ASIA-PACIFIC NETWORK FOR
GLOBAL CHANGE RESEARCH

Proceedings of APN 6th Southeast Asia Sub-Regional Cooperation Meeting, Economics of Climate Change Seminar, and Proposal Development Training Workshop

25–29 NOVEMBER 2013, KUALA LUMPUR, MALAYSIA

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Proceedings on

ASIA-PACIFIC NETWORK FOR GLOBAL CHANGE RESEARCH 6TH SOUTHEAST ASIA SUB-REGIONAL COOPERATION MEETING, ECONOMICS OF CLIMATE CHANGE SEMINAR AND PROPOSAL DEVELOPMENT TRAINING WORKSHOP

25-29 NOVEMBER 2013, KUALA LUMPUR, MALAYSIA

Co-organised by

Malaysian Meteorological Department
Ministry of Science, Technology and Innovation, Malaysia

&

Asia-Pacific Network for Global Change Research

May 2014

Acknowledgement

The Asia-Pacific Network for Global Change Research 6th Southeast Asia Sub-Regional Cooperation Meeting, Economics of Climate Change Seminar and Proposal Development Training Workshop were successfully co-organised by the Malaysian Meteorological Department (MetMalaysia), Ministry of Science, Technology and Innovation (MOSTI), Malaysia and the Asia-Pacific Network for Global Change Research (APN) from 25 to 29 November 2013 in Kuala Lumpur, Malaysia. The Meeting, Seminar and Workshop were attended by seven countries namely Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Viet Nam. The 6th Southeast Asia Sub-Regional Cooperation Meeting and back-to-back activities were officiated by the Honourable Dato' Dr. Rosli bin Mohamed, Secretary General of MOSTI. The presence of the Secretary General of MOSTI is a testimony of his profound concern and commitment towards his support as well as a strong advocate of the importance of maintaining the existing cooperation and collaboration in the international programmes.

I would like to take this opportunity to express my deep appreciation to APN for the kind generosity in providing the financial support and guidance in organising this important regional programme. I would also like to sincerely thank all the participants, comprising the National Focal Points (nFPs), Scientific Planning Group (SPG) members, APN representatives and resource persons, for their commitment and active participation in this programme. I also wish to acknowledge all the efforts taken by the organising committee in making the programme a success.

Yours sincerely,

Dato' Che Gayah Ismail
Director General
Malaysian Meteorological Department
Ministry of Science, Technology and Innovation, Malaysia
National Focal Point, Asia Pacific Network for Global Change Research

1. Background

The Asia-Pacific Network for Global Change Research (APN), a network of Member Country governments, has been established to promote global change research in the region, increases developing country involvement in the global change research and strengthens interactions between the science community and policy makers. Therefore, APN strives to assure that the research results contribute to the development of science-based adaptation strategies, policy- and decision-making processes, and developing scientific capacity to address these important issues. At present, APN has 22 members and Malaysia is one of the member countries of which the Malaysian Meteorological Department (MetMalaysia) acts as the APN National Focal Point (nFP).

During the 18th APN Joint Inter-Governmental/Scientific Planning Group Meetings (IGM/SPG) held from 8 to 12 April 2013 in Kobe, Japan, the meeting agreed that Malaysia will be the host of the Asia-Pacific Network for Global Change Research 6th Southeast Asia Sub-Regional Cooperation Meeting, Economics of Climate Change Seminar and Proposal Development Training Workshop (6th APN SEA-SRC, ECCS & PDTW) in 2013.

2. Opening Session

The 6th APN SEA-SRC, ECCS & PDTW were officiated by the Honourable Dato' Dr. Rosli bin Mohamed, Secretary General of MOSTI on 25 November 2013. The opening session was attended by the participants and invited officials from MOSTI and its agencies.

Group Photo of the Participants and Local Organiser with the Secretary General (centre) of the Ministry of Science, Technology and Innovation, Malaysia at the Opening Session

The session started with the welcoming speech delivered by Madam Che Gayah Ismail, Director General of MetMalaysia cum APN nFP for Malaysia. In the speech, Madam Che Gayah Ismail extended her warmest welcome to all the delegates from the member countries of Southeast Asia and APN representatives. She also expressed her sincere thanks to the Secretary General of MOSTI for his presence and support towards this important event. She pointed out the remarkable achievements by APN in supporting the scientific activities of APN over the decade and thus credit must be given to the excellent APN Secretariat staff for their dedication and efficient management of APN projects. She emphasised the issues of the growing population and increasing demand of the energy sources and resources, massive environmental and climate changes. She expressed her hope that members will actively engage in discussions to achieve technical solutions in specific areas for the policy and regulatory authorities through the 5-day event. She highlighted that the meeting is a strategic opportunity to expand mainstream community based adaptation to national and international level. Finally, she thanked APN secretariat and local organizing committee for their great effort in preparation of the event.

On behalf of the APN secretariat, Dr. Linda Anne Stevenson, Head Communication and Scientific Affairs Division of APN, expressed her sincere

appreciation to the honourable guests from MOSTI and MetMalaysia for organising the back-to-back events of APN in her speech. She also expressed her special thanks to all the participants of the 6th APN SEA-SRC, ECCS & PDTW. She explained in brief about APN and acknowledged APN stakeholders; Ministry of Environment Japan, the USA, New Zealand, the Republic of Korea, and Hyogo Prefectural Government, for their financial contribution and in-kind contribution from APN member countries towards the APN establishment and activities. She emphasised the important role of APN and uniqueness in bringing science and policy groups together. She further highlighted the output of Southeast Asia Science Policy Dialogue which was held in Bangkok in July 2012 in collaboration with START and informed that next science policy dialogue will be held in 2014 in South Asia. In addition, she noted the APN three frameworks; Climate Adaptation, Low Carbon Initiatives, and Biodiversity and Ecosystem Services. With the special call for proposal under the Climate Adaptation Framework, APN has received 85 Expressions of Interest (EOI) from Asia-Pacific region and it reflects strong policy needs for climate adaptation by way of disaster risk management and reduction of loss and damage. Finally, she welcomed Mr. Subramaniam Moten, who is the former SPG member for Malaysia, back into the APN family as an invited expert to the Scientific Planning Group. To conclude her remarks, she expressed her sincere thanks to the organising team of MetMalaysia for the effort and hard work and hoped for the great accomplishment of the 6th APN SEA-SRC, ECCS & PDTW.

The Honourable Dato' Dr. Rosli bin Mohamed, Secretary General of MOSTI began his opening remarks by welcoming all the delegates and participants of 6thAsia Pacific Network for Global Change Research (APN) of Southeast Asia Sub-Regional Cooperation Meeting and the participants of the seminar and workshop. He noted the purpose of APN and acknowledged the importance of the scientific knowledge and understanding of the interaction between global change and human activities be further enhanced and optimised to enable scientists to be in a better position to provide advice and make appropriate recommendations to policy makers in order to minimise the possible negative impact of global change. He then recalled the Super

Typhoon Haiyan that brought much damage and suffering to the people of the Philippines and conveyed his heartfelt condolences to the people and the Government of the Philippines. He continued with his remarks by sharing the Malaysian Government's integrated approach to address the various global change issues, which are cross-sectoral by forming various national committees with specific terms of reference to coordinate and implement activities related to global environmental change. He added that besides the National Policies on Biodiversity and Climate Change, the Malaysian Government has recently approved the National Policy on Science, Technology and Innovation, which will drive the country growth and development based on Science, Technology and Innovation towards transforming Malaysia into high income nation by 2020. By conducting the 6th APN SEA-SRC, ECCS & PDTW, he hoped it will steer the Southeast Asia region to greater cooperation and commitment towards the understanding and tackling of global environmental issues for the benefit of all mankind. In closing his speech, he thanked the APN Secretariat for their strong support and leadership thus far, in making the sub-regional network a reality and the secretariat of the event for their hard work in making the occasion a successful one. On this note and with great pleasure, the Honourable Dato' Dr. Rosli bin Mohamed declared the 6th APN Southeast Asia Sub-Regional Cooperation Meeting, Economics of Climate Change Seminar and the Proposal Development Training Workshop officially opened.

