAM</td>
<td>Vietnam, Thailand, Cambodia (INDOCHINA)</td>
<td>2 years</td>
<td>$30,400</td>
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<tr>
<td>CAF2015-RR10-NMY-Neef</td>
<td>Climate Change Adaptation in Post-Disaster Recovery Processes: Flood-Affected Communities in Cambodia and Fiji</td>
<td>Prof. Andrew Neef, Human Sciences Building, 10 Symonds Street, Rm. 8368, Auckland 1142, NEW ZEALAND, Tel +64-9-323486, Fax +64-9-377330</td>
<td>New Zealand, Fiji, Cambodia, Australia, UK</td>
<td>3 Years</td>
<td>$45,000</td>
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<td>CAF2015-RR11-NMY-Siswanto</td>
<td>Developing High Spatiotemporal Resolution Datasets of Low-Trophic Level Aquatic Organism and Land-Use/Land-Cover in the Asia Pacific Region: Toward an Integrated Framework for Assessing Vulnerability, Adaptation, and Mitigation of the Asia-Pacific Ecosystems to Global Climate Change</td>
<td>Dr. Rei Tatsukawa, Japan Agency for Marine-Earth Science and Technology (JAMSTEC) 2-15 Natatsuima-cho, Yokosuka, Kanagawa 237-0063, JAPAN</td>
<td>Japan , Korea, China, Thailand, Viet Nam, Malaysia, Indonesia, USA</td>
<td>3 Years</td>
<td>$45,000</td>
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<tr>
<td>CAF2015-RR12-NMY-Shaheen</td>
<td>Climate smart agriculture through sustainable water use management: Exploring new approaches and devising strategies for climate change adaptation in South Asia</td>
<td>Nabita Shaheen, Global Change Impact Studies Centre, National Centre for Physics (NCP) Complex, Shahdara Road, Quaid-i-Azam University Campus, Islamabad, 44000, PAKISTAN</td>
<td>Sri Lanka, Bangladesh, Cambodia, UK, Pakistan</td>
<td>2 Years</td>
<td>$45,000</td>
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<td>CAF2015-RR13-NMY-Dautova</td>
<td>Developing life-supporting marine ecosystems along the East Asia’s coasts - a synthesis of physical and biological data regarding coral reef ecosystems for the science-based management and socio-ecological policy making in terms of Global Sustainability</td>
<td>Dr. Tatiana P. Dautova A V. Zhirmunsky Institute of Marine Biology, Far East Branch of the Russian Academy of Sciences, Paichiysky Street 17, Vladivostok 690041, Russia</td>
<td>Russia, Viet Nam, Philippines</td>
<td>2 Years</td>
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<tr>
<td>CAF2015-RR14-NMY-Odesh</td>
<td>Monitoring grassland degradation in North/Central Asia: Deciphering the impacts of climate change and government policies at different spatial-temporal scales using remote sensing and expert knowledge</td>
<td>Associate Prof. Ibukow Odesh Centre for Carbon, Water and Food, Faculty of Agric. &amp; Envir., The Univ of Sydney, Australian Technology Park, 1, Central Avenue, Eveleigh NSW 2035, AUSTRALIA</td>
<td>Australia, China, Mongolia, Uzbekistan</td>
<td>2 Years</td>
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<tr>
<td>CAF2015-RR15-NMY-Marambe</td>
<td>Building Climate Resilience in Farming Systems in Sloping Lands of South Asia</td>
<td>Prof. Buddhi Marambe, Faculty of Agriculture, University of Peradeniya Old Galaha Road, Peradeniya 20400, SRI LANKA</td>
<td>Sri Lanka, Bangladesh, Pakistan, Nepal</td>
<td>2 Years</td>
<td>$60,000</td>
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<tr>
<td>CAF2015-RR16-NMY-Pham</td>
<td>Utilising geospatial technology to assess health vulnerability to climate change for rural population in Vietnam and Philippines</td>
<td>Dr. Phm Thi Thanh Nga Vietnam National Satellite Center, Vietnamese Academy of Science and Technology, Floor 9th, Main Building, 18 Hoang Quoc Viet, Cau Giay district, Ha Noi, VIET NAM</td>
<td>Viet Nam, Philippines, Japan</td>
<td>2 Years</td>
<td>$40,000</td>
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<tr>
<td>CAF2015-RR17-NMY-Anfiridodo</td>
<td>Synergising Academic, Business, Community and Government Institutions for Better Livelihood to Conceptualise Development of Smart Cities towards Climate Change Mitigation and Adaptation in Bandung, Bangkok and Manila</td>
<td>Dr. rer. pol. Rajo Abdulharis, ST, M.Sc. Center for Agrarian Research, Institut Teknologi Bandung Gedung Lattek IX-C, Lantai 1, Jl. Ganesa 10, Bandung 40132, INDONESIA</td>
<td>Indonesia, Thailand, Philippines</td>
<td>2 Years</td>
<td>$40,000</td>
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<tr>
<td>CAF2015-RR18-NSY-Jacobsin</td>
<td>Understanding Urban Heat Island Effects to Urban Energy Consumption and Implications to Microclimate Adaptation and Mitigation Strategies for Planning Policy in Major Southeast Asian Cities</td>
<td>Sigit Dwiananto Anfishidodo, PhD Faculty of Architecture, Kasetsart University, Thailand 50 Paholyothin Road, Jatujak, Bangkok 10900 Thailand Tel. +6624942860 ext. 314 Fax +662 94045413</td>
<td>Thailand, Japan, Viet Nam</td>
<td>2 Years</td>
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<td>CAF2015-RR19-NSY-Jacobsin</td>
<td>Optimizing climate change adaptation through enhanced community resilience</td>
<td>Dr. Christine Jacobson Sustainability Research Centre, University of the Sunshine Coast, Australia Locked Bag 4, Manoohydroge DC, QLD 4558, AUSTRALIA Tel. +61 449 121 590 Fax +61 754065008</td>
<td>Australia, Cambodia, Viet Nam</td>
<td>1 Year</td>
<td>$45,000</td>
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<td>CAF2015-RR19-NSY-Monprapussorn</td>
<td>Integrated analysis of climate, land-use and water for resilient urban megacites; A case study of Thailand, Lao PDR and Vietnam</td>
<td>Somsak Monprapussorn, Ph.D., Department of Geography, Faculty of Social Sciences, Srinakharinwirot University, 114 Sukhumvit 23 Bangkok, THAILAND, 10120, Tel 662 649 5000 ext 1554</td>
<td>Thailand, Viet Nam, Lao PDR</td>
<td>1 Year (18 months)</td>
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<tr>
<td>CAF2015-CD01-CMY-Wijenayake</td>
<td>Enhancing Capacity of policymakers and practitioners in India, Sri Lanka and Nepal on Loss and Damage related to slow onset events in the region</td>
<td>Ms Vositha Wijenayake, Climate Action Network – South Asia (CANSA), Dhaka, BANGLADESH</td>
<td>India, Sri Lanka, Nepal</td>
<td>2 years</td>
<td>$40,400</td>
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<td>Project is still ongoing in its 1st year</td>
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<tr>
<td>CAF2015-CD02-CMY-Nhat</td>
<td>Capacity Building for National, Provincial Stakeholders and local Communities on Loss and Damage related to Disaster Risk Reduction and Climate Change Adaptation</td>
<td>Le Minh Nhat, Official, Office of Vietnam National Climate Change Committee and Department of Meteorology, Hydrology and Climate Change, Vietnam Ministry of Natural Resources and Environment, Hanoi, VIETNAM</td>
<td>Viet Nam</td>
<td>2 years</td>
<td>$31,300</td>
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<td>CAF2015-CD03-CMY-Ibrahim</td>
<td>Building capacity for reducing loss and damage resulting from slow and rapid onset climatic extremes through risk reduction and proactive adaptation within the broader context of sustainable development</td>
<td>Prof. Dr. Kamarulazizi Ibrahim, Director, Centre for Global Sustainability Studies, Level 5, Hazah Senibul Library Extension, Universiti Sains Malaysia, Penang, MALAYSIA</td>
<td>Malaysia, Vietnam, Cambodia</td>
<td>2 years</td>
<td>$45,000</td>
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<td>Project is ongoing</td>
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<tr>
<td>CAF2015-CD04-NSY-Emerson</td>
<td>Assessment and mapping of the vulnerability of iTaukei (indigenous) communities in Fiji.</td>
<td>Mr. Peter Emerson, Programme Manager for Climate Change and Resettlement, Fiji</td>
<td>Fiji</td>
<td>1 Year</td>
<td>$43,000</td>
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APN Scoping Workshop on GEC-related Technology Transfer

**Objective:** To conduct a Scoping workshop on Technology Transfer on Global Environmental Change issues that includes (but is not limited to): Climate mitigation and adaptation; air and water pollution; solid waste management and 3R.

**(A) Background:**
What is technology transfer? According to the IPCC, “technology transfer encompasses the broad set of processes that cover the flows of knowledge, experience, and equipment for mitigating and adapting to climate change among different stakeholders. It comprises the process of learning to understand, utilize, and replicate the technology, including the capacity to choose it, adapt it to local conditions, and integrate it with indigenous technologies.”

In addition, international efforts for technology transfer have been concentrated in the UNFCCC framework’s five themes: technology needs and needs assessments; technology information, enabling environments, capacity building, and mechanisms for technology transfer. For example, a key project is developing a technology transfer clearinghouse called TT:CLEAR, and establishing a Technology Center and Network (CTCN). However, successful technology transfer requires not only exchange of technological solutions, but also strengthening policy and regulatory environments, and capacities to absorb, employ, and improve appropriate technologies. In both developed and developing countries, multilateral institutions can support collaboration that engages private interests in regulatory planning and possibly activities, particularly if ongoing funding is expected.

Further, within the context of technology transfer and enhancing the implementation of the UNFCCC technology transfer framework, UNFCCC defines capacity building a process which seeks to “build, develop, strengthen, enhance and improve existing scientific and technical skills, capabilities and institutions particularly in developing countries, to enable them to assess, adapt, manage and develop technologies.” In this context, UNFCCC notes that capacity building should be country-driven, addressing specific needs and conditions of developing countries, and reflecting their national sustainable development strategies, priorities and initiatives.

**(B) Scoping Workshop**
It is with the above background that APN would like to conduct a scoping workshop, particularly on the capacity building needs of its developing member countries on technology transfer with science-policy linkages. The workshop would draw on key experts in the region as well as country national Focal Points identified in UNFCCC’s CTCN network (https://www.ctc-n.org/ – some national Focal Points in the network also have close linkages with APN); UNESCAP APCTT’s (http://www.apctt.org/content.php?id=13), UNCRD and its related work on 3Rs and waste Management (http://www.uncrd.or.jp/index.php?menu=14), among others.

**(C) Budget and Dates**

| Budget Requested: | US$50,000 |
| Venue: | Kobe, Japan |
| Suggested Date: | Early November, 2016 (?) |

**(D) Outputs**

The outputs of the workshop would be:

i) A report that provides a clear indication of the needs of member countries relating to technology transfer, and

ii) A draft proposal by way of a framework for technology transfer for presentation to the 22nd IGM. This draft framework will outline the kinds of activities that would be beneficial for APN as well as suggestions on how APN, together with partnering entities such as CTCN, APCTT, etc., can assist developing countries in raising their capacity in the context of technology transfer for environmental global change issues.
**Item 5-3: Hyogo Activities**

**Objectives:** 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. The activities outlined in this paper are to continue APN’s work in the area of Global Environmental Change in strong collaborative partnership with and support from Hyogo Prefectural Government.

In FY 2016/2017 following new Hyogo Activities are proposed:

(a) **International Satoyama Workshop**

Since FY 2011, APN and Hyogo Prefectural Government have jointly conducted a series of workshops and symposia to explore Satoyama as an example of harmonious co-existence between human and nature, and ways and means of enhancing sustainable use and development of Satoyama as well as resilience of communities to climate and ecosystem changes.

Building on the outcomes of the “International Workshop on Hokusetu SATOYAMA” held in November 2015, it is proposed to hold a consecutive workshop with the participation of researchers, practitioners, educators and government officers on specific themes relevant to Satoyama, such as the utilisation of traditional wisdom of Satoyama to establish a sustainable society.

**Date:** 12 November 2016  
**Venue:** Takarazuka, Hyogo Prefecture  
**Budget Requested:** US$ 20,000

(b) **11th EMECS Conference**

Since FY2001, APN has been supporting the activities of The International Center for Environmental Management of Enclosed Coastal Seas (EMECS).

The topics of EMCS11-Sea Coasts XXVI Joint Conference “Managing Risks to Coastal Regions and Communities in a Changing World” includes but not limited to:

- Coastal systems and their dynamics (from coast to water and from water to coast); and
- Climate change in the changing world. Coastal adaptation to climate change.