3. Sixth Asia Pacific Network for Global Change Research (APN) of Southeast Asia Sub-Regional Cooperation Meeting

The Meeting was held from 25 to 26 November 2013 and attended by the nFPs and SPG members of the Southeast Asia regions namely Cambodia, Indonesia, Lao PDR, Malaysia, Thailand and Vietnam as well as the APN's invited expert. The representatives from the APN Secretariat were also participated in the Meeting. The Meeting agenda were discussed by the members in four sessions.

3.1 Sub-Regional Cooperation Update

Dr. Linda facilitated the self-introduction and election of officers. Dr. Wan Azli, Director of Technical Development Division, MetMalaysia was nominated as the Chair of the 6th SEA-SRC Meeting on behalf of the national Focal Point (nFP) of Malaysia. He expressed his apologies on behalf of the nFP Malaysia, who was not able to participate in the meeting due to schedule that conflicts with the national level meeting. Dr. Jariya Boonjawat, SPG member for Thailand, nominated Mr. Sangkhane Thiangthammavong, nFP of Lao PDR as the vice chair of the meeting. Before the Meeting started, the Chair requested all participants to spare a minute of silence to convey the condolence to the families of the victims in Philippines affected by Super Typhoon Haiyan. Subsequently, the Chair briefly introduced draft agenda and requested members' comment on the agenda before endorsing. All members agreed to the draft agenda with slight modification.

3.1.1 Background and Objectives of the Meeting

Ms. Taniya Koswatta, coordinator of the APN secretariat, provided brief explanation on the background of APN Sub-Regional Cooperation and Meeting objectives of the 6th SEA-meeting, which are:

- Discuss the main action points from the 5th SEA-SRC
- Discuss the main action points from the 18th SPG/IGM
- Discuss output of Scoping Workshop on Climate Change Adaptation in Urban Planning in SEA
- Discuss new and future activities of SEA related to APN Climate Adaptation Framework and Biodiversity and Ecosystem Services Framework
- Hold open discussion session on 3rd strategic plan evaluation (scientific and institutional) and APN programme fellowship programme

After the presentation, Dr Linda Stevenson stressed the three important objectives that are to discuss the status of the Seed Grant proposal, enhancing the communication and discussion on approved status of Myanmar and involvement of the Myanmar to sub-regional activities.

3.2 SEA-SRC Activities and Updates

3.2.1 Status Update of Seed Grant Proposal on Scoping Workshop on Climate Change Adaptation in Urban Planning in SEA

Dr. Erna SRI Adiningsih provided output of the scoping workshop held in May 2013 in Jakarta, Indonesia. She mentioned that Malaysia and Lao PDR did not participate in the scoping workshop. She noted that during the workshop, members have identified the common problems and needs of SEA related to urban planning and recommended to include training of trainers to develop serial climate change adaptation and faculty exchange activities. In addition, accommodating climate change concern to planning studio particular for master program and develop the research based activities on urban planning and climate change adaptation was identified. Furthermore, she highlighted that to achieve the objectives of the project plan, it is necessary to extend project period for two years. Each training component at the summer school will be for one week and each group consists of 25 participants. The trainings are proposed to be held in all SEA member states or at least in Indonesia, Viet Nam and Thailand but the local organiser will invite participants from all member states based on geographical locations. As discussed during the scoping workshop, the proposed title of the project is “Building Capacity for Urban Climate Change Adaptation in Southeast Asia Region”. At the end of her presentation, she briefed the financial status of the Seed grant and future plan to submit the full proposal in 2014 annual call for proposal.

The Chair requested clarification from Mr. Subramaniam Moten on the absence of the Malaysian collaborators. Mr. Subramaniam Moten replied that as he is not expert on urban planning, he has recommended a collaborator from Malaysia to attend the scoping workshop. Further, he mentioned due to

schedule conflict of Malaysian collaborator, Malaysia was not represented in the scoping workshop. However, Dr. Wan Azli stressed that Malaysia is still keen to participate in the summer school project. Mr. Sangkhane Thiangthammavong explained that as former SPG member of Lao PDR was busy with her PhD scholarship, she did not have time to participate in the scoping workshop. Dr. Erna SRI Adiningsih stressed that it is important to consider the in-kind contribution from the member countries toward the summer school. She recalled that for the scoping workshop, she has got in-kind contribution for the dinner, local transportation, and other in-kind contribution from her organization. She further explained that if any countries are willing to have local level training activities, host country needs to consider 20% of in-kind contribution towards the project.

Mr. Sabar Ginting proposed that Dr. Erna SRI Adiningsih should continue the project leadership and requested from members to share their opinion on completing remaining financial and technical report. He suggested that in-kind contribution from the host country must be considered as the main issue, and if Thailand and Viet Nam are hosting the summer school they should identify the mechanism to find in-kind contribution. Ms. Taniya Koswatta stated that full proposal submission for the 2013 annual call for proposal is closed. Thus, the proposal submission has to be deferred to next year. Further she stressed that it needs to identify a clear timeline and work plan and work distribution for any proposal. Mr. Virasack Chundara, SPG member for Lao People's Democratic Republic, confirmed that there was a communication gap between members and developing project is a complex process and it needs supervision from Secretariat to develop the communication. Finally, he highlighted that the proposed project needs regional involvement and as SPG member from Lao PDR, he will try to engage in the proposal in future.

Dr. Jariya Boonjawat mentioned that Climate change adaptation and urban planning is part of the core course under architecture and engineering in university, therefore proposal must focus on capacity building by training the community to achieve climate adaptation. She stressed that there are many urban planning activities which address urban planning on development

sector such as infrastructural planning in megacities and green building. Many non-governmental organizations and private sectors are heavily involved in such kind of adaptation activities. Therefore she explained that addressing the need of community learning system will trim down the broader area of objectives of summer school project. She finally concluded her idea by stating that capacity development activity to address the community learning system on climate change adaptation and use of practical knowledge are more important issues to concern in full proposal development.

SEA members agreed to continue the project proposal development under Dr. Erna SRI Adiningsih coordination and Dr. Jariya Boonjawat will act as co-coordinator to develop the proposal and also will follow up the proposal development. Referring to the project implementation, Mr. Subramaniam Moten mentioned that members need to identify the project leader. Dr. Linda Stevenson replied that the project leadership can be decided later after the proposal has passed the review stages. Mr. Subramaniam Moten suggested sharing the final version of the proposal during the 19th IGM SEA sub regional committee meeting (SEA SRCom). Dr. Jariya Boonjawat requested members to share one or half page suggestions on summer school to update the proposals. Dr. Kim Chi Ngo, SPG member of Viet Nam, confirmed that proposal needs to be updated and Viet Nam is keen to engage in the project.

3.2.2 Open Discussion on Improving Communications Among the SEA Member Countries and Between Other Southeast Asia Regional Networks

Dr. Linda Stevenson provided a short presentation addressing the main points needed to focus on the discussion session. She pointed out three main issues which are 1. Coordinating communication among members; 2. Self-sustain of sub-regional activities in future with limited financial support from APN; and 3. Expanding the APN Network and engaging with ASEAN in sub-regional activities. The Chair requested members to give their opinion based on the presentation and he stressed that members must identify an alternate member (not SPG or nFP) from each country to develop the communication.

Mr. Sabar Ginting stressed that frequent changes of nFP positions is one of main reasons for miscommunication among the SEA group members. Therefore, when nFP position changes, the former nFP must share his/her expertise and give guidance to newly appointed nFP on APN and SEA function. He proposed that telecommunication is an important tool to develop the communication, but considering the cost, Skype conference is an effective tool.

Dr. Erna Adiningsih explained that in regards to urgent communication, email is not always the proper media and communicating through mobile phone is the best way to reach members immediately. Dr. Jariya Boonjawat concurred with Dr. Erna Adiningsih's suggestion by stating that mobile phone is the common accessible and convenient communication media to everyone. Ms. Taniya Koswatta suggested sharing the mobile phone number of SEA members. She further explained that when coming to next SEA meeting preparation, it is necessary to start the activities as early as possible to avoid the communication gaps. Mr. Sangkhane Thiangthammavong pointed out that SEA members need training on developing communication skills. Dr. Wan Azli requested from Ms. Fariza Yunus, SPG member of Malaysia, to share the experience on communication difficulties faced during the young scientists nomination. Ms. Fariza Yunus replied that she did not face any difficulties. She stressed that Skype meeting once in two months is needed to develop the communication.

Ms. Taniya Koswatta informed about APN receiving participation requests from young scientists for the Proposal Development Training Workshop (PDTW) and due to closed nature of the training workshop, APN cannot approach them individually. Therefore, to attract young scientists, PDTW should be opened to Asia-Pacific young scientists. Dr. Jariya Boonjawat agreed to her suggestion and confirmed that self-funded participants are good approach. Dr. Wan Azli mentioned that new universities are interested in this kind of workshop. Mr. Subramaniam Moten explained that if the PDTW is open, the number of applications would increase and therefore a mechanism for the selection of young scientists must be developed. Mr. Sabar Ginting

stressed that it will help to identify best young scientist who are interested in PDTW.

3.2.3 Identify Potential Scientist from Myanmar to Engage APN

Mr. Sangkhane Thiangthammavong, co-chair of the meeting, led the discussion and invite members to share their opinions. Dr. Wan Azli recalled that identifying the potential scientist from Myanmar is not a fresh topic to the SEA members as it was discussed during the 5th SEA-SRC meeting. Further, he explained that the Malaysian Meteorological Department does not have good connection with Myanmar to engage and identify any scientist from Myanmar. Dr. Jariya Boonjawat mentioned that during the last meeting Mr. Sundara Sem informed through the Mekong River Commission (MRC) that they have potential scientist. However, she has found out that there is no scientist who works in the field of global change in MRC. Mr. Sangkhane Thiangthammavong pointed out that Myanmar is the upstream dialogue partner to MRC and not a member. Mr. Subramaniam Moten expressed that through his colleague he will be able to identify a scientist who is working in global change research area. Mr. Virasack Chundara suggested that since Myanmar is a member of Acid Deposition Monitoring Network in East Asia (EANET), there may be a possibility to engage or identify relevant contact of Scientist. He requested APN secretariat assistance to find the proper contact. Finally, all members agreed to identify a scientist to be invited to the next SEA meeting as observer.

3.2.4 Institutionalising Sub-regional Committees in APN Framework Document

Ms. Taniya Koswatta presented the overview of planned institutional structure and South Asian members' suggestion on formal establishment of sub-regional committee under APN framework. She noted that every suggestion and decision will be sent to Mr. Lou Brown and Ms. Peldon Tshering for the revision of APN Framework. Mr. Subramaniam Moten recalled the former practice of nominating chair and co-chair is based on the host country.

However, in order to avoid confusion to new members, committee needs to appoint a chair and co-chair at the meeting. Dr. Erna Adiningsih enquired that if sub-regional committee was established under the APN framework whether it will be an organ in the APN structure or not. Responding to Dr. Erna Adiningsih's comment, Dr. Linda Stevenson explained that the final decision will be made by the Steering Committee and draft APN framework document will be presented at the next Inter-Governmental Meeting before final establishment. Referring to present organ structure of APN, Dr. Erna Adiningsih mentioned that currently APN has six organs, therefore APN sub-regional committee can be the next organ of the APN. She further pointed out that as APN has Oceania member countries, APN can have four sub-regional committees in the future. Therefore, it needs to identify a mechanism to add sub region committee to APN.

Dr. Erna Adiningsih further stated that under the meeting procedure, sub-regional committee should meet annually after the establishment of the committee. Dr. Linda Stevenson commented that based on the available financial resource at APN, providing funds for three sub-regional meetings will make a huge financial pressure on APN core programme. Therefore, it is better to have a procedure to meet the committee when it is necessary. Mr. Sabar Ginting commented that it is required to formalize the structure of committees but also it need to consider the financial condition. Dr Linda Stevenson stated that APN Sub-regional committee (SRCom) has committed more than five year of work and financial resources and it is necessity to formally establish under the APN framework.

Dr. Wan Azli requested clarification on chair's responsibilities and he explained that without a secretariat it is difficult to manage the committee. He also suggested that holding sub-regional committee meeting, one day before the IGM is another possible way to reduce the cost. Dr. Linda Stevenson replied that APN sub-regional committees were designed to self-sustain after the implementation period without APN secretariat support. To achieve this objective, the Chair needs to manage sub-regional communications and activities. She further explained that members can find additional financial

resources or in-kind contribution to sustain the regional committee activities.

Dr. Jariya Boonjawat recalled that SRCom was established to discuss the common needs for the southeast region to address the vulnerability and impacts of climate change and it is supposed to be the bridge between scientists and policy makers. She explained that to address the global need of research concerning the future of the Earth, it is important to identify regional issues and develop the researcher capacity development concept. Therefore, she proposed that sub-regional committee can be associated with capacity development activities under ARCP or CAPaBLE projects and held as a back to back event. Mr. Subramaniam Moten said that in procedure it can mention that sub-regional meeting will be held subjected to resource availability. Dr. Linda Stevenson responded that APN and other committees under the frame work has no procedure to meet based on resource availability, thus it is better to keep the present statement which states that committee will meet based on necessity.