APN will send researchers who conducted projects on environmental management of enclosed coastal seas with the support of APN. The researchers are:

- Professor Joyashree Roy, Global Change Programme, Jadavpur University, India, ARCP2013-07CMY-Roy: “Coastal Ecosystem and changing Economic Activities: Challenges for Sustainability Transition”
- Dr Konstantin Lutaenko, Institute of Marine Biology, Russia, ARCP2011-10CMY-Lutaenko: “Coastal Marine Biodiversity of Viet Nam: Regional and Local Challenges and Coastal Management for Sustainable Development”; and
- Dr Dipayan Dey, South Asian Forum for Environment, India, CBA2013-14NSY-Maity: “Promoting Agriculture in Trapped Waters as Sustainable Aquafarming and Adaptive Climate Mitigation in Inundated Coastal Areas”.

**Date:** 22-27 August 2016  
**Venue:** Saint Petersburg, Russia  
**Website:** http://www.emecs.or.jp/en/emecs/emecs11  
**Budget Requested:** US$ 20,000
Item 5-4: 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 2016/17 activities:
1. UNFCCC SBSTA44 (US$10,000); COP22 (US$15,000); IPBES-5 (US$5,000)

Total Budget requested for Science-Policy Activities is US$30,000

UNFCCC SBSTA and COP Meetings

UNFCCC SBSTA 44, World Conference Centre, Bonn Germany, 16-26 May 2016
1. In response to UNFCCC Secretariat, APN has been attending the research dialogues organised at annual SBSTA meetings at Bonn, Germany. The 8th Research Dialogue, which will be held on 19 May from 15:00-18:00, will consist of a poster session, presentations and moderated discussion to convey new scientific findings and research information, and support scientific knowledge and capacity building in the light of the Paris Agreement. This year’s dialogue will discuss:
   • Part 1. Scientific research findings and needs in regards to slow onset events and achievement of the long term temperature goals
   • Part 2. Scientific knowledge and capacity building in regards to slow onset events and the development and delivery of climate services

APN is expected to attend the dialogue again and it was agreed at the recent SC Meeting that Dr. Matthews will represent APN in the SBSTA dialogue among parties and the international research community.

2. APN is contributing to the Nairobi Work Programme.
3. APN is contributing to the International Warsaw Mechanism for Loss and Damage.

22nd Session of the Conference of the Parties (COP 22) to the UNFCCC

The 2016 United Nations Climate Change Conference will be held in Marrakech from Monday, 7 November, to Friday, 18 November 2016. The Marrakech Conference is expected to include sessions of the COP, the CMP, the Subsidiary Body for Scientific and Technological Advice (SBSTA), the SBI and the Ad Hoc Working Group on the Paris Agreement (APA) during the two-week sessional period. It will also include a joint high segment of the COP and the CMP, during the second week, to hear national statements and statements of representatives of intergovernmental organisations and nongovernmental organisations. No decisions will be taken at the joint meetings. Read more: http://climate-i.iisd.org/events/unfccc-cop-22

Intergovernmental Platform for Biodiversity and Ecosystems Services (IPBES) Plenary 5

APN attended the IPBES-4 Plenary in Malaysia and a general report is provided below:

The two-day IPBES-4 Stakeholder Days (SHD) provided IPBES stakeholders an opportunity to hear updates from the IPBES Secretariat on the work undertaken by IPBES in the last year and to discuss issues related to stakeholder engagement in the IPBES process (including during and between IPBES plenary sessions). Particularly, SHD participants:
• Heard updates on the work of IPBES task forces (capacity building, indigenous and local knowledge (ILK), and knowledge and data);
• Heard updates on thematic assessments (pollination), methodological assessments (scenarios and models) and regional assessments undertaken in the previous year, including lessons learned from these assessments;
• Heard updates from a representative of UNDP on the Biodiversity and Ecosystem Services Network (BES-Net);
- Discussed how best to utilise the outcomes of the assessments and how stakeholders can contribute to the process;
- Discussed the creation of an inclusive, open-ended, self-organised, collaborative “IPBES Stakeholder Network”;
- Prepared a draft statement by the stakeholders for IPBES-4, and discussed how to engage in IPBES-4 as individual stakeholders and as the coordinated group of stakeholders.

1. Report from the IPBES Secretariat
Dr. Anne Larigauderie, Executive Secretary of the IPBES provided a report on (1) the progress in implementing the IPBES work programme; (2) lessons and challenges during the 2nd year of implementation; (3) introduction to IPBES-4; and (4) the stakeholder engagement strategy. Full details are available in attached document SHD-01-IPBES-Secretariat.pdf, and below is a summary of key points:

- The IPBES work programme is entirely based on requests from governments and international conventions, while stakeholders can provide input/suggestions;
- Two full assessments were completed (pollinators, pollination and food production; scenarios and models of biodiversity and ecosystem services) and stakeholders can help disseminate and make use of the findings (to be released soon as Summaries for Policymakers and full reports);
- Initiation of four new assessments is expected to be approved by the plenary: global assessment (5e); invasive alien species (5g); sustainable use of biodiversity (5h); and diverse conceptualisation of values (5f). The global assessment will become a part of the Global Biodiversity Outlook-5 of the Convention on Biological Diversity (CBD);
- There are knowledge gaps in social science and a lack of expertise in indigenous and local knowledge (ILK). There is also a gap in financially supporting nominated experts from developed countries;
- In 2016, the IPBES will launch calls for nomination of experts for the newly approved assessments, call for fellows under the capacity building work stream, invite peer reviewers and invite stakeholders to disseminate IPBES products.

1.1. Discussions and Observations
- IPBES is preparing three memorandum of cooperation with IUCN, Future Earth and IAI. Regarding the IAI partnership (a question by Deng), IAI will contribute by facilitating the nomination of experts, explaining and identifying products of IPBES, hosting meetings, etc., and will act as a platform for the Americas. She added that this could be done in other sub-regions as well. Although APN has been contributing to some of the above mentioned work, there might be an opportunity for APN to form a formal cooperation relation with IPBES.
- IPBES should develop a strategy to reach out to policy makers, scientists, practitioners and the general public.
- Pacific island states are an important sub-region for the regional and thematic assessments. IPBES should fully engage experts from these countries.
- The Stakeholder Days is a venue to for stakeholders to get informed about the IPBES process, become familiar with other stakeholders and hear diverse views from different organisations.
Collaborative Activity on APN LCI FRAMEWORK (LCI) & LoCARNet

Objective: To hold a collaborative activity with LoCARNet that will also provide visibility to the recent results of the projects conducted under the APN’s Low Carbon Initiatives Framework (LCI)

(A) Background:
The launch of Low Carbon Asia Research Network (LoCARNet) was declared at the side-event of the “East Asia Low Carbon Growth Partnership Dialogue” held in April 2012 in Japan. LoCARNet was launched by IGES in close cooperation with NIES to promote research to support the development of policies for low-carbon growth by enabling dialogue between scientists and policy-makers.

On the same year in 2012, APN launched the Low Carbon Initiatives (LCI) framework with a view to enhance mitigation actions across countries in the region to help achieve the global vision for a low carbon, sustainable future. Since 2012, the LCI has been supporting regional research, capacity development and networking activities related to low carbon development. This framework is under APN’s thrust on climate change mitigation and has the following three-pronged approach:

1. Regional-based research activities
   a. Research to develop and enhance components of integrated assessment models.
   b. Research on regional-based low carbon development pathways and scenarios.
   c. Cross-cutting research on low carbon development including studies on traditional knowledge in the region.

2. Capacity building activities:
   a. Training workshops that develop scientific capacity to formulate low carbon scenarios and pathways.
   b. Dialogue between researchers and national/local policy makers in developing member countries.
   c. Development of educational toolkits on low carbon development.

3. Communication and networking activities organised with partners including the LoCARNet on:
   a. Institutional knowledge sharing.
   b. Information and knowledge dissemination.
   c. Regional collaborative research and networking in Asia.

(B) Areas of Commonality, Collaboration & Potential Collaboration
According to LoCARNet, the future direction of LoCARNet are the following:
   a. Enhancing collaboration with other stakeholders. For example, international organisations and development practitioners can cooperate in low-carbon research and provide support to build up a research exchange network/platform.
   b. Collaborating with private sector, which will become more important for green investment and green growth.
   c. Coordinating and collaborating at the national, sub-national/cities and regional levels in order to strengthen ownership of knowledge and accelerate the speed of low-carbon growth in Asia.

(C) APN/LoCARNet Collaboration
   – Joint Activity in Cambodia, Bangladesh or Indonesia (back-to-back with one of the LoCARNet activities that will be conducted in these countries in FY2016/17)
Item 5-6: Partnership Development and Conferences

Objective: To attend the Asia-Pacific adaptation forum and engage, where possible, in 2 parallel sessions and take part in the marketplace to raise visibility of APN in the context of adaptation.

1) Asia-Pacific Adaptation Forum

(A) Background:
The Fifth Asia-Pacific Climate Change Adaptation Forum will be held on 17-19 October 2016 in Colombo, Sri Lanka. While details are not yet available, the organisers has advised the following four main themes:

1) adaptation planning processes (not restricted only to NAPs and NAPAs);
2) climate finance;
3) climate resilience;
4) cross cutting theme.

(B) Areas of Commonality, Collaboration & Potential Collaboration
APN would like to be engaged in 2 parallel sessions:

1) APN and its recent work under the Climate Adaptation Framework (fully organised by APN)
2) Co-organised session on Loss and Damage with the L&D Forum, ICCCAD and IIED.
APN would also like to raise its profile on the work undertaken on climate adaptation by manning a booth at the “Marketplace” event.

(C) Budget Requested
US$16,000

2) Future Collaborative Approach with Organisations in South Asia

South Asia Sub-Regional Committee conducted several discussions to identify a collaborative approach that would benefit the SA-SRC Committee and APN. As a result, members identified 22 potential organisations that have similar interest with APN and developed a possible collaborative approach that will engage all organisations. The Committee is planning to hold a partnership workshop as a back-to-back event with the 7th SA-SRC Meeting. Therefore, SA-SRC Committee requests a total of US$ 15,000 from APN general budget to initiate the approach. Detailed approach, potential organisations and how this fund will be utilised will be explained by SA-SRC chair under Item 7, Sub-Regional Committee Reports.

Budget Request US$ 15,000
DRAFT Work Programme and Resources Allocation, FY 2016

Resources Available

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<thead>
<tr>
<th>Resource Type</th>
<th>Amount</th>
<th>Unit</th>
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<tr>
<td>Hyogo (JPYen 21,773,000)</td>
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<td>NZ (NZ$ 30,000)</td>
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<td>ROX</td>
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Projected Resources, Committed and Uncommitted from past FYs

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<th>Resource Type</th>
<th>Amount</th>
<th>Unit</th>
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<tr>
<td>Uncommitted</td>
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Use of Resources

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<tr>
<th>Ongoing Projects from Past Fiscal Years</th>
<th>Reserved Resources (A)</th>
<th>Reallocation for FY 2016 Activities (B)</th>
<th>Allocation of New Resources (C)</th>
<th>Total (D) = (A)+(B)+(C)</th>
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<td>CAF 2015</td>
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<td>484,371</td>
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<td>CAF 2014</td>
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<td>CAF 2013</td>
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<td>LCI 2013</td>
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<td>ARCP (CRRP) 2015</td>
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<td>ARCP 2014</td>
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<td>Sub Total</td>
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Projects and other Activities in FY 2016

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<tr>
<th>Project</th>
<th>Reserved Resources (A)</th>
<th>Reallocation for FY 2016 Activities (B)</th>
<th>Allocation of New Resources (C)</th>
<th>Total (D) = (A)+(B)+(C)</th>
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<tr>
<td>ARCP(CRRP)</td>
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<td>CAPABLE</td>
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<td>72,000</td>
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<td>CAF (including APAN Forum (12k), Mortgage for CAF Projects (25k))</td>
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<td>26,800</td>
<td>519,550</td>
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<td>LCI (Low Carbon Technology Transfer Scop WS (50k), LoCARNet (50k))</td>
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<td>75,000</td>
<td>99,795</td>
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<td>Science Policy Linkage (SBSTA, IPBES, COP22)</td>
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<tr>
<td>Hyogo Activities</td>
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<td>-</td>
<td>40,000</td>
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<tr>
<td>Future Collaborative Approach</td>
<td>-</td>
<td>-</td>
<td>15,000</td>
<td>15,000</td>
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<tr>
<td>20th Anniv. (Media Visit, PROVIA)/Other</td>
<td>38,000</td>
<td>91</td>
<td>-</td>
<td>38,091</td>
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<tr>
<td>Annual Reports &amp; Other Publications</td>
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<td>-</td>
<td>10,000</td>
<td>10,000</td>
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<tr>
<td>Sub Total New Projects and Other Activities</td>
<td>592,750</td>
<td>78,202</td>
<td>1,551,450</td>
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Administration and Operational Costs

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<tr>
<th>Activity</th>
<th>Reserved Resources (A)</th>
<th>Reallocation for FY 2016 Activities (B)</th>
<th>Allocation of New Resources (C)</th>
<th>Total (D) = (A)+(B)+(C)</th>
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</thead>
<tbody>
<tr>
<td>22nd IGM/SPG &amp; 32nd SC</td>
<td>-</td>
<td>-</td>
<td>130,000</td>
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<tr>
<td>SRC-SA</td>
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<td>6,000</td>
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<td>15,000</td>
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<tr>
<td>SRC-SA</td>
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<tr>
<td>SRC-TEA</td>
<td>-</td>
<td>15,000</td>
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<tr>
<td>APN Members/Secretariat Travel</td>
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<td>-</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Personnel</td>
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<td>-</td>
<td>520,000</td>
<td>520,000</td>
</tr>
<tr>
<td>General Maintenance &amp; Operational Cost</td>
<td>-</td>
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<tr>
<td>Contingency</td>
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<td>121,170</td>
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<tr>
<td>IGES Administrative Overhead (3% of MOEJ Contribution)</td>
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<td>64,950</td>
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<tr>
<td>Sub Total Administration and Operational Costs</td>
<td>121,170</td>
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<td>858,950</td>
<td>986,120</td>
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<td>Total</td>
<td>2,202,226</td>
<td>84,202</td>
<td>2,410,400</td>
<td>4,696,828</td>
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</table>
Annotation to Work Programme with Resources Allocation FY 2016

1. The exchange rates USD 1 = JPY 124 and USD 1 = NZD 1.60 were calculated by adding 5% on the average value of the exchange rates from the end of December 2015, and the end of January and February 2016.