3.2.5 APN Framework Updates

Dr. Linda Stevenson presented updates on three APN frameworks; Low Carbon Initiatives (LCI) Framework, Biodiversity and Ecosystem Service (B&ES) and Climate Adaptation Framework (CAF). She emphasized that under the climate adaptation framework; APN has announced a special call for proposal and has received 85 expressions of interests (EOI). Due to funding availability, initial screening is targeted to eliminate 75 per cent of EOIs and only invite 25 per cent to submit the full proposals to ensure 50 per cent chance of funding from APN for invited full proposals. Mr. Sabar Ginting requested information on regional balance of selected EOIs. Dr. Linda Stevenson replied that screening process is targeted to address criteria developed at the climate adaptation workshop and also focuses on border theme of CAF and regional balance. Dr. Erna Adiningsih raised issues of evaluating the frame work activities, reporting donors and producing synthesis. Dr. Linda Stevenson informed that under the LCI framework, it has planned to produce a synthesis after the projects completion. However, she pointed out

that as there are no special projects funded from the B&ES framework, the continuation of the framework is based on potential donors. As to reporting to donors, APN share the project output through the APN website and project evaluation will be conducted after every strategic phrase.

3.2.6 Review of the 5th APN SEA-SRC Meeting

Mr. Sundara Sem, APN nFP for Cambodia, first apologised for his absence on the first day of the meeting due to conflicting meeting schedule of his department and presented highlights of the 5th SEA-SRC Meeting and SEA-SRC Ad hoc meeting which were held during the 18th IGM. He noted output of the science dialogue and stressed the importance of the private sector involvement in any future science policy dialogue. Mr. Sabar Ginting expressed his interest to join the Asia Pacific Symposium Waste and Landfill Management and Climate Change proposal which was submitted by Dr. Ngo Kim Chi, to the 2013 CAPaBLE Calls for Proposals. He further requested clarification on the purpose of the private sector involvement. Mr Sundara Sem answered that climate change and their impacts are not only applicable to public sector but it is also relevant to private sector. Engaging the private sector and getting their involvement will be beneficial to mitigate and adapt to climate change.

3.2.7 Evaluation of Southeast Asia Sub-regional Committee

Dr. Linda Stevenson provided overview of the work plan which has been developed by task committee on 3rd Strategic plan evaluation and 4th Strategic plan Planning and evaluation process. She explained important points to develop a Metric to gauge the performance of the SEA-SRC and she elaborated six main points which might be used as metrics to perform self-evaluation or assessment. Finally, she concluded the presentation by saying that committee had ten weeks to complete the process. The evaluation report is a 1000 word summary report to be submitted on February 2014. Mr. Sabar Ginting proposed that the next chair, nFP of Lao PDR, can perform the evaluation and also pointed out that SEA group missed the chance to submit

the proposal in 2013 and it is important to identify the weakness. Dr. Linda Stevenson noted that nFP Lao PDR is a new member to the committee and it is better for evaluation to be done by experienced member. Dr. Ngo Kim Chi suggested adding a seventh metric to the proposed plan to evaluate the success of the regional proposals conducted through the committee. Dr. Erna Adiningsih expressed that the metrics must include the process to evaluate the committee based on the APN goals and also original objective of SRC. Dr. Jariya Boonjawat requested support from APN secretariat on the evaluation process by providing the relevant information such as previous meeting summaries and PDTW. Dr. Linda Stevenson informed that Ms. Taniya Koswatta will provide the information on behalf of APN secretariat.

During the discussion, the members identified the need of task committee to develop the evaluation report and identify responsible members. Based on that, the Chair requested volunteers and nomination for the task committee. Dr. Ngo Kim Chi and Dr. Jariya Boonjawat are identified as co-coordinators of the Southeast Asia sub-regional evaluation task committee and Mr. Subramaniam Moten and Mr. Sabar Ginting as task committee members.

3.3 APN Opportunity Fund

Dr. Linda Stevenson presented an overview of the APN Opportunity Fund (AOF), including funds available and new allocations. She informed that actual AOF balance was USD715,000 and at the end of October 2013, the remaining balance of USD148,000. During the 25th Steering Committee Meeting, 148,000 USD has been reallocated for four activities, which are USD40,000 for 3rd Strategic Evaluation and 4th Strategic Planning, USD50,000 for South Asia Science Policy Dialogue, USD43,000 for B& ES Framework activities and USD30,000 for fellowships programme. Mr. Subramaniam Moten expressed that due to financial resource availability, sometimes good proposals have to be removed without awarding funding. To avoid such situations and reduce the pressure on the core programme budget, SEA sub-regional meeting can be held back to back with ASEAN meeting. Mr. Virasack Chundara, requested information on Southeast Asia sub-regional proposals. Dr. Linda Stevenson

mentioned that, presently SEA members have developed two proposals. One has received a seed grant which was discussed in previous items and the other proposal from Dr. Kim Chi on Asia Pacific symposium waste and landfill management and climate change. She further explained that developing the regional proposals is not a mandate for regional committee.

Dr. Erna Adiningsih pointed out that if the AOF funds is zero in balance and does not have a secure budget from the APN core budget, the evaluation report must address solution to find financial resources for future activities. Dr. Wan Azli stressed that MetMalaysia is facing a travel budget cut and without APN support it is difficult to participate. Mr. Sabar Ginting emphasized that as solution to limited financial resources; first, meeting period can be reduced, second, not to hold the PDTW as back to back activities annually and third, consider getting the private sector sponsorship to hold the meeting. Dr. Jariya Boonjawat recalled in-kind contribution on hosting the sub-regional meetings and she explained that if the committee faced 20 per cent budget reduction for next year activities, members must develop a mechanism to cover the 20 per cent. Mr. Sundara Sem stressed that APN need to priorities and reduces activities. Through future communication, SEA members need to identify a solution to get financial resources.

3.4 Future Plans/Activities and the 7th APN SEA-SRC Meeting

Dr. Wan Azli remarked that based on identified action points, members need to follow up future activities so that results can be discussed in detail during the next meeting. SEA members agreed to hold next meeting in Lao People's Democratic Republic. Mr. Saundra Sem requested to select common issues in the Southeast Asia to be addressed in the next meeting. He expressed concern about climate impacts which Southeast Asia is vulnerable. He further explained that unlike in other regional meetings, APN sub-regional cooperation meeting has friendly environment and it is a good platform to address regional issues. Mr. Sabar Ginting emphasized that if PDTW is to be held next year, it is better to be conducted in Lao People's Democratic Republic and it needs to identify possible partners and sponsors to cover the

meeting expenses. Dr. Jariya Boonjawat stressed that the next meeting needs to address the gap existing in the global change issues. Dr. Linda Stevenson noted that APN has already identified gaps in the sector of Biodiversity of Ecosystem under the APN framework. If the next meeting focuses on those gaps, there is a potential to find financial support from APN and other organizations. On behalf of the local host, Ms. Lucia Enggong shared experience on the difficulties faced during the organizing stage. She noted that earlier communication is needed to reduce the meeting expenses especially the cost of airfare. Ms. Taniya Koswatta emphasised that meeting preparation should be started at early stage probably after the official announcement of the host. Earlier confirmation from members and selecting the best time period to minimise meeting cost and travel cost are also important.

Dr. Wan Azli concluded the meeting and thanked all participants, local secretariat and APN Secretariat for the support. Finally, he provided the final remarks on behalf of the national Focal Point of Malaysia and formally closed the 6th SEA-SRC meeting.