2. Based on the exchange rates the total income of APN through direct financial contributions in FY 2016 is around USD 2.4 Mio.

3. From FY 2015 an amount of approximately USD 2.3 Mio. is carried over to FY 2016.

4. In total, the amount that is available for APN operation in FY 2016 is around USD 4.7 Mio.

5. From the reserved resources that are carried over from FY 2015, substantial amounts are reserved for projects that are underway, not completed yet or have not drawn their contracts yet (Column A). Furthermore, some funds are allocated for other activities in FY 2016 (Column B). The amount in these columns totals USD 2.3 Mio.

6. Column C (marked in pale pink) shows the proposed allocation of new income of USD 2.4 Mio.

7. Column D shows by project programmes and operational line items how the total available resources in FY 2016 of USD 4.7 Mio. are allocated.
Item 7: Suggested Amendments to the Framework Document

Part II. IGM Consideration and Approval of the
Final Suggested Amendments to the Framework Document

The IGM is invited to consider and approve the Draft Suggested Amendments to the Framework Document prepared by the FD Task Team.

Such additional suggestions, if any, will be circulated and presented by the FD Task Team under the present Item for inclusion in the document to be approved or for action after the IGM, as the IGM deems appropriate.
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, 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...
Framework of the Asia-Pacific Network for Global Change Research

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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.

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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. 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, 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 APN are to:

i. Promote and encourage research that can improve understanding of global change and its implications for the region, and contribute to a 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 17).

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 APN at any time by submitting written notice to the Secretariat.

6. Organs and Sub-Organs

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.

The Inter-Governmental Meeting (IGM) is APN's general policy and decision-making body. The IGM:

i. sets policy for the programmes, finances and other activities of APN, etc.;

ii. adopts rules and procedures for APN;

iii. oversees the development and production of APN's annual operating plan;

iv. reviews and approves the annual financial report, budget, and long-term financial management plan for APN;

v. considers APN's needs for resources to support its programmes and activities; identifies possible sources of such funding and considers and approves arrangements for securing such funding;

vi. reviews and approves projects to be undertaken or supported by APN, based on recommendations made by the SPG and CDC;
vii. reviews and approves other activities to be undertaken or supported by APN, based on recommendations made by SPG, the SC, the CDC, SRCs and the Secretariat;

viii. provides guidance to the SC, SPG, CDC, SRCs and the Secretariat;

ix. conducts regular reviews of, evaluates and approves APN’s long-term plans, especially its Strategic Plan, and the implementation of these plans;

x. establishes SRCs when appropriate; and

xi. performs other functions, as necessary, to achieve the mission and goals of 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 agenda for the IGM shall be prepared by the Secretariat in consultation with the SC chair. It will be circulated 3 weeks in advance to all the members for comments and inputs;

iii. The IGM elects a Chair, usually from the host country and one Vice-Chair from among the national Focal Points in attendance;

iv. The Chair facilitates all sessions of the IGM. He/she may delegate this role to the Vice-Chair;
v. The Chair ensures orderly and timely conduct of the IGM and that issues are decided by consensus;

vi. 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;

vii. The Secretariat maintains a record of the IGM; and

viii. 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 APN, especially through thorough consideration of APN budget and long-term financial management plan. In particular, the SC guides the Secretariat to:

   a. develop, with member countries, funding and in-kind financial support for APN and its programmes and activities by inviting and encouraging contributions, and developing co-funding partnerships; and to

   b. explore potential funding from other sources, e.g., international organisations, funding agencies, development banks, private foundations, and other stakeholders of the private sector;

iii. liaises with international global change research and research-related organisations and encourages their involvement in and support for APN activities and programmes; and

iv. considers 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, through consultation among elected nFPs in SC, ex-officio members and donor members, with each co-opted member to participate in SC activities for a one-year term (renewable); and

   f. National Focal Points from donor countries.

   g. The SC may invite additional members to participate in its meetings as observers as appropriate.

   h. The SC shall meet a minimum three times in a year; a day before the annual IGM/SPG meeting, immediately after the annual IGM/SPG meeting and at least once inter se ssionally between the last IGM and the next IGM meetings.

   i. The quorum needed to convene a meeting shall be two thirds of the members present at the meeting.

   j. The agenda for the SC meetings shall be prepared by the Secretariat in consultation with the SC chair.

   k. 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;

   l. The tenure of the Chair, the First Vice-Chair, and the Second Vice-Chair shall start upon their election as Chairs and shall end upon termination of their terms as members of the SC.
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, through consultation among elected nFPs in SC, ex-officio members and donor members, with each co-opted member to participate in SC activities for a one-year term (renewable); and

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g. The SC may invite additional members to participate in its meetings as observers as appropriate.

3. Procedures

i. The SC shall meet a minimum three times in a year; a day before the annual IGM/SPG meeting, immediately after the annual IGM/SPG meeting and at least once intersessionally between the last IGM and the next IGM meetings.

ii. The quorum needed to convene a meeting shall be two thirds of the members present at the meeting.

iii. The agenda for the SC meetings shall be prepared by the Secretariat in consultation with the SC chair.

iv. 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

v. The tenure of the Chair, the First Vice-Chair, and the Second Vice-Chair shall start upon their election as Chairs and shall end upon termination of their terms as members of the SC.
vi. The Chair is responsible, with the assistance of the Secretariat, for managing SC activities.

vii. 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.

viii. The Chair ensures orderly and timely conduct of the SC and that issues are decided by consensus.

ix. The Secretariat maintains a record of the SC; and

x. The Chair, with the assistance of the Secretariat, will prepare for review, a List of Actions taken by the SC including those actions for submission to the IGM, and a Chairperson’s Summary of the Meeting.

C. The Scientific Planning Group (SPG)

1. Mandate

The Scientific Planning Group (SPG):

i. reviews research proposals received by APN for funding, especially those in response to 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 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 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;

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 or more donor representatives, 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.
iii. additional representatives may attend, upon invitation, CDC meetings as observers.

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.

iii. the CDC elects one of its members to act as its Chair;

iv. the Chair is responsible, with the assistance of the Secretariat, for managing the CDC activities and coordinating communication among its members.

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 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 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;

v. The SRC Chairs in consultation with their members shall prepare the agenda for the meetings. The secretariat shall provide technical support.

vi. 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 provides operational support for APN and, in particular, for the IGM, the SC, the SPG, the CDC, the SRCs, and other APN organs. The Secretariat:

i. Assists these organs to assure effective implementation of the general policies of APN;
ii. Works with the IGM and SC to assure effective implementation of their
decisions, especially with respect to the Strategic and Operational
Plans, the scientific activities and the finances. In this regard, the
Secretariat:

a. Supports drafting and development of APN’s Strategic Plan, which
is prepared together with a Status Report of the previous five-year
Strategic Phase;

b. Manages APN’s calls for proposals processes, and assists the SPG
and CDC in the effective review and evaluation of the proposals
received and the submission of their recommendations to the IGM
for approval;

c. Works closely with the IGM and the SC to obtain the financial
resources needed, especially by identifying and engaging potential
donors, which include member and non-member countries,
international and regional organisations, and private foundations;

d. Prepares an annual report on the finances of APN; a draft annual
budget; and a long-term financial management plan for
consideration and approval by the IGM and distributes these
documents to nFP’s well in advance of the IGM;

e. Prepares an interim status report on the budget for the SC for
review and comment at its intersessional meeting;

f. Manages other aspects of APN finances in a transparent and cost-
effective manner;

iii. Supports the work of SRCs to assure effective implementation of APN
programmes and related activities in the sub-regions and assist the
SRCs in providing input on sub-regional needs and priorities to the
IGM;

iv. Plans, organises and supports the conduct of APN meetings.

v. Communicates closely with all organs and members, the international
global change community, and other stakeholders; and

vi. Facilitates other day-to-day operations of APN.

vii. Coordinates activities as required by the IGM and its organs.

2. Operations

i. Resources and support for the Secretariat are provided by the host
country, including the Central and Local Governments and may be
augmented by other donors. 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 19).

7. Financial Arrangements

i. 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 (pages20–30) 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

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, 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.

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

APN’s financial report is submitted for external audit by an independent body with an international reputation. Thus, APN’s status will become more robust with the aforementioned financial, legal and administrative arrangements.
Appendix 4

Guidance for APN national Focal Points (nFPs)

National Focal Points (nFPs) are responsible for representing their countries in the activities of 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 APN’s annual operating plan; review and approval of APN’s annual financial report and budget; review and approval of projects and activities to be undertaken or supported by 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 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 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 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 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.

Procedures for SC Member Election:

1. Mode of election

   An annual election will be held to elect either three or two nFPs as the case may be to the SC. The remaining nFPs who have already served their first of the two year term will continue into their second year in the SC.

2. Nomination

   a. The timeframe for nominations will be three months starting from mid-November to mid-February.

   b. A maximum of two nFPs can be nominated by an individual nFP. The nominee must provide his/her consent for nomination. In order to be considered for election, the nominee (or his/her designated alternate) must be present at the IGM. No self nomination is allowed.

3. Election procedure at the IGM

   a. The IGM chair or co-chair shall facilitate the SC election. In the event the chair and co-chair are both candidates for election the Director of the Secretariat shall facilitate the SC election.

   b. In the event there are insufficient candidates, further nomination from the floor shall be sought at the IGM, keeping in mind regional representation.

   c. In the event that the number of candidates is more than required, there shall be an open discussion at the IGM for consensus. The following points shall be considered important for the discussion:
i. A balanced regional representation.

ii. Member countries that have never been on the SC should be given priority.

iii. Nominated nFP has attended at least 2 or more IGM meeting in the last 5 years, excluding the current IGM.

4. Terms of office of elected nFPs in the SC

a. Elected nFPs are expected to attend all SC meetings and IGM meetings during their terms as members of the SC. If an elected member finds it necessary to be absent at an SC meeting, he/she must designate an alternate to act on his full behalf and actively participate in the meeting. The designated Alternate should preferably be:

i. One who has attended at least one IGM meeting in the last three years so that he/she is aware of the current issues in APN, or,

ii. One who has not attended any IGM meetings but is a strong candidate to represent the nFP at the next or future IGMs or is a potential candidate to be the nFP of the country in the near future,

iii. The nFP, if he/she so wishes, may consider designating the active SPG member of his/her country to represent him/her at the SC meeting as an Alternate.

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 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 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 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 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 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 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 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 APN; and
- when called upon, to represent the SPG in other APN activities or with national and/or international programmes and organisations with which 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 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 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 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 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 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 APN; and strengthens interactions among scientists and policy makers in the sub-region.

An SRC is also expected to:

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• 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 Secretariat**

The Secretariat performs the daily operations of APN and, in particular, assists the IGM, the SC, the SPG, the CDC and the SRCs in implementation of APN’s Strategic and Operational Plans; programme; budget; and other activities, as appropriate.

In managing APN finances, the Secretariat prepares and distributes annual financial reports; draft annual budgets and financial management plans for
consideration and approval by the IGM. In addition, the Secretariat prepares and presents an interim status report on the budget to the SC at its intersessional meetings, for review and comment.

The Secretariat is expected to manage as a very high priority the calls for proposal processes for regional research and capacity building.

The Secretariat is expected to support APN Meetings, including the IGM, SC, SPG and CDC Meetings. This support includes planning, organising, and arranging logistics for the meetings; preparing and assuring timely distribution of meeting documentation; assisting in the conduct of the meetings at the guidance of the respective Chairpersons; and documenting the meetings, especially by keeping records 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.).