4. Economics of Climate Change Seminar

The half day seminar of Economics of Climate Change Seminar (ECCS) was held in the afternoon of 26 November 2013. The Seminar focused on climate change and economics in the Southeast Asia region. The Seminar was participated by the nFPs, APN SPG members and early-career scientists from Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Viet Nam. Two distinguished experts, Mr. Chang Yii Tan and Professor Dr. Jamal Othman who are from the Consultant Company for Economic Planning Unit, Prime Minister's Department, Malaysia and the Faculty of Economics & Management, National University of Malaysia respectively, were invited as the keynote speakers in the Seminar. The SPG Members for Indonesia (Dr. Erna Sri Adiningsih), Thailand (Dr. Jariya Boonjawat) and Vietnam (Dr. Kim Chi Ngo) were also invited as the seminar speakers.

Photo of the Economics of Climate Change Seminar Participants with the Speakers

4.1 Welcome Remarks

Dr. Linda Anne Stevenson, Head Communication and Scientific Affairs Division, APN welcomed all the early-career scientists from the Southeast Asia countries to the Economics of Climate Change Seminar, she indicated that the seminar is a platform for Southeast Asia countries to talk and share on the economic aspects of climate change in their respective countries and the region as a whole.

4.2 Seminar Presentations

After the welcoming remarks by Dr. Linda Anne Stevenson, the Seminar was subsequently chaired by Dr. Wan Azli Wan Hassan, Director, Technical Development Division, Malaysian Meteorological Department and the alternate nFP for Malaysia. He apologised on behalf of the nFP for Malaysia who was unable to chair this seminar due to urgent official commitment. He then welcomed all the seminar participants as well as the invited speakers and facilitated the self-introduction of the participants.

4.2.1 Keynote 1: Economics of Climate Change for Malaysia: Adaptation of Water Sector - *Mr. Chang Yii Tan, Consultant for Economic Planning Unit, Prime Minister's Department*

The Economics of Climate Change for Malaysia (ECCM) project has been conducted by the Government of Malaysia to assess the cost and benefit of adaptation and mitigation measures for Malaysia. The ECCM's objectives are to develop economic models; develop relevant databases; and quantify the options for meeting climate change challenges for Malaysia.

For the development of the database, various economic approaches have been adopted and major studies and databases were used. The key sectors that were identified under the adaptation analysis component in the study include water-floods and water-resource. Based on the Bank Negara Economic Bulletin, over 50 years (1960 to 2010), the Malaysian economic growth is slowing down as the economy becomes bigger. The future economic growth is likely to be influenced by current economic policies as well as international environment. In between 2010 and 2060, the population growth will slow down.

Malaysia is well endowed with water resources of which the average rainfall per year in Peninsular Malaysia is 2,400 mm and in East Malaysia, namely Sarawak 3,800 mm and Sabah 2,600 mm. In addition, there are 189 river basins in Malaysia of which 17 are major ones. Depending on the rainfall pattern, they could be subjected to floods or droughts. ECCM study areas for floods or drought include Kedah (northern part of Peninsula) and Johor (southern part of Peninsula).

The ECCM study took an economic approach and thus for the adaptation analysis in addressing the climate change impacts, a cost-benefit approach that consists of estimating the cost of floods as well as the benefits of avoided floods is used as the methodology for flood studies. The analysis for this approach involved linkage of technical studies to economic study (water sector), assess the impact of flood spending, cost of floods and benefits

(avoided flood damages). Based on the study, it can be concluded that for Kedah River Basin in Kedah, the funding for the current flood abatement programmes by the Economic Planning Unit (EPU), Malaysia can be considerably increased as the climate change would increase the flood damages and would therefore justify further investment to abate them. The current programmes could be increased by at least 2.7 times to 5.4 times more than the 9th Malaysia Plan (2006-2010) allocation. Meanwhile, the cost of the flood abatement measures for Johor Bahru in Johor is estimated at RM387 million. As for the adaptation analysis for water resource, forecasting the water demand is through the sectoral approach namely the agriculture, household and industry sectors. The methodology used for forecasting water supply includes the rainfall endowment and infrastructure. With regards to water supply for Kedah, based on the the cost-benefit analysis, the proposed investment in the water sector for Kedah is about RM3.5 billion to ensure that there is enough drinking water for Kedah's residents till 2050. In annual terms, the total capital cost of the water investments for Kedah would be RM70 million. The water investments proposed for the state should be undertaken in the time that they have been planned so as to minimise the chance that urban economic activities are disrupted.

For the component on policy issues in the ECCM study, the total cost of adaptation & mitigation for Malaysia under climate change conditions was produced based on the analysis on the water sector (floods & drought), paddy sector (maximise planting areas) and energy sector (mitigations with the least cost). With regards to the water sector, three possible approaches for best combination of investments (cost) that would achieve the desired goal of least damage are identified as the benefit emphasis - investments needed to minimise the extreme impact of climate change for both drought & flood; cost emphasis - measures or combinations of solutions that achieve least cost or cost effective solutions in which non-structural solutions are the lowest in terms of cost; and cost benefit analysis - solution that gives the highest benefit-cost ratio or the highest net present value. The findings indicate that based on the case study for the ECCM, the climate change induced flood impact is likely to increase 7 times in Kedah's case and 9 times in the case of

Johor. If flood impacts are to be minimised, then masterplan studies must be implemented. With respect to the planning for greater uncertainty and risk in the water sector, it is likely that cost effectiveness should be the way forward. In the study, among the recommendations for water sector to meet climate change challenges in Malaysia include the following:

- Expand the technical expertise in the Department of Drainage & Irrigation and National Hydraulic Research Institute of Malaysia as well as other government agencies - to conduct risk assessment studies for all the major river basins to examine the worst case scenarios under climate change.
- Mainstream climate change in land use planning.
- All stakeholders, particularly State Governments & local communities will need to be consulted and engaged on the goals, strategies and solutions that are needed for a long term solution.
- Share best practices in water resource management.
- Flood abatement solutions - current policy to explore non-structural solutions be continued and expanded.
- Comprehensive communications package for the public.
- Communications is essential to raising awareness and priority actions. Bridge the gap between the technical people, planners and policy makers.
- More studies on climate change.

4.2.1 Keynote 2: Economics of Climate Change for Malaysia: Energy Sector - *Professor Dr. Jamal Othman, Faculty of Economics & Management, National University of Malaysia*

Based on the carbon dioxide (CO2) emission rate by sector (1991-2010), the emission share in 2010 was produced by five sectors identified as agriculture (1.73), industry (13.75), transportation (26.41), residential (3.51) and power (54.60). The energy consumption growth rate (kilo tonne of oil equivalent - ktoe) indicates that the growth share (%) in 2010 was produced by four

sectors, which are power - encompassing coal, natural gas and petroleum product (49.41%), coal (2.84%), natural gas (9.74%) and total petroleum (38%). The growth decomposition of CO2 emissions, 1991-2010 compound annual growth rate (CAGR), the bulk of emission growth was due to population and income expansion (91%) while 9% of emission growth was associated with declining energy and carbon efficiency. In 2005, CO2 emission rate per (gross domestic product) GDP was 0.31 (kg per ringgit of GDP). The business-as-usual (BAU) per GDP emission in 2020 after taking into consideration the presumed decline in manufacturing contribution to GDP is projected to rise to 0.34 kg or total emission of 308 million tonnes (Mt).

The reduction scenarios and emission levels (2011-2020) projected that the emission reduction by 2020 (Mt) (% of total reductions) produced by petroleum, natural gas, coal sectors (for both non power & power) and carbon efficiency of energy (presuming an autonomous improvement of 10 percent annually from 2011 through 2020) is 69%. By using the computable general equilibrium (GCE) Model, adding to the above cuts by the amount of reduction (12 Mt) from oil subsidy reductions (30%) and electricity tariff increases (10%) results in a total reduction of 81 Mt. This leads to an emission intensity of 0.25 kg per unit GDP by 2020, which is far off from the targeted level of 0.19. The realistic mitigation scenarios projected that the energy efficiency (EEC) scenario has potential reduction of total energy demand in commercial sector by 1.0 percent per annum from 2015 until 2060 whereas the renewable energy (RE) scenario projected that by 2030, Malaysia will be expected to have these renewable energy (RE) capacities in power generation. In 2014, 5 percent of Malaysia’s share of diesel consumption in transport sector will come from biodiesel. As the nuclear (NUC) scenario, by 2023, 2000 MW nuclear plant is expected to be commissioned. The CO2 emissions and intensity by scenarios (2010-2030) using the LEAP Model indicates that Malaysia is not well positioned to be on the development track that would lead to an increasingly greener economy. The rate of emission reductions is not sufficiently high to cause a significant decline in emission intensity per GDP.

From the cost-benefit analysis of mitigation strategies (energy), the marginal reduction potential is 74 Mt by 2020. The potential mitigation initiatives may involve strategies that may generate net benefits such as the driving behaviour - demand side strategies, green or efficient buildings for both residential and commercial buildings, public transportation, increased use of natural gas via imports, increased energy efficiency in industries, increased efficiency in transportation and increased use of hydropower for electricity generation. Meanwhile, the strategies that may involve substantial direct involvement, investment and incentives by the Government are the renewable energy (solar photovoltaic, bio-mass, bio-gas, small hydropower, municipal wastes, waste composting), alternative 'drive-trains' for cars and public transportations - buses and trains.

The impact of a 10 percent reduction in gas subsidies (CGE Model), resulting in a strong switch to coal and crude oil use is very likely given a reduction in gas subsidy provision to the economy. This eventually will lead to increases in emissions. However, the implication of results indicates that it is not advisable for gas subsidies to be entirely reduced or removed especially its employment in the power sector without a clear plan for the development of REs, as it is likely to be substituted by the more price competitive coal which consequently enhances emission rates.

The Feed in Tariff (FiT) is Malaysia's best hope to realise a significant contribution of power from REs into the national grid. Malaysia has targeted to generate some 175 MW of power from solar PV by 2020. The amount of land area to generate the energy is calculated at 9.34 square kilometers. This is relatively minute when compared to Malaysia's total land area. Hence, it indicates very clearly the vast potential of solar energy that can be generated by Malaysia. The major impediments facing FiT include criteria for would be Feed-in Approval Holders (FiAHs), fixation of quotas and financing for FiT. Hence, the policy recommendations for FiT are as follows:

- Added criteria for would be FiAHs - establish meaningful criteria and guidelines for FiAHs incorporating multi social goals

- Fixation of quotas - increasing the caps and active participation of the national utility agency
- Financing of FiT - federal allocation of funds, capturing resource rents from oil and gas extraction, incentive shifts from gas subsidies and channelling it to FiT, implementing creative finance - Leasing of RE System, taxing power generators, acknowledging RE projects as a Real Estate Investment Trust (REIT), tax on consumption of petroleum based products, progressive tariff rates on electricity users, familiarizing local banks with RE finance and development of a Green Bank

The possible initiatives for FiT and energy sector are as follows:

- Expanding FiT scheme to off grid communities
- Demand side management for REs
- Addressing power quality and stability
- Encourage participation of local governments in RE and FiT program
- Promote REs for rural electrification program
- Policy coordination and implementation
- Emission trading for Malaysia
- Green Government Procurement (GGP) Regulatory Framework
- Establishing standards for construction
- Hasten replacement of older vehicles with more efficient new models through incentives
- Development of more efficient public transportation system need to consider user preference/demand for more efficient public transportation system to be truly effective substitutes to private vehicles
- Technology standards and targeting to promote energy efficiency establish environment and emission standards consistent with international standards for household appliances and industrial equipment. Establish clear target dates for the use of energy savings technologies.

- Promotion of sustainable cities through a score card system and energy portfolio standards promote healthy competition based on a score card system across cities and municipalities focusing on energy conservation and emission reduction performance
- Tax adjustment
- Correcting resource prices
- Balancing bio-fuel development and food prices
- Promoting corporate environmental management
- Capacity building on the green economy

4.2.2 Economic Impacts of Climate Change in Indonesia - *Dr. Erna Sri Adiningsih, SPG member for Indonesia*

Indonesia rainfall varies among islands and provinces. The major climatic impacts of global warming are the rainfall and temperature change in which the rainfall change is more problematic. The intra-seasonal climate variability in Indonesia is affected by heat waves, drought/floods, tropical cyclones and Madden-Julian Oscillation (MJO). The inter-annual variability is affected by ENSO and Indian Ocean Dipole (IOD), whereas the inter-decadal variability is affected by decadal variability, sun activity variation, sea circulation and greenhouse gas (GHG) emission. The trend of seasonal rainfall under high GHG emission scenarios by using 14 General Circulation Models (GCMs) indicates that in 2025, wet seasonal rainfall for December to February (DJF) increase and dry seasonal rainfall for June to August (JJA) decrease in Java, Bali and Papua. In 2050, wet seasonal rainfall (DJF) increase in most of Indonesia, except Northern Sumatera and Kalimantan, dry seasonal rainfall (JJA) decrease. In 2080, wet and dry seasonal rainfall (DJF & JJA) increase, except Sumatra, Kalimantan and Java. As the averaged sea level rise in 1982-2011, sea level rise in eastern part was much higher than western part of Indonesia. The impacts on coastal areas by this rise are increasing floods and permanent inundation.

With regard to the climate change impacts in Indonesia, the provinces of Sumatra, Java and Bali are very vulnerable to climate change in which the water supply and rice production are the major affected sectors. For the economic impacts of climate change on agriculture sector, the increase in temperature and the changes in rainfall pattern and length of seasons may trigger the development of crop pests and diseases in Java. The sea level rise will result in inundation at coastal areas that could lead to increasing floods in crop areas resulting in reduction of rice and maize production as well as loss of employment for farm labourers. The rice production in Java between 2025 and 2050 is likely to decrease by about 1.8 and 3.6 million ton from current level, which will result in a loss of about USD1,600 million to USD3,200 million. As for the marine and fishery sector, the inundation at coastal areas due to the sea level rise will increasingly floods crop lands and ponds causing loss of fish, shrimps, and prawns. With regard to the water resources sector, climate change has caused frequent floods and prolonged droughts. The extensive and prolonged floods in Jakarta in 2013 caused a loss of USD3.3 million/day while drought in Garut District in West Java in 2007 caused loss of 9,468 tons of rice production (more than USD20 million). Other affected sectors include the forestry, human health and macro economy. Hence, as climate in Indonesia is characterized by rainfall variation, climate change impacts are dominated by water-related disasters (drought, floods, shortage of water supply) although they vary among regions and sectors. Coastal area is the most vulnerable to climate change.