If deemed necessary, the Secretariat may seek support from a person or persons having a long institutional memory of APN for advice to specific operations the Secretariat undertakes. In this case, the Secretariat Director may appoint a Non-Affiliated Invited Expert (NAIE) in this role. This advisory role is on a voluntary basis.

A NAIE could be:

- An active or former APN Member with a long experience in the area that is related to the specific operation;
- An external expert with a long experience in the area that is related to the specific operation (e.g. an active or former Project Leader of APN funded projects/activities, an active or former official of global change-related organisations, etc.);

To perform the assigned task the NAIE could be invited to travel to Kobe or any other city in the region where an APN funded/organized event is taking place and the NAIE’s attendance is required to accomplish the task. Alternatively the NAIE could perform the task by working from home via electronic correspondence with APN secretariat.

In the event that the specific operation, for which a person has been appointed to be a NAIE, is an item point for discussion at an APN meeting, and if Director of APN Secretariat deems it useful, he/she may propose to SC
Chair to invite this NAIE to attend the said meeting in an advisory role (unless the NAIE is an official member/participant of that meeting anyway).

When travelling on behalf of 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, to the SC.
<table>
<thead>
<tr>
<th>Item 9</th>
<th>Project Title</th>
<th>Proponent</th>
<th>Country</th>
<th>Project Summary</th>
<th>Regional Collaboration</th>
<th>Project Duration</th>
<th>Budget Allocation</th>
<th>Total Funding Recommended</th>
<th>SPG Recommendation to the IGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Influence of Mangrove Biodiversity on Accumulation of Carbon and Resilience to Sea Level Rise</td>
<td>Dr. Severino G. Salmo III, Aenos de Manilla University, Quezon City</td>
<td>Philippines, Malaysia, Singapore, Australia, Indonesia</td>
<td>Mangroves provide vital ecological and socio-economic services such as supporting fisheries and forestry products, stabilizing shorelines, sequencing 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 standardized 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.</td>
<td>3 Years</td>
<td>2014/2015 Awarded: 40,000 (Retained from 2014/2015 fund)</td>
<td>2014/2015 Approved: 25,000 (Retained from 2014/2015 fund)</td>
<td>20,000</td>
<td>85,000</td>
</tr>
<tr>
<td>2</td>
<td>Comparative Analysis of Pollution Sources at the Hangzhou Bay &amp; Mekong River Mouths</td>
<td>Professor Jiaping Wu, Institute of Islands and Coastal Ecosystems, Zhejiang, CHINA</td>
<td>Thailand, Vietnam, Laos, ROK, Japan, USA</td>
<td>At the interface between land and sea there exist continuous material exchanges where the terrestrial ecosystems discharge nutrients into oceans to provide food sources for oceanic organisms but also cause 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.</td>
<td>3 Years</td>
<td>2014/2015 Awarded: 45,000 (Retained from 2014/2015 fund)</td>
<td>2014/2015 Approved: 20,000 (Retained from 2014/2015 fund)</td>
<td>45,000</td>
<td>110,000</td>
</tr>
</tbody>
</table>
The proposed project will strive to design a new generation of flood risk reduction services that are integrated into the urban landscape. The project will be divided into three phases: (1) Understanding the urban landscape and identifying key flood risk hotspots; (2) Developing a city-wide flood risk reduction strategy; and (3) Implementing and monitoring the strategy. The project will be coordinated by the Australian Centre for Climate Change and Resilience (ACCCR) and will involve collaboration with local governments, universities, and research institutions in the target city.

**Project Coordinator:** Dr. Jackie Parry, Australian National University, Canberra, Australia

**Funding:**
- **Australia:** $450,000
- **Bangladesh:** $150,000
- **India:** $350,000
- **Malaysia:** $450,000
- **Vietnam:** $350,000

**Total Funding:** $1,650,000

The project is projected to start in 2016 and will run for 3 years.
### Project Title: Developing life-supporting marine ecosystems along the East Asia’s coasts - a synthesis of physical and ecological processes for coral reef ecosystems for management and socio-economic development in the region

**Proponent:** Dr. Oo Mee Sar, University of the South East Asia, Myanmar

**Project摘要:** The project aims to synthesize physical and ecological processes for coral reef ecosystems for management and socio-economic development in the region.

<table>
<thead>
<tr>
<th>Country</th>
<th>APN</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Location</th>
<th>Project Duration</th>
<th>APN</th>
<th>US$ (Budget)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>2</td>
<td>Developing life-supporting marine ecosystems along the East Asia’s coasts - a synthesis of physical and ecological processes for coral reef ecosystems for management and socio-economic development in the region</td>
<td>Dr. Oo Mee Sar, University of the South East Asia, Myanmar</td>
<td>2 years</td>
<td>75,000</td>
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### Item 9

**Total APN secured from FY 2015/2016 budget:** $355,000

**Total APN secured from FY 2016/2017 budget:** $355,000

The project is a regional research project aimed to understand the Urban Heat Island (UHI) effects to urban energy efficiency and the potential to mitigate the UHI effect through workshops and capacity building programs for policy makers.

**Proposal Title:** Urban Heat Island Effects to Urban Energy Efficiency and the Potential to Mitigate the UHI Effect through Workshops and Capacity Building Programs for Policy Makers

**Proponent:** Prof. Yuji Sugiyama, University of Tokyo, Japan

**Project Summary:** The project aims to understand the Urban Heat Island (UHI) effects to urban energy efficiency and the potential to mitigate the UHI effect through workshops and capacity building programs for policy makers.

<table>
<thead>
<tr>
<th>Country</th>
<th>APN</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Location</th>
<th>Project Duration</th>
<th>APN</th>
<th>US$ (Budget)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2</td>
<td>Urban Heat Island Effects to Urban Energy Efficiency and the Potential to Mitigate the UHI Effect through Workshops and Capacity Building Programs for Policy Makers</td>
<td>Prof. Yuji Sugiyama, University of Tokyo, Japan</td>
<td>2 years</td>
<td>80,000</td>
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</tr>
</tbody>
</table>

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### Item 10

**Total APN secured from FY 2015/2016 budget:** $355,000

**Total APN secured from FY 2016/2017 budget:** $355,000

The project aims to develop water management systems in urban areas in Asia and to promote a better understanding of water management practices and policies in urban areas.

**Proposal Title:** Water Management Systems in Urban Areas in Asia

**Proponent:** Dr. Pradeep Kumar, IIT, New Delhi, India

**Project Summary:** The project aims to develop water management systems in urban areas in Asia and to promote a better understanding of water management practices and policies in urban areas.

<table>
<thead>
<tr>
<th>Country</th>
<th>APN</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Location</th>
<th>Project Duration</th>
<th>APN</th>
<th>US$ (Budget)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>2</td>
<td>Water Management Systems in Urban Areas in Asia</td>
<td>Dr. Pradeep Kumar, IIT, New Delhi, India</td>
<td>2 years</td>
<td>80,000</td>
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</table>

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### Item 11

**Total APN secured from FY 2015/2016 budget:** $355,000

**Total APN secured from FY 2016/2017 budget:** $355,000

The project aims to study the effectiveness of different water management practices and policies in urban areas in Asia and to promote a better understanding of water management practices and policies in urban areas.

**Proposal Title:** Effectiveness of Different Water Management Practices and Policies in Urban Areas in Asia

**Proponent:** Dr. Pradeep Kumar, IIT, New Delhi, India

**Project Summary:** The project aims to study the effectiveness of different water management practices and policies in urban areas in Asia and to promote a better understanding of water management practices and policies in urban areas.

<table>
<thead>
<tr>
<th>Country</th>
<th>APN</th>
<th>Proposal Title</th>
<th>Proponent, Institution and Location</th>
<th>Project Duration</th>
<th>APN</th>
<th>US$ (Budget)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>2</td>
<td>Effectiveness of Different Water Management Practices and Policies in Urban Areas in Asia</td>
<td>Dr. Pradeep Kumar, IIT, New Delhi, India</td>
<td>2 years</td>
<td>80,000</td>
<td></td>
</tr>
</tbody>
</table>
Anthropogenic perturbations to carbon export and greenhouse gas evasion from Asian river systems

Prof. Ji-Hyung Park
Ewha Womans University
52 Ewhayeodae-gil, Seoul 03760, Republic of Korea

River systems provide ecosystem services crucial for sustaining rapidly expanding population centers across Asia. Despite far-reaching environmental impacts, human induced perturbations such as water pollution have rarely been linked to carbon (C) export and greenhouse gas (GHG) evasion from Asian rivers. The proposed research aims to build a research network on C fluxes through Asian river systems to assess water pollution impacts on Asian rivers as a C sink. The project will take a unique approach combining repeated monitoring and synthesis workshops and exploratory field studies. Each year a workshop will be held in a regional hub - Yellow River (East Asia), Mekong (Southeast Asia), and Ganges Brahmaputra (South) - to synthesize existing long term data and conduct a field trip and follow-up workshops. Standardized protocols for monitoring C fluxes will be disseminated among project members and local collaboration via a workshop session and field studies. Long term data from local sources and new data from field studies, will be synthesized using regional scale models of water flow and balance to provide the first regional assessment of water pollution impacts on Asian rivers as a source of C to the atmosphere and recommendations for water management options integrating water quality and GHG emissions.

Bangladesh, Cambodia, China, India, Nepal, Republic of Korea, Singapore, United States of America, Vietnam

3 years $138,000 $154,000 $43,000 $43,000 $43,000 $129,000

The proposal is ranked in the 1st range. Award is recommended at a level of US$ 129,000 for the three years project duration.

Assessing land use functions for sustainable land management in Asia countries

Prof. Lin Zhen
Institute of Geographic Science and Natural Resources Research, Chinese Academy of Sciences, 11A Datun Road, Chaoyang District, Beijing 100101, PR China

A combination of natural condition and human activities caused significant effects on land use in Asia, and brought challenges for decision making on sustainable land management. Land functional assessment (LFA) approach has been developed for assessing impact on services of multi-functions attached to land use, and economic, environmental and societal impacts of land use changes have on sustainability. LFA is a crosscutting test bed studied issue. This project addresses questions of what are the policy impact on LFA and sustainability, and how to mainstream the results into land use decision. It aims to a place-based comparative study in China, Bangladesh and Japan by selecting remote rural areas and linking to local policies/programmes and international best practices. To develop a framework, indicator system and scenario for quantitative impact assessment of policy on LFA, and enhance regional partnerships with Global Land Project/GIFP/GEF/JP/WH/Forestry/SCU/FAO/UNEP/IEA through joint activities, shared data/findings and dissemination materials. Quantitative data will be developed from intensive field surveys using professional tools like Participatory Rural Appraisal (PRA). Key informant interview (KII). Framework for Participatory Impact Assessment (PIA). Satellite images and statistics. The study highlights, stakeholders participatory improvement; proposed activities and expected outputs are closely relevant for APN goals and agenda in various ways.

Bangladesh, China, Japan

2 years $88,955 $75,000 $42,000 $42,000 $84,000

The proposal scored high above the cut off line, shows strong collaboration and adequate expertise within the project team. Award is recommended at a level of US$84,000 for two years project duration.

Development of new water supply strategies in two watersheds of India and Sri Lanka in the context of climate change, rapid urbanization and population growth: a vulnerability assessment approach

Dr. Manish Kumar
Tezpur University
Department of Environmental Sciences, Tezpur University, Napaam, Sonitpur, Assam 784-028, India

This project aims to re-examine the current urban water use system and propose a new one to cope up with the future climate change, rapid urbanization and population growth in South Asian Cities. In the new system, each water resource will be properly allocated to each water use by considering the balance between water supply and demand. It requires information on available amount, and chemical and biological quality of various water resources, exchange zone identification for sustainable planning as well as people perception and willingness to pay. Two of main cities in South Asia, Guwahati (India) and Colombo (Sri Lanka), are selected in research fields. Both locations fall under Asian monsoon region but are on different phases of economic and demographic growth, nonetheless, suggested water supply strategies are being to an integral part of integral infrastructure development of urban areas especially in developing countries, Climate change and related uneven rainfall distribution cause water shortage. In such areas, safe water supply might become unsustainable, because water pollution becomes severe by decrease of water recharge and unintentional shift of water resources. We intend to evaluate urban water use strategies suitable for each city from various angles and develop water Quality Information Platform (WQIP) and new strategies of sustainable water supply under climate change scenario. The research will have an impact not only on the critical scientific understanding of emerging chemical and biological pollutants issues posing threat on water potable use, but also on the development of a sustainable water management in urban and agriculture sectors.

India, Japan, Sri Lanka

2 years $81,000 $24,000 $42,000 $33,000 $75,000

The proposal scored high above the cut off line. Proposal themes are satisfactory. Award is recommended at a level of US $75,000 for two years project duration.

Managing organic amendments to reduce greenhouse gas emissions and supplement fertilizer nitrogen inputs in tropical Indian and Sri Lankan agricultural soils

Dr. David Rowlands
Queensland University of Technology (QUT)
1 George Street, Brisbane, 4001, Australia

Organic amendments (OA) such as crop residues, manures and composts offer valuable and cost effective sources of nitrogen (N) for tropical agricultural production systems in developing countries. The amount and timing of N available for crop growth following OA application to the soil however is difficult to predict due to the complex interactions between added N and associated carbon (C) and the soil microbial biomass, climate and management. Maximizing N release from OA with crop N demand is critical for maintaining adequate crop growth and ensures high food yields often over apply N, either as OA or with synthetic fertilizer N. As well as reducing farm profitability, this results in substantial N losses, contributing to pollution of watersheds, and the production of the powerful greenhouse gas N2O. The proposal will extend two current projects which use the latest greenhouse gas research methodology developed in Australia and established in field experiments. Sri Lanka and India is a key region in tropical agriculture and can provide farmers with better tools for predicting N availability from OA. The project has three major aims: (i) quantify N turnover and N2O losses and from a range commonly used OA (ii) determine N release rates for major crops under tropical climates and (iii) examine the potential for increasing N use efficiency by better accounting for N in OA and develop recommendations for the use of OA by local farming communities.

Australia, India, Sri Lanka

2 years $88,000 $325,595 $40,000 $40,000 $80,000

The SPG agreed that information about collaborators’ engagement in the project needs to be improved. Funding is awarded with condition that clarification on collaborators’ engagement is to be provided. Conditional award is recommended at a level of US$80,000 for 2 years project duration.

CRRP2015-FP01-Zhen
CRRP2015-FP03-Park
CRRP2015-FP08-Rowlings
CRRP2015-FP09-Kumar
CRRP2015-FP04-Zhid
<table>
<thead>
<tr>
<th>Proposal Title</th>
<th>Project Summary</th>
<th>Collaborating Countries</th>
<th>Project Duration</th>
<th>Total Funding Requested (Original)</th>
<th>In-kind contribution</th>
<th>Funding Recommendation (to be secured from FY 2016/2017 budget)</th>
<th>Total APN Funding Recommended</th>
<th>SPIG Recommendation to IGM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRRP2015-FP10</strong></td>
<td>Appropriate Solid Waste Management Towards Flood Risk Reduction Through Recovery of Drainage Function of Tropical Asian Urban Cities</td>
<td>This study aims to exhibit an urban flood risk reduction strategy which solves urban drainage problems by managing solid wastes derived from anthropogenic and natural activities, through administrative services on sewage and drainage cleaning, waste collection, and citizens cooperation to waste-disposal. Flooded that often happens, after high intensity of precipitation in urban area is mainly caused by the lack of drainage capacity. On top of that, one of the common causes of urban flood in Asian cities, is said to be the lack of drainage system to prevent rising of devastated area.</td>
<td>Japan, Thailand, Vietnam</td>
<td>2 years</td>
<td>$ 90,000</td>
<td>$ 25,000</td>
<td>$ 35,000</td>
<td>$ 40,000</td>
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<tr>
<td><strong>CRRP2015-FP08</strong></td>
<td>Water-Energy-Food nexus: perspective: Path making for Sustainable Development Goals (SDGs) to country actions in Asia</td>
<td>Water and energy security are still a study important for sustainable development. The UN General has approved a set of 17 Sustainable Development Goals (SDGs). Among the proposed goals, peace, good and equality favor the cause of basic elements such as food, water, and energy, respectively. For survival of human being, economic growth and development. About 27 indicators have been proposed for food, water, and energy goals by the UN General Assembly. Open Working Group for Sustainable Development Goals. The indicators of three basic elements are interdependent and the nature of interdependency should be taken for designing the future objectives of the country and region. But, to date resource management is mostly done in unidisciplinary manner approach, causing unintended trade-offs, and conflicts among relevant sectors or areas. Unexpectedly, a lot of discussion has been made to reflect migration approach in the SDGs process. In the Asia-Pacific, where faces significant challenges in ensuring water, energy and flood security achieving the SDGs on food, water, energy and flood will require integrated perspective across the pillars of resource management. The project aims at creating a platform that will help the countries (both developed and developing countries) to develop policies and plans to manage these resources effectively and meet related targets more swiftly. This project will also perform comparative analysis in the context of readiness to implement SDGs by the developed countries, emerging countries, and developing countries in the region and this will facilitate to learn the good cases from each other.</td>
<td>Bangladesh, Japan, Vietnam, India</td>
<td>2 years</td>
<td>$ 85,085</td>
<td>$ 71,000</td>
<td>$ 40,000</td>
<td>$ 40,000</td>
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<tr>
<td><strong>CRRP2015-FP07</strong></td>
<td>Risk and Resilience in the Pacific: Influence of Peripherality on Exposure and Responses to Global Change</td>
<td>In rural parts of many Pacific Island countries, significant differences exist between core and peripheries. Core communities may be better informed about the science of global change and better equipped to respond to its impacts. Peripheral communities often have less such awareness. Yet much of the cultural resilience that has allowed such communities to survive through adversity is lost in core areas and in peripheral communities it remains stronger, often as traditional environmental/cultural knowledge. These disparities are critical in archipelagic Island countries but have not been recognized by agencies seeking to enable adaptation. Adaptation is a complex process, and as the change unfolds, more needs to be done to determine the appropriate resilience options for long-term benefit.</td>
<td>Australia, Fiji, Federated States of Micronesia</td>
<td>5 years</td>
<td>$ 163,520</td>
<td>$ 100,000</td>
<td>$ 50,000</td>
<td>$ 45,000</td>
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<tr>
<td><strong>CRRP2015-FP11</strong></td>
<td>SEACLID/CORDEX Southeast Asia Phase 2: high-resolution analysis of climate extremes over key areas in Southeast Asia</td>
<td>The second phase of the SEACLID/CORDEX Southeast Asia project will examine climate extreme events over key areas within Southeast Asia through active engagement and collaboration with stakeholder/user groups. Key vulnerable areas in the region will be identified (e.g. megacities, coastal low-lying urban areas, areas of frequent flooding or drought). These regions will be offered high-resolution climate change projection. If the project is successful, the results will be used by local and national government agencies in their planning.</td>
<td>Indonesia, Malaysia, Philippines, Thailand, Vietnam</td>
<td>3 years</td>
<td>$ 135,000</td>
<td>$ 30,000</td>
<td>$ 40,000</td>
<td>$ 40,000</td>
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<td>Full Proposal Reference Number</td>
<td>Proposal Title</td>
<td>Proponent, Institution and Country</td>
<td>Project Summary</td>
<td>Collaborating Countries</td>
<td>Project Duration</td>
<td>Total Funding Requested (Original)</td>
<td>In-kind Involvement and Contribution</td>
<td>Funding Recommendation (to be secured from FY 2016/2017 budget)</td>
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<tr>
<td>CRRP2015-SG01-Lokupitiya</td>
<td>Identification of the best agricultural management practices with better greenhouse gas benefits in salinity affected areas of South Asia</td>
<td>Dr. Erandathie Lokupitiya&lt;br&gt;Department of Zoology, Faculty of Science, University of Colombo, Colombo 03, Sri Lanka</td>
<td>Sea level rise is a major impact of climate change, the main cause of which has been identified as increased greenhouse emissions (GHGs) since industrial revolution. Sea level rise and related anthropogenic activities leading to salt water intrusion have affected the lowlying agricultural areas of South Asia. In addressing climate change related issues, both mitigation of GHG emissions and adopting appropriate adaptation measures to minimize the impacts are necessary. In addressing the salinity issue, remediation measures adopted on salt affected soils to reduce the salinity effect could influence future climate change if they cease high levels of salinity. This will result in the creation of the salinification of rice cropping systems of the South Asian region considering the role GHG emissions and other socio-economic benefits associated with the adoption measures. The outcome of this collaborative project will be used to raise awareness among farmers for adopting climate-friendly land management practices (WFP) for salt affected soils and make recommendations for policymakers in developing adaptation policies and strategies within the respective countries and the region as a whole.</td>
<td>Sri Lanka, Pakistan, Bangladesh, India, USA</td>
<td>2 years</td>
<td>$41,705</td>
<td>$74,000</td>
<td>$80,000</td>
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<tr>
<td>CRRP2015-SG02-Huang</td>
<td>Assessing the health effects of extreme temperatures and the development of adaptation strategies to climate change in the Asia-Pacific region</td>
<td>Dr. Cunrui Huang&lt;br&gt;Sun Yat Sen University&lt;br&gt;74, Zhongshan Road #2, Guangzhou 510080, China</td>
<td>The health effects of extreme temperatures are the most significant source of weather-related public health problems. They are also the most direct and well-understood impact of climate change on human health. This project aims to: (1) quantify the total mortality burden attributable to non-optimum ambient temperature in China, Vietnam, Thailand and Bangladesh; (2) elucidate the detailed temperature-related risk factors, regional and community characteristics; and (3) formulate local adaptation strategies to deal with temperature-related health effects and reduce vulnerability. The project will have the potential to make a significant contribution to protecting the health of present and future generations in the Asia-Pacific region.</td>
<td>China, Vietnam, Thailand, Bangladesh, Australia</td>
<td>2 years</td>
<td>$60,000</td>
<td>$90,000</td>
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**TOTAL FUNDS AWARDED TO NEW CRRP PROJECTS**

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<thead>
<tr>
<th>Contingency Fund</th>
<th>$196,000</th>
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<tr>
<td><strong>TOTAL AVAILABLE FUNDS FOR CRRP</strong></td>
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<tr>
<td>Project Reference Numbers</td>
<td>Proposed Title</td>
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<tr>
<td>CBA2015-01NY - Pushpakumara (CBA2015-02NY - Pushpakumara)</td>
<td>Scientific Capacity Development to Strengthen Informed-decision Making for Improved Climate Policy Formulation and Implementation in South Asian Countries</td>
</tr>
<tr>
<td>CBA2015-02NY - Adhiprakash (CBA2015-03NY - Adhiprakash)</td>
<td>Building Capacity for Urban Climate Change Adaptation in Southeast Asia</td>
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| 72,000 | 72,000 | 72,000 |
### Table