The economic valuation of climate change impacts in Indonesia is not easy, since the impacts could be intangible and not measurable. However, the loss and damage approaches could be a good option to start valuation of economic impacts of climate change.

4.2.3 Economic Impacts of Climate Change in Southeast Asia - *Dr. Jariya Boonjawat, SPG member for Thailand*

It is found that 2013 is the 7th warmest year on record since 1850. The rapid urbanisation in the Southeast Asia region in recent decades has resulted in

decreasing cool nights trends in which this phenomenon is called the urban heat island effect. The influence of El Niño Southern Oscillation (ENSO) also has been the factor that affects the climate variability in the region. The human activities in the region, which are the widespread changes in land use and biomass-burning have contributed to regional air pollution issues. Meanwhile, the interaction of black carbon aerosol due to widespread biomass-burning, on glaciers in the Himalaya and Tibetan Plateau (HTP) region resulting in the retreat of glaciers, water resources of 10 rivers in Asia including the Mekong River. The regional climate models have predicted extreme weather conditions with higher frequency of intense tropical cyclones, intense rainfall, tornadoes and thunderstorms in the region. These can be observed with the occurrence of the Super Typhoon Haiyan (Yolanda) this year which has severely impacted the Philippines. In addition, the intense rainfall in the region has induced series of severe floods in Vietnam, Cambodia and Thailand. Moreover, the climate variability and extreme in the region have contributed to sea level rise, beach erosion and coral bleaching that could trigger ocean acidification which is a threat to the regional food security.

Climate change has potential economic impacts on various sectors of Southeast Asia. With regard to the rapid urbanisation in the region, the energy sector is highly demanded for air conditioning, transportation and industrial activities. The increasing pollution in the urban areas, which is closely linked to waste generation, also has contributed to high demand for the thermal wastes treatment as well as the electricity generation to support the urbanisation growth. As such, the urbanisation in the region has led to urban air pollution that adversely impacts the human health, which in turn can affect the economic development and growth. On the water sector, climate change has an impact on the availability of water to households, agriculture and industry across the region. In responding to the climate variability and extreme due to climate change, actions required for the water security in the region include development of drought and flood warning system and water management system. The change in climate also has an impact on agriculture, including forestry and fisheries that are crucial for food security.

As such, the resilience of agroforestry, agriculture and fisheries sectors to the challenges brought about by climate change, need to be increased. As for the energy sector in the region, renewable energy such as the bioenergy can be generated in meeting the demands of energy induced by climate change. The tourism sector in the region that depends on the ecosystem also has been affected by climate change. The response to this climate effect is the development of natural ecosystem management such as the ecotourism that conserve the natural environment of coral reef and small islands. In the region, the agro-forestry systems are used to conserve the tropical forest ecosystem in its response to climate change impact. In addition, the disaster management and societal vulnerabilities to climate-related hazards are also used as an approach to conserve the mountainous, river delta and coastal ecosystems across the region. With regard to the society, its responses to the climate include low carbon society, knowledge-based climate governance as well as participatory approaches that combine local and scientific knowledge.

4.2.4 Policy Development, Financial Mechanism for Climate Change Adaptation and Mitigation In Viet Nam - *Dr. Kim Chi Ngo, SPG Member for Vietnam*

The sectors in Viet Nam that are affected by climate change include the industrial zones which are mostly located in coastal zone and agriculture as the agricultural areas are located in main delta river basin. The impacts of climate change are also observed on the frequency of tropical cyclones that has affected Viet Nam, which has increased by 0.43 event per decade in the past 50 years. The occurrence of series of floods in 2009 to 2012 due to extreme heavy rainfall resulting in loss and damages of lives and property. These severe floods have occurred more than 8 times per year. Vietnam also experienced sea level rise that increased by 0.398 cm per year (1981-2006) while mean annual temperature has increased by 0.4°C since 1960. The rate of increase in the temperature is more rapid in the dry seasons (November, December, January; February, March, April) and in the southern parts of Vietnam. The frequency of ‘hot’ days (1998, 2002, 2003, 2006, 2007 and 2009) has increased since 1960 while annual frequency of ‘cold’ days

decreased. The World Bank (WB) in 2007 estimated the impacts of climate change on Viet Nam's population and GDP by the sea level rise scenarios as that the country's impacted population would reach 35% whereas it's GDP to reach 36% with a 5m rise.

The challenges faced by Viet Nam in responding to climate changes include lack of planning solutions, Climate Change Vulnerability Index (CCVI) assessment, climate change downscaling and hydrological modeling for provincial scale. Moreover, to develop the strategies and action plans, there are gap analyses on the climate change adaptation. These include the data and information systems that need required tools, gap between related institutions, gap in research on adaptation for reduction of losses and damages, gap in assessment the technology priority for reduction of losses and damages, capacity building, human resources, participation of communities and relevant units. In meeting these challenges and gaps, access to the financial sources and funds and international assistances is needed by the country.

With regard to the policy development in responding to climate change issues, the Government of Viet Nam has undertaken the following actions:

- Approved National Target Program to respond to climate change adaptation (Dec 2008)
- Building CC scenario on sea level raise (June 2009), updated (March 2012) more detail on focus province
- Approved National Climate Change Strategy (Dec 2011)
- Established National Committee on Climate Change (Jan 2012)
- Approved National Green Growth, 2012
- Started implementing climate change and sea level rise response models given priority to coastal zones and Mekong delta rivers (2012)
- Just approved list of action plan on climate change adaptation (2013)

The action plan on financing mechanisms, the Governmental investments and Official Development Assistance (ODA) sources are allocated for the:

- Building approaches:
  - Infrastructure planning and coastal zone development
  - Development system for dam and disaster management
  - Water resource protection facilities
- Non building approaches:
  - Strengthening national capacities, research, policies on respond to climate change
  - Study vulnerability and inventory greenhouse gas emissions, earlier warning

Based on the Strategy's principles, visions, objectives and implementation phases, the Government of Viet Nam has identified the following priority programs for 2011-2015 and to 2025:

- The National Target Program to Respond to Climate change, development of extended plan for 2016-2025;
- The National Scientific Program on Climate Change;
- The Hydrometeorological Observation Network and Forecasting Technology Modernisation Program by 2020;
- The water resources management and climate change adaptation programs for Mekong and Red River Deltas;
- The GHG emission inventory, reduction, management of emission reduction acts
- The climate change response programs in megacities;
- The sea dyke and river embankment upgradation, reinforcement program under climate change and sea level rise conditions.

- The public healthcare improvement program in the in climate change, SLR
- The socio-economic development program in inhabited island to cope with climate change and sea level rise.
- The pilot programs for community's effective response to climate change with an aim for further expansion.

At the end of the Seminar, Dr. Wan Azli Wan Hassan thanked all the speakers for their informative presentations on the issues related to economics of climate change in the Southeast Asia region.

5. Field Trip

On 27 November 2013, the participants of the 6th APN SEA-SRC, ECCS & PDTW visited the Kuala Lumpur Flood Mitigation System called Stormwater Management and Road Tunnel (SMART), which is under the management of the Drainage and Irrigation Department, Malaysia. SMART is a storm drainage and road structure in Kuala Lumpur, Malaysia. During the visit, participants were briefed on the functions and operation of SMART, which was built to solve the problem of flash floods in Kuala Lumpur and also to reduce traffic jams in the city centre of Kuala Lumpur particularly during rush hours. Subsequently, the participants visited the Kuala Lumpur Tower, one of tallest spots in the centre of Kuala Lumpur City for weather familiarisation.