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Proposal Title</th>
<th>Summary</th>
<th>Proponent</th>
<th>Collaborative countries</th>
<th>Duration and Funding</th>
<th>2016/2017 Fund recommended</th>
<th>CDC Remarks</th>
</tr>
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<tbody>
<tr>
<td>CBA2015-FP11-01</td>
<td>Facilitating the attendance, interaction and training of young and developing nation scientists from Asia Pacific at the International Conference on Regional Climate CORDEX 2016 (IRC-CORDEX 2016)</td>
<td>There is an increasing need for reliable regional climate information that is both scientifically rigorous but also communicated in a manner to which all potential end-users, from water managers in Vietnam to city planners in Metro Manila to renewable energy companies in China, can utilize for effective impact and adaptation planning. The scientific capacity development, partnership building and science-policy interaction activities ongoing in the Asia Pacific regional teams of the global Coordinated Regional Downscaling Experiment (CORDEX), as part of the World Climate Research Programme, are working towards meeting this challenge. IRC-CORDEX 2016, to be held in Stockholm 17th-20th May 2016, will bring together the international community involved in regional climate research and its applications to the vulnerability, impacts and adaptation community and the full spectrum of potential end-users of regional climate information. It will further promote the CORDEX vision to advance and coordinate the science and application of regional climate downscaling through global partnerships. This project will provide support for members of the Asia Pacific CORDEX communities, particularly early career and developing nation scientists, to attend, present their work, network, build new partnerships and collaborations, and gain new experiences and skills at this high level international event.</td>
<td>Dr. Hyun Suk Kang</td>
<td>Australia, Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pacific Island States, Pakistan, Philippines, ROM, Russian Federation, Sri Lanka, Thailand, USA, Viet Nam, Maldives</td>
<td>$24,926.00</td>
<td>$24,926.00</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>CBA2015-FP11-01</td>
<td>Enhancing perception and capacity for national and provincial level planners and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Vietnam</td>
<td>Vietnam National Climate Change Strategy (2011) and other national policies recognize the significance of GHG emission monitoring and inventory. Department of Meteorology, Hydrology and Climate Change (DMHCC) under Ministry of Natural Resources and Environment (MONRE), appointed as national focal point for GHG emission monitoring and inventory, has been chairing the team to develop National Communications, Biennial Updated Reports and Intended Nationally Determined Contributions. These national reports include results from National Inventory Report (NIR). However, the NIR development encountered various difficulties, leading to very limited supports to the implementation of NAMAs and low-carbon cities. This is due to the lack of perception and understanding of GHG inventory at all levels. With high ambitious goals in INDC, Vietnam needs to improve perception and capacity for leaders and practitioners on GHG emission monitoring and inventory. This project proposes the immediate solution through two main activities: (1) the development of a comprehensive set of training materials on GHG monitoring and inventory, NAMAs and low-carbon pathways, (2) organization of regional training workshops for national and provincial leaders in the three regions in Vietnam. The outcomes of this project will be significant enhancement of perception and capacity for policy makers and practitioners at all levels on GHG monitoring and inventory. The project will also motivate neighboring areas to follow.</td>
<td>Dr. Quang Huy Luong</td>
<td>Vietnam</td>
<td>2 years</td>
<td>$39,175.00</td>
<td>$44,300.00</td>
</tr>
<tr>
<td>CBA2015-FP01-05</td>
<td>CLIVAR Open Science Conference</td>
<td>The CLIVAR Open Science Conference, and the associated Early Career Scientists (ECS) Symposium and Regional Stakeholder Forum, will bring together prominent international scientists and the future generation of leaders for an unprecedented series of international meetings. It is expected that around 600 climate scientists from all around the world will attend the conference. The meetings will provide opportunities for young and senior scientists and practitioners from a variety of disciplines and countries to present their work, network and become more involved in CLIVAR climate and ocean research activities. This proposal is to support the attendance of 20-30 young scientists and students from Asia-Pacific developing countries to participate in both the Open Science Conference, and the associated Early Career Scientists Symposium. The program of the conference will consist of presentations from invited speakers, oral and poster presentations, and outreach events. The Early Career Scientists Symposium will have career building workshops as well opportunities for the participants to discuss their scientific achievements and build collaboration with their peers, while developing a strong network with colleagues from different countries. CLIVAR would like to actively engage early career scientists, especially those from the regions that are most vulnerable to climate change and variability.</td>
<td>Dr. Fangli Qiao</td>
<td>China, New Zealand, Republic of Korea, USA, France, Germany</td>
<td>1 year</td>
<td>$40,375.00</td>
<td>$40,375.00</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Proposal Title</td>
<td>Summary</td>
<td>Proponent</td>
<td>Collaborative countries</td>
<td>Duration and Funding</td>
<td>2016/2017 Fund recommended</td>
<td>CDC Remarks</td>
</tr>
<tr>
<td>------------------</td>
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<tr>
<td>CBA2015-FP06-Weerakkody</td>
<td>Capacity Development of Agrarian Research Policy-Technology Personnel in Sri Lanka on “Global Change and Sustainability”</td>
<td>The agricultural policy of Sri Lanka symbolizes far-reaching ‘awareness’ of policy makers on ‘global change’ and ‘sustainability’. Nevertheless, poor social identity of farming communities, adverse environmental externalities and declining profitability depict how agrarian development efforts have fallen short of its goals thus placing sustainability of farming systems at a great jeopardy. Failures visible in the context of aging farm population, youth departure from agriculture, poverty, malnutrition, health issues of pesticide use (OXO), poor living conditions of farmers, clearing of forests, soil erosion and excessive use of subsidized fertilizers points to ‘awareness’ of policy makers alone is inadequate to translate the policies into sustainable practices. The role of researchers in guiding them to adopt ‘systems perspective’ while making them equipped with smart agricultural policy transformation tools in order to facilitate the allocation of resources between sustainable farming options. This collaborative project aims to build the capacities of different stakeholders in the agricultural sector; train national level researchers in constructing such tools, indices of sustainability as proposed in this exercise/interactive research policy dialogue to provide a scientific input to policy formulation/process aided by the above tool; training of grass roots level farmer educators and farmer leaders towards greening of major farm lands in the country.</td>
<td>Mrs. Priyamjanie Renuka Weerakkody</td>
<td>Sri Lanka</td>
<td>1 year</td>
<td>$21,934.50</td>
<td>$21,934.50</td>
</tr>
<tr>
<td>CBA2015-FP03-Shrestha</td>
<td>Adapting groundwater of Asian cities to climate change: bridging the science and policy interface</td>
<td>The proposed project aims to formulate the adaptation strategies to reduce the vulnerability of groundwater resources of Asian cities to climate change through the collaborative efforts of scientists and policy makers and relevant stakeholders (e.g. users) in selected Asian cities (Bangkok, Bandung, Ho Chi Minh City and Lahore). The project also aims to develop the capacity of policy makers to assess the vulnerability of groundwater resources thorough customization and application of several indicators. Through e-conferences and regional workshops, communications among policy makers, scientists, and local stakeholders (water users) will be enhanced and the assessment results will be a baseline for future studies. The proposed project and its activities are relevant to APN’s goals such as supporting regional cooperation, strengthening interactions between scientists and policy makers, and improving scientific and technical capabilities of the nation. Similarly the project also encompasses the scientific agenda (2010-2015) which covers the specific areas such as climate change and climate variability, resource utilization and pathways.</td>
<td>Dr. Sangam Shrestha</td>
<td>Indonesia, Pakistan, Thailand, Viet Nam</td>
<td>1 year</td>
<td>$40,000.00</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>CBA2015-FP15-Dutta</td>
<td>Mainstreaming weather and climate information application for agro-ecosystem resilience in a changing climate</td>
<td>Climate change has already altered the weather patterns and therefore planning and decision making process based on the information on tradition and indigenous knowledge of farmers may no longer be accurate and useful. Regional, national and local authorities have not been given due attention to address this issue and therefore farmers and their dependents have been facing enormous difficulties to sustain their livelihoods with the face of climate change and its consequences. Mainstreaming climate information application and utilization of adaptive technological solutions is one of the remedial measures to improve agriculture livelihoods, which in turn enhances agro-ecosystem services and functions. This project proposes to conduct a training course on agro-ecosystem resilience for the national and sub-national government officials in Sri Lanka, Nepal, Vietnam and Thailand as a Training of Trainers activity to create awareness and build capacity on utilization of weather and climate information and adaptive technological solutions. A 4-day training course on “agro-ecosystem resilience in a changing climate”, developed by Asian Disaster Preparedness Centre (ADPC), Thailand under the Australian Aid support, will be customized with some modifications to conduct TOIs in four target countries. This will be organized in collaboration with respective ministries, national and sub-national authorities to get their acceptance to facilitate the mainstreaming process.</td>
<td>Dr. Rishiraj Dutta</td>
<td>Nepal, Sri Lanka, Thailand, Viet Nam, India</td>
<td>2 years</td>
<td>$42,500.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Proposal Title</td>
<td>Summary</td>
<td>Proponent</td>
<td>Collaborative countries</td>
<td>Duration and Funding</td>
<td>2016/2017 Fund recommended</td>
<td>CDC Remarks</td>
</tr>
<tr>
<td>------------------</td>
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</tbody>
</table>
| CBA2015-FP14-NGO | Ecosystem Based Adaptation approach for Sustainable Management and Governance of Coastal Ecosystems (ENGAGE) | Coastal ecosystems are biodiversity rich and socio-economically relevant, supporting livelihood options of millions inhabiting the coastal zones. Recent debates in sustainability science endorses the need of ecosystem based framework for resource management and planning as it appropriates various ecological services and benefit received by social capital. IPBES is taking effort to strengthen the science-policy interface for human well-being and sustainable development by supporting the framework of Ecosystem Based Adaptation. Capacity development is identified as means of implementation both for IPBES objectives as well as the post-2015 development agenda, the sustainable development goals (SDG's - Goal 17). For successful implementation of scientific concepts and outcomes, it is pertinent to strengthen the capacity of all levels of stakeholders for monitoring and assessing risks to socio-ecological (including the component on human health systems, to manage and restore ecosystems (mainly, mangroves) and further to increase awareness of the ecological services, economic importance and cultural significance of coastal ecosystems. The key objective of this proposal is to initiate a regional level capacity development program in support of Ecosystem of Coastal Ecosystems. The twin-framework approach (training course-workshop) is an innovative way to involve a wide range of stakeholders for exchange and discussions (ENGAGE), and for young professionals to network. | Dr. Tho Hung Ngo  
Asian Institute of Technology in Vietnam  
Building B3, University of Transport and Communication, Lang Thuong, Dong Da, Hanoi, Vietnam;  
Phone: +84913586886/Fax: +844 37690492;  
Email: ngothothing@gmail.com | Cambodia, Indonesia, Malaysia, Philippines, Republic of Korea, Thailand, Viet Nam, UNU-RWTH - Canada | 1 year $39,950.00 | $39,950.00 | $35,000.00 | CONDITIONAL FUNDING  
RECOMMENDED: Proponent is requested to answer the Step II Stage II review comments. The response will be communicated with reviewers to further strengthen the proposal. |
| CBA2015-FP10-Subrino | Rapid mapping technique for disaster observation and environmental change data acquisition | The Asia Pacific countries are facing many impacts due to the natural disasters such as earthquake, tsunami, volcano eruption, landslide, flooding, forest fire etc. These will lead to the global environmental change if they are not instantly monitored and managed. The rapid mapping technology have a good potential to overcome these problems, one of which is by improving the resilience of environment to disaster and environmental changes. Remote Sensing (RS) and Geographic Information System (GIS) are powerful technologies for rapidly collecting, combining, analyzing and visualizing necessary information on the damages of the prone areas (Balatuxa, 2013). Therefore, integrating these technologies into a rapid mapping technique is practical for decision makers and end-users in the high risk developing countries, such as the majority of ASEAN countries. These need to be acknowledged and practiced by young scientists of the high risk countries, in which they will assist to disseminate the technology to any of the environmental stakeholders. In response to that, a summer school will be held in accordance with the International conference of Indonesian Society for Remote sensing (ISR) 2016 to assist the young scientists to improve their knowledge in the implementation of the rapid mapping technique for providing fast and accurate geospatial information in the decision making processes. | Prof. Dewayany Subrino  
Indonesian Society For Remote Sensing (ISR) or  
Masyarakat AHI  
Penginderaan Jauh Indonesia (MAPiN)  
Executing Secretariat  
2nd Floor F Building, Jalan Raya Jakarta Bogor km 46  
Cibinong 16911 Indonesia;  
Phone: +6221 87906241;  
Fax: +6221 87906041;  
Email: dewayany@gmail.com | Indonesia, Malaysia, Taiwan and Netherlands | 1 year $37,279.00 | $37,279.00 | $35,000.00 | CONDITIONAL FUNDING  
RECOMMENDED: Proponent’s institution legitimacy is questionable thus it is recommended to check the project's administrative capabilities of institution before awarding the APN grant. |
Item 11: APN Future Development

The purpose of this paper is to initiate lively discussions on the future development of APN which marked the 20th anniversary since its establishment. In order to comply with the evolving global change community and to respond to the changing needs of member countries, this paper provides ideas on the possible direction of APN activities. For example, collaborating with other organisations internationally and setting themes of much required research and capacity development.

Albeit the limited amount of time at the IGM/SPG Meeting to extensively discuss this important topic, the Secretariat believes that your continuous consideration and guidance is crucial in directing APN in the mid-term.

Since its establishment in 1996 APN has been active in the Asia-Pacific region to foster regional collaborative research, improve scientific and technical capabilities of developing countries, and strengthen interactions between policy makers and the scientific community.

The support from APN to scientific research in developing countries is especially valued among member countries. APN has supported over 560 scientific research and capacity development activities in the past 20 years.

Furthermore, APN is well acknowledged by various international organisations such as:

- IPBES that emphasises the importance of capacity development and recognises APN as a vital partner in the Asia-Pacific region.
- IPCC that reaffirms the importance of supporting and training young scientists to enhance the involvement of developing countries, and recognises APN as one of the existing regional organisations that is “better suited and more experienced in this area”.
- UNFCCC that acknowledges the importance of responding to the needs to identify, design and implement adaptation and mitigation actions in developing countries. APN is in a good position to contribute to UNFCCC through our mechanisms of supporting collaborative research and capacity development activities.
- UNFCCC that also confirms the relevance of stronger involvement of developing countries, and the needs to assess and transfer appropriate technology in efforts to fight global warming.

While APN continues to play a prominent role in global change research in the Asia-Pacific region, APN wishes to contribute more in advancing efforts of the international community. In order to do so effectively, APN may consider below directions.

1. Development of Activities and Cooperation

1. Activities that should be enhanced

   Given the result of COP21 which reaffirmed the importance of technology development and transfer as one of the key tools to increase resilience to climate change and reduce greenhouse gas emissions, APN may consider in incorporating these currents in our activities.

   Consideration is also required on how to approach the private sector which possess technologies on mitigation and adaptation, waste management and the 3Rs, and water and air pollution which are crucial in responding to global change.

2. New cooperation with organisations internationally that include:

   - collaboration in supporting research projects and capacity development activities;

   - New cooperation with organisations internationally that include;
I. Development of Activities and Cooperation

While APN continues to play a prominent role in global change research in the Asia-Pacific region, APN wishes

Since its establishment in 1996 APN has been active in the Asia-Pacific region to foster regional collaborative research, improve scientific and technical capabilities of developing countries, and strengthen interactions and to respond to the changing needs of member countries, this paper provides ideas on the possible themes of much required research and capacity development.

The purpose of this paper is to initiate lively discussions on the future development of APN which marked the 20th anniversary since its establishment. In order to comply with the evolving global change community and to contribute more in advancing efforts of the international community. In order to do so effectively, APN may

In order to do so effectively, APN may

Albeit the limited amount of time at the IGM/SPG Meeting to extensively discuss this important topic, the Secretariat believes that your continuous consideration and guidance is crucial in directing APN developments of a new call/calls for proposals on topics of high importance by direct financial contributions, trust funds, etc.;

- encourage co-organised and co-financed events with APN such as Science-Policy Dialogues, Proposal Development Training Workshops, etc.;

3. Cooperation with Member Countries

3.1 Developing Member Countries

In FY2015, a Proposal Training Workshop was held in Siem Reap, Cambodia, based on the Memorandum of Understanding signed between the Ministry of Environment of Cambodia and APN. The Ministry contributed US$18,000 to hold this event. This is an excellent example how each member countries can contribute to APN financially.

APN wishes to further improve this "Co-Finance Partnership" to encourage member countries, especially developing countries, to use this mechanism to conduct research and capacity development activities on specific topics of high importance to APN.

For example, member countries may submit proposals for co-funding on topics of high importance and shoulder 100% of the cost that is related to activities conducted by the researchers from their own countries (subject to SPG judgement on the quality of the proposal).

3.2 Developed Member Countries

Developed member countries may pledge ear-marked funds for activities on their high priority areas.

II. Strengthening Financial Basis of APN

APN is very grateful to the continuous direct financial support of the Ministry of the Environment of Japan, the Hyogo Prefectural Government, the Ministry of Environment of ROK and the Ministry for the Environment of New Zealand. However, in the light of decreasing annual contributions over the years and more than 90% of APN’s annual income coming from the Ministry of the Environment of Japan in FY 2015, open and serious discussions are necessary to diversify our financial sources to secure a strong future of APN. Any ideas for further discussion are welcome.

1. Internal measures to secure funds for APN’s core programmes and other activities:

- Shorten the period of IGM/SPG Meeting;
- Hold IGM/SPG Meetings biennial (require amendments to the Framework);
- Encourage developing countries to cover the travel cost of participants representing their country; and
- contribute to APN in saving financial resources.

2. Mid-Term Strategies

Mid-term strategies that are summarised under I. Development of Activities and Cooperation:

- Activities in thematic areas that needs to be strengthened by engaging the private sector as much as possible;
- New partnerships with organisations internationally; and
- Explore new ideas and improve old mechanisms to further engage the governments of member countries.
III. Task Force

It is suggested that a Task Force/ad hoc group to be established to discuss the future development of APN and formulate a set of clear strategies by working on the aforementioned ideas through the fiscal year.

Mode of operation:
- Both policy makers and scientists from all sub-regions should be represented in the Task Force. SC Members and volunteers, including member countries that has supported APN through direct financial contributions, are also welcome to join the Task Force.
- Initial communications will be conducted through electronic means. If possible and appropriate, a face-to-face meeting will be considered.
- The Task Force/ad hoc group will provide the intersessional SC Meeting with an initial plan.
- The final draft plan will be presented to the 22nd IGM/SPG Meeting for discussion and approval.
GREEN CLIMATE FUND (GCF)

Status
GCF was established by 194 governments, guided by the principles and provisions of UNFCCC. It is governed by a Board of 24 members, comprising an equal number of members from developing and developed countries.

Mission
The mission of GCF is to limit or reduce greenhouse gas emissions in developing countries and to help vulnerable societies adapt to the unavoidable impacts of climate change. The Fund has identified 5 investment priorities which will deliver major mitigation and adaptation benefits:
- transforming energy generation and access
- creating climate-compatible cities
- encouraging low-emission and climate resilient agriculture
- scaling up finance for forests and climate change
- enhancing resilient in Small Island Developing States.

Funding and Accreditation
GCF will finance projects and programmes in the public and the private sectors that contribute towards achieving at least one of the eight strategic impacts of the Fund which are: (1) energy generation and access; (2) transport; (3) buildings, cities, industries and appliances; (4) forest and land use; (5) health, food and water security; (6) livelihoods of people and communities; (7) infrastructure and built environment; and (8) ecosystems and ecosystem services.

To access funding, institutions (national, regional, and international entities) will go through a process of “accreditation” designed to assess whether they are capable of strong financial management and of safeguarding funded projects and programmes against any unforeseen environmental or social harm.

An entity (subnational, national, and regional entities, public and private) seeking accreditation will need to:
1. submit a completed application through Green Climate Fund Accreditation
2. submit a nomination letter from a National Designated Authority or Focal Point.

Accredited Entities carry out a range of activities which includes developing and submitting funding proposals for, and overseeing the management and implementation of projects and programmes, deploying a range of financial instruments within their respective capacities (grants, loans, equity, and guarantees), and mobilising private sector capital. Currently, 33 entities have been accredited.

Entities that are not accredited by the Fund may still submit funding proposals through Accredited Entities.

National Designated Authority (NDA) or Focal Points of GCF within APN member countries
(Countries that are underlined indicate that NDA/Focal Point of GCF belong to the same ministry as APN’s nFP)

Bangladesh-Ministry of Finance
Bhutan-Gross National Happiness Commission
Cambodia-Ministry of Environment
China-Ministry of Finance and National Development and Reform Commission
India-Ministry of Environment, Forests and Climate Change
Indonesia-Ministry of Finance
Korea-Ministry of Strategy and Finance
Lao PDR-Ministry of Natural Resources and Environment
Malaysia-Ministry of Natural Resources and Environment
Mongolia-Ministry of Environment, Green Development and Tourism
Nepal-Ministry of Finance
Pakistan-Ministry of Climate Change
Philippines-Climate Change Commission
Sri Lanka-Ministry of Mahaweli Development and Environment
Thailand-Office of Natural Resources and Environment Policy and Planning
Viet Nam-Ministry of Planning and Investment

Item 12: Confirmation of SC Procedures

The IGM is requested to confirm the membership of elected national Focal Points of the Steering Committee for the present term (2015–2017), and consider possible arrangements for starting a staggered election system, if such a system is approved by the IGM under Item 7.

1. Background

1.1. Paragraph 6.B.3.iii of the APN Framework Document provides that:

- 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.

1.2. In FY 2015, Indonesia and Pakistan appointed a new NFP to APN. The new members became observers of the SC in accordance with the provision above.

2. Action required

2.1. In light of the above, the IGM is to confirm the membership of nFPs to serve the SC for the remaining year of the current term (until 2017 when the 22nd IGM is held). It is customary for the IGM to endorse members currently serving as observers to become full members for the remainder of the current term. A list of current nFPs/observers is provided below for IGM information and decision.

Bhutan Peldon Tshering Chair
China Chengyong Sun First Vice-Chair
Indonesia Henry Bastaman* Second Vice-Chair
Pakistan Muhammad Irfan Tariq*
Russian Federation Andrey V. Adrianov

* Newly appointed nFPs in FY2015

2.2. In accordance with the approval status of the draft amendments to the Framework Document (Item 7), the IGM is to further consider possible arrangements of starting a staggered election system (annual election for either two or three nFPs) if the system is approved by the IGM under Item 7. The exact procedures will be subject to the APN Framework Document with the newly approved amendments.
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<table>
<thead>
<tr>
<th>Country</th>
<th>nFP</th>
<th>Chairpersonship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhutan</td>
<td>Peldon Tshering</td>
<td>Chair</td>
</tr>
<tr>
<td>China</td>
<td>Chengyong Sun</td>
<td>First Vice-Chair</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Henry Bastaman*</td>
<td>Second Vice-Chair</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Muhammad Irfan Tariq*</td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Andrey V. Adrianov</td>
<td></td>
</tr>
</tbody>
</table>

* Newly appointed nFPs in FY2015

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## Item 13: Hosts of 22nd and 23rd IGMs

Discussions are expected to take place under the present item and announcements may be made. A list of past IGMs and associated meetings are provided below.

### Locations of past IGMs and associated meetings

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Sub-Region</th>
<th>Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Zhengzhou, China</td>
<td>TEA</td>
<td>21st IGM/SPG, 21-22 March</td>
</tr>
<tr>
<td>2015</td>
<td>Kathmandu, Nepal</td>
<td>SA</td>
<td>20th IGM/SPG, 25-27 March</td>
</tr>
<tr>
<td>2014</td>
<td>Siem Reap, Cambodia</td>
<td>SEA</td>
<td>19th IGM/SPG, 17-21 March</td>
</tr>
<tr>
<td>2013</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>18th IGM/SPG, 8-12 April</td>
</tr>
<tr>
<td>2012</td>
<td>Jakarta, Indonesia</td>
<td>SEA</td>
<td>17th IGM/SPG, 12-16 April</td>
</tr>
<tr>
<td>2011</td>
<td>Colombo, Sri Lanka</td>
<td>SA</td>
<td>16th IGM/SPG, 4-8 April</td>
</tr>
<tr>
<td>2010</td>
<td>Busan, Republic of Korea</td>
<td>TEA</td>
<td>15th IGM/SPG, 15-19 March</td>
</tr>
<tr>
<td>2009</td>
<td>Kuala Lumpur, Malaysia</td>
<td>SEA</td>
<td>14th IGM/SPG, 16-20 March</td>
</tr>
<tr>
<td>2008</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>13th IGM/SPG, 16-20 March</td>
</tr>
<tr>
<td>2007</td>
<td>Honolulu, USA</td>
<td>Pacific</td>
<td>12th IGM/SPG, 19-23 March</td>
</tr>
<tr>
<td>2006</td>
<td>Bangkok, Thailand</td>
<td>SEA</td>
<td>11th IGM/SPG, 20-24 March</td>
</tr>
<tr>
<td>2005</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>10th IGM/SPG, 10-14 April</td>
</tr>
<tr>
<td>2004</td>
<td>Canberra, Australia</td>
<td>Oceania</td>
<td>9th IGM/SPG, 21-24 March</td>
</tr>
<tr>
<td>2003</td>
<td>Hanoi, Viet Nam</td>
<td>SEA</td>
<td>8th SPG and 8th IGM, 9-14 March</td>
</tr>
<tr>
<td>2002</td>
<td>Manila, Philippines</td>
<td>SEA</td>
<td>7th SPG and 7th IGM, 10-14 March</td>
</tr>
<tr>
<td>2001</td>
<td>Jeju Island, Republic of Korea</td>
<td>TEA</td>
<td>6th SPG and 6th IGM, 18-24 March</td>
</tr>
<tr>
<td>2000</td>
<td>Islamabad, Pakistan</td>
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<td>5th SPG and 5th IGM, 26-30 March</td>
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<td>1999</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>4th IGM, 18-20 March</td>
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<td>1998</td>
<td>Beijing, China</td>
<td>TEA</td>
<td>3rd IGM, 11-13 March</td>
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<td>TEA</td>
<td>2nd SPG and 2nd IGM, 24-28 March</td>
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<td>Chiangmai, Thailand</td>
<td>SEA</td>
<td>1st IGM, 25-26 March</td>
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</table>

*SA – South Asia*

*SEA – Southeast Asia*

*TEA – Temperate East Asia*
**Locations of other APN Meetings**

<table>
<thead>
<tr>
<th>Meeting Type</th>
<th>Location</th>
<th>Region</th>
<th>Date/Range</th>
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<tr>
<td>1st TEA SRC</td>
<td>Ulaanbaatar, Mongolia</td>
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<tr>
<td>31st SC</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>17-18 September 2015</td>
</tr>
<tr>
<td>8th SEA SRC</td>
<td>Bogor, Indonesia</td>
<td>SEA</td>
<td>7-8 September 2015</td>
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<tr>
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<td>Thimpu, Bhutan</td>
<td>SA</td>
<td>22 January 2015</td>
</tr>
<tr>
<td>28th SC</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>22-23 September 2014</td>
</tr>
<tr>
<td>7th SEA SRC</td>
<td>Vientiane, Lao PDR</td>
<td>SEA</td>
<td>8 July 2014</td>
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<td>6th SEA SRC</td>
<td>Kuala Lumpur, Malaysia</td>
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<td>25-29 Nov 2013</td>
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<tr>
<td>5th SA SRC</td>
<td>Wattala, Sri Lanka</td>
<td>SA</td>
<td>1-5 Oct 2013</td>
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<tr>
<td>4th SA SRC</td>
<td>Kathmandu, Nepal</td>
<td>TEA</td>
<td>14-18 Jan 2013</td>
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<tr>
<td>22nd SC</td>
<td>Kobe, Japan</td>
<td>TEA</td>
<td>31 October-1 Nov 2012</td>
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<tr>
<td>5th SEA SRC</td>
<td>Siem Reap, Cambodia</td>
<td>SA</td>
<td>22-26 Oct 2012</td>
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<td>Paro, Bhutan</td>
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<td>16-19 Jan 2012</td>
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<td>Kobe, Japan</td>
<td>SA</td>
<td>24-27 Aug 2009</td>
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<td>19-20 Aug 2009</td>
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<td>4th SC</td>
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<td>SEA</td>
<td>24-26 Aug 2006</td>
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<td>3rd CAPaBLE SC</td>
<td>Tokyo, Japan</td>
<td>SA</td>
<td>18-19 Nov 2005</td>
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<tr>
<td>2nd SC</td>
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<td>19-20 Nov 2005</td>
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<td>8th SC</td>
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<td>11-12 Dec 2003</td>
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<td>1st SC</td>
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<td>3rd SPG</td>
<td>Canberra, Australia</td>
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<td>19-21 Jan 1998</td>
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<td>1st SPG</td>
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<td>1st SPC</td>
<td>Tokyo, Japan</td>
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<td>25-26 Jan 1996</td>
</tr>
</tbody>
</table>
Item 14: Action Points of the 21st IGM/SPG Meeting

*The IGM is asked to consider and approve a list of Action Points of the Present Meeting*

- It was agreed at the 24th Steering Committee Meeting held in Japan, April 2013 that the Secretariat and the IGM chairperson will provide a list of recommended action points for IGM approval.

- A draft Chairperson’s Summary will be provided within one month from the closing of the IGM/SPG Meeting for Members’ feedback. A final Chairperson’s Summary, together with the approved list of action points, will be available in the Proceedings of the Meeting.

- The action points will be split into two parts: (I) Budget Confirmation; and (II) Others.
Section 4

Mitra Award Winning Poster and Presentation
Introduction

Background The United Nations Framework Convention on Climate Change (UNFCCC) agreed that the reducing emissions from Deforestation and Forest Degradation plus sustainable management of forests, also known as REDD+, could contribute to the reduction of carbon sinks, as well as afforestation, reforestation, and re-socialization in tropical regions. It is regarded as an essential component of the post-2020 climate regime to stabilize Greenhouse Gas emissions (GHG) and engage developing countries in worldwide mitigation endeavors.

Objective Despite the utility of REDD+, it has raised a number of questions, particularly with respect to its financial costs. This study seeks to contribute to the current debate on REDD+ implementation by focusing on the gap between agricultural revenue from land use and REDD+ compensation.

Materials and Methods

Land use change We linked the business-as-usual (BAU) land use scenarios to historic data. There were two main maps of baseline mapping: determining the deforestation rate and identifying deforestation potential locations for REDD+. Input parameters include elevation, slope, aspect, soil type, distance to road, distance to river, and other factors.

Carbon account Total carbon emissions due to the plantation were calculated through changes in carbon stocks. The components include the initial carbon sequestration in new palm oil plantations, the decay of product, stock, and element carbon pools, and the balance of emissions and absorption during the growth cycle of the oil palm.

Results

Conclusions

Policy Remarks A detailed assessment of future carbon prices and agricultural revenue in Southeast Asia provides significant insights into projected REDD+ compensation.

1) The most likely scenarios of palm oil prices continue to produce large differences in the profitability gap, favoring palm oil plantation over REDD+ projects. Thus, the effect of carbon pricing policies, as they currently exist, will remain limited. Since country participation is voluntary, it is difficult for the governments to ensure that REDD+ money "reaches the ground" in terms of balancing the agronomic revenue of local actors in Southeast Asia. The continuing high demand for biodiesel and food palm carbon stocks in tropical forests at risk, and in doing so, potentially undermines efforts to stabilize the atmospheric CO2 concentration through REDD+.

2) Our study focused on the Southeast Asia region, where forests are directly fragmented by future palm oil plantations. However, this research also provides a possible means to evaluate whether the financial benefits from carbon compensation from REDD+ projects could be financially attractive in other forest areas of the world.

Literature cited

Mitra Award Winning Poster by Dr. Heli Lu

Acknowledgments

I am thankful to the Department of Science and Technology, for the support provided. This work was supported by JSPS-USU Partnership Fellowship from the Japan Society for the Promotion of Science (JSPS) and APN Project Reference Number 49828106. (Heli Lu) thanked colleagues cited "Evolution of Trade-offs between Conservation and Development - Case of land use change in Malaysia and Indonesia".
A Spatially Explicit Modeling Framework of Cost-Benefit and Carbon Emissions from Land Use Coverage Changes for Implementing REDD+ in Southeast Asia

Heli LU

Henan University

Contents

- Background
- Methodology
- Application and Analysis
- Concluding Remarks
- Achievements
Background

Avoided deforestation” among the cheapest options for emissions mitigation.

Background

Climate Model Runs With/Without Greenhouse Gases
Global Temperature Anomalies from 1890-1919 average

National Center for Atmospheric Research, USA
Background

Global Emissions by Sector

- Power (24%)
- Industry (14%)
- Other Energy Related (5%)
- Waste (5%)
- Agriculture (14%)
- Transport (14%)
- Buildings (8%)
- Land Use (18%)
- NON-ENERGY EMISSIONS

Total emissions in 2000: 42 GtCO₂-e

“A voided deforestation” among the cheapest options for emissions mitigation

Winning Poster Presentation • Mitra Award
REDD+

Reducing Emissions from Deforestation and forest Degradation

Conservation of forest carbon stocks
Sustainable management of forests
Enhancement of forest carbon stocks

“Nationally Determined Contributions” (NDCs)
**Objective** Despite the utility of REDD+, it has raised a number of questions, particularly with respect to its financial costs. This study seeks to contribute to the current debate on REDD+ implementation by focusing on the gap between agricultural revenue from land uses and REDD+ compensation.
Land Use

Modeling REDD+

Planting Profit

Carbon Account

Carbon Credit

Author: Heli LU
Land Use Model

- $CA = \{X, S, N, R\}$ \hspace{1cm} (1)
- where $CA$ is the cellular automaton, $X$ is the CA cell space, $S$ represents the CA states, $N$ is the CA cell neighborhood, and $R$ represents the CA transition rules.
- The MCE weights used in CA, which indicate each variable’s influence on the spatial probability of a transition, are calculated as follows (Filho et al., 2002, 2004):
  - $O\{D|B\} = P\{D|B\} \times P\{B\}$ \hspace{1cm} (2)
  - $\log\{D|B\} = \log\{D\} + W^+$ \hspace{1cm} (3)
  - where $W^+$ is the weight of evidence for event $D$ occurring given a spatial pattern $B$. The spatial post-probability of a transition $i \Rightarrow j$ given a set of spatial data $(B, C, D, ..., N)$ is expressed as follows:
    - $\frac{\lambda_{\text{slash}}C_{\text{slash}}(t - 1) + \lambda_{\text{prod}}C_{\text{prod}}(t - 1) + \lambda_{\text{elem}}C_{\text{elem}}(t - 1)}{\text{initial}}$ \hspace{1cm} (4)
    - where $B, C, D,$ and $N$ are the values of $k$ spatial variables measured at location $(x, y)$ and represented by its weights.

Carbon Accounting Model

- $C_{f,\text{net}}(t) = C_{f,\text{burn}}(t) + C_{f,\text{decay}}(t) + C_{f,\text{regrowth}}(t)$ \hspace{1cm} (1)
- where $t$ is the year, $C_{f,\text{net}}(t)$ is the total carbon flux, $C_{f,\text{burn}}(t)$ is the carbon flux from instantaneous burning, $C_{f,\text{decay}}(t)$ is the carbon flux from decay of the product, slash, and elemental carbon pools, and $C_{f,\text{regrowth}}(t)$ is the carbon flux due to regrowth of vegetation, and where:
  - $C_{f,\text{decay}}(t) = \frac{\lambda_{\text{slash}}C_{\text{slash}}(t - 1) + \lambda_{\text{prod}}C_{\text{prod}}(t - 1) + \lambda_{\text{elem}}C_{\text{elem}}(t - 1)}{\text{initial}}$ \hspace{1cm} (2)
  - $C_{f,\text{burn}}(t) = \text{Bioclear}(t)f_{\text{burn}}$ \hspace{1cm} (3)
  - Initial biomass values were set by using the values from in situ forest inventories and permanent sampling plots. Secondary vegetation accounted for 20% of the total forest area.
Carbon Credit Model

- Maximizes the discounted value of total utility of global consumption

- Decision variables:
  - Consumption: $C(t)$
  - Investment: $I(t)$
  - Abatement: $TC(t)$

- Output: $Q(\Omega, A, K, L)$ (Production)
  - $\Omega$: Environment damage
  - $A$: Technological progress
  - $K$: Capital
  - $L$: Labor

- $Q = C + I$ (Consumption)

- $\Omega = \Omega(TC, E)$
  - $TC$ ... Mitigation costs
  - $E$ ... (Cumulative) emissions

Planting Profit Model

\[ NPV = V_1 + \theta \sum_{t=0}^{T} (1/(1+\gamma))^t \cdot V_2 + \theta \sum_{t=0}^{T} (1/(1+\gamma))^t \cdot V_3 + \theta \sum_{t=0}^{T} (1/(1+\gamma))^t \cdot V_4 \]  

- where $T$ is the commitment period of forest protection;
- $V_1$, the one-time net revenue from logging per hectare;
- $V_s$, the net revenue from rice cultivation per hectare;
- $V_g$, the net revenue from rubber plantation per hectare;
- $V_p$, the net revenue from oil palm plantation per hectare;
- $\theta_s$, the ratio of rice cultivation per hectare of expanding agricultural land;
- $\theta_g$, the ratio of rubber plantation per hectare of expanding agricultural land;
- $\theta_p$, the ratio of oil palm plantation per hectare of expanding agricultural land; and $\gamma$, the discount rate.
**Research Area** Central Kalimantan currently is the fastest growing province in Indonesia and features the greatest expansion of oil palm cultivation. Field survey conducted by the international research team have indicated that the clearance of forests is predicted to reach a maximum in the next 30 years while palm plantations expand.
Carbon Emissions
Profit Gaps

Figure 7. Comparison of compensation from Scenarios A, B, and C and agricultural revenues.

Source: Authors’ elaboration.

Sensitivity Analysis

- Carbon Price 20% Decrease
- Carbon Price 20% Increase
- Palm Oil Price at $545.33
- Palm Oil Price at $773.03

Change in Incremental Profitability Gaps Ratio (%)

PROCEEDINGS OF THE 21ST IGM/SPG MEETING | 181
It is very difficult for the governments to ensure that REDD+ money “reaches the ground”.

REDD+ in the Red
REDD+ in the Red

- The effect of carbon pricing policies, as they currently stand, will remain limited.
A case study of REDD+ challenges in the post-2012 climate regime: The scenarios approach
Heli Li and Guifang Liu
Natural Resources Forum 2012 Vol. 36: 192-201

More than Carbon Stocks: A Case Study of Ecosystem-based Benefits of REDD+ in Indonesia
LI Heli, YAS Weiying, QIN Youde, LIU Guifang
... (Institute of Natural Resource, and Environmental Sciences, Ocean Sciences, University of China, Shandong, China, story of Education,)

Modeling the impacts of policy interventions from REDD+ in Indonesia

Distributed land use modeling and sensitivity analysis for REDD+

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11th International Conference on Dryland Development: “Global Climate Change and its Impact on Food & Energy Security in the Drylands”........................................ 5

A case study of REDD+ challenges in the post-2012 climate regime: the scenarios approach
Lu Heli; Liu Guifang
Natural Resources Forum; 2012, 36; 3, 192-201
The REDD+ (Reducing Emissions from Deforestation and Forest Degradation) partnership works to promote the reduction of greenhouse gas (GHG) emissions by protecting forests in developing countries through positive
**Distributed land use modeling and sensitivity analysis for REDD+**


**Summary**

There is an urgent need to develop a framework for understanding and predicting the effect of opportunity costs of REDD+. The team developed an approach comprising two components: distributed land use modeling for assessing the profitability gap between maintaining palm oil plantations and complying with REDD+ and a sensitivity analysis of the model’s predictions.

First, a spatially explicit model is used to predict the future distribution of land use changes in central Kalimantan, Indonesia. This model predicts the change in carbon storage due to deforestation by linking business-as-usual baseline emissions scenario to historic data and using an improved cellular automaton system to predict land use changes. Input parameters include elevation, slope, aspect, soil types, distance to road, distance to river, etc. The so-called “non-year approach” is combined with the future price of carbon to estimate compensation under the REDD+ mechanism.

Potential revenues from palm oil plantation are calculated by multiplying yields from palm oil products with corresponding prices in the world market. Second, a sensitivity analysis is conducted to assess the robustness of the modeling results to alternative assumptions about palm oil price and carbon price. The palm oil price is shown to have the highest relative sensitivity. Further analysis indicates…

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**Acknowledgments**

I am thankful to Henan Department of Science and Technology. Funding for this work was provided by JSPS-UNU Postdoctoral Fellowship from the Japan Society for the Promotion of Science (JSPS) and APN Project Reference Number EBLU2010-01NSY(R)-Suneetha titled ‘Evaluation of Trade-offs between conservation and development - Case of land use change in Malaysia and Indonesia’.