Participants Visiting the SMART Control Centre

6. Southeast Asia Proposal Development Training Workshop

The Proposal Development Training Workshop (PDTW) was conducted on 28 to 29 November 2013 and chaired by Ms. Fariza Yunus, SPG member for Malaysia. The objectives of PDTW are to raise awareness of the APN among young/early career scientists in the Southeast Asia sub-region of the Asia-Pacific; increase capacity of young/early career scientists to submit proposals to the APN and compete effectively in its competitive Annual Calls for Proposals (for research and capacity development) in key scientific areas for sustainable development in the Asia-Pacific region; and empower APN Members to provide their knowledge on the APN proposal submissions and learn about the APN Proposals Process so that they might go back to their respective countries and impart their knowledge. Thus, the PDTW will bring together early-career scientists to engage in developing proposals, potential research activities and establish solid ground for continuous collaboration across borders in global environmental research into the future. During the workshop, participants were divided into four groups of peers and mentors consisted of the nFP, SPG members and two resource persons who are from the National University of Malaysia (UKM).

Before the groups moving on with their discussion, the SPG members and resource persons as well as the representatives from APN delivered their views, experience and advice regarding the proposal submission for APN fund.

6.1 An Overview of the APN - *Dr. Linda Anne Stevenson, Head Communication and Scientific Affairs Division, APN*

The Asia-Pacific Network for Global Change Research (APN) is an inter-governmental network of 22 countries in the Asia-Pacific Region. APN was established in 1996 and has a full-time secretariat based in Kobe, Japan since 1999. The APN goals are to support the regional cooperation in global change research; to strengthen interactions among scientists and policymakers, and providing scientific input to policy decision-making and scientific knowledge to

the public; to improve the scientific and technical capabilities of nations in the region; and to cooperate with other global change networks and organisations. The financial contribution is from four donor countries consisting of Japan, USA, Republic of Korea and New Zealand.

The APN major activities in 2013/14 consist of the funding of regional research projects under the Annual Regional Call for Research Proposals (ARCP) and capacity building projects under the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE); focused activities through three frameworks namely the Low Carbon Initiatives, Climate Adaptation and Biodiversity & Ecosystem Services; and strengthening of science-policy linkages. In 2013, APN has 13 on-going projects and 14 new projects under the ARCP and 2 on-going projects and 14 new projects under the CAPaBLE. Meanwhile, a special call for expressions of interest launched in July 2012 under the Low Carbon Initiatives Framework has received 44 expressions of interest of which 13 full proposals were invited and 7 proposals were approved for funding in March 2013. The Climate Adaptation Framework created in 2012 has undertaken the scoping workshop to enhance the action of APN developing country members on adaptation in the Asia-Pacific region in August 2012 in Kobe, Japan; UNFCCC workshops in August 2012 in Bangkok, Thailand; APN-UNCECAR (University Network for Climate and Ecosystems Change Adaptation Research) Training Course on Climate Change Downscaling Approaches and Applications in November 2012 in Bangkok, Thailand; United Nations Environment Programme (UNEP) 3rd Asia Pacific Climate Change Adaptation Forum in March 2013 in Incheon, Republic of Korea; and Launch of Forum on Loss and Damage in Asia in March 2013. In addition, APN has initiated new activities under this framework in order to enhance the adaptation, disaster risk reduction, and loss and damage associated with climate change impacts in Asia Pacific region, which are expected to contribute to the United Nations Framework Convention on Climate Change/19th Conference of Parties to the UNFCCC (UNFCCC/COP19). Under the Biodiversity and Ecosystems Services Framework launched in 2012, APN through the Framework's Opportunity Paper has invited the stakeholders to propose and engage in collaborative

activities with the APN in key thematic areas under this framework for the Asia-Pacific region, especially in developing countries. These four key thematic areas include the identification of drivers and pressures for biodiversity change that influence ecosystem services; assessment of the impacts of biodiversity loss and vulnerability to the shrinking of ecosystem services; prediction of changes in biodiversity and ecosystem services through model-based scenarios; and adaptation, response and mitigation of the depletion of biodiversity and ecosystem Services. With regard to the strengthening of science-policy linkages, APN has put emphasis on science-policy interaction through awareness-raising, capacity development and science-policy mechanisms activities.

In relation to the opportunities for young or early-career scientists, APN has been conducting Proposal Development Training Workshops (PDTW) in various parts of the region. APN has also convened the Young Scientists Poster Session where early-career scientist got the opportunities to present their research work to international community during the APN's Inter-Governmental Meeting (IGM). The 10-day APN-UNCECAR Training Course on Climate Change Downscaling Approaches and Applications which involved 14 specialists was conducted in November 2012 where 48 participants from 45 developing countries were trained. These opportunities also include the Asia-Pacific Fellowship Programme on Global Environmental Change that was approved at the APN's 18th IGM. APN's opportunities also include the Special Call for Proposal on adaptation, disaster risk reduction, loss and damage launched in August 2013 and the 2014 Annual call for Proposal to be launched in June 2014 as well as three Proposal Development Workshops back to back with APN sub regional committee meetings. The recent Publication of APN is the Climate in Asia and the Pacific: Security, Society and Sustainability that involved 31 authors from the global change community.

6.2 Objectives of the Workshop and the APN's Calls for Proposals Process - *Ms. Taniya Koswatta, APN Secretariat*

One of the APN's four goals is improving the scientific and technical capabilities of nations in the region. In this regard, the APN has been conducting Proposal Development Training Workshop (PDTW) in various parts of the region since 2008. Up to present, more than 74 young, early-career scientists from 17 countries received training in the PDTWs. The objectives of the workshop are to:

- Raise awareness of the APN among young/early-career scientists in the Southeast Asia
- Increase capacity of young/early career scientists to submit proposals to the APN and compete effectively in its competitive Annual Calls for Proposals in key scientific areas for sustainable development in the Asia-Pacific region
- Empower APN members to provide their knowledge on the APN proposal submission process and to learn about the APN proposals process so that they might go back to their respective countries and impart their knowledge
- Give the hands-on experience on proposal writing and develop a summary proposal

APN's Annual Call for Proposals comprises the Annual Regional Call for Research Proposals (ARCP) Programme and the Scientific Capacity Building/Enhancement for Sustainable Development in Developing Countries (CAPaBLE) Programme. The ARCP is one of the scientific pillars of the APN to support global change research in the Asia-Pacific region. The ARCP is a competitive process launched in 1998 for funding under the Science Agenda of the APN. Research activities under ARCP focus on the Climate Change and Climate Variability; Ecosystems, Biodiversity and Land Use; Changes in the Atmospheric, Terrestrial and Marine Domains; and Resources Utilisation

and Pathways for Sustainable Development as well as cross-cutting issues, science-policy linkages and the human dimensions of global change.

The types of activities eligible for APN funding under ARCP include new research which addresses knowledge gaps in key areas; synthesis and analysis of existing research; research planning/scoping activities; and development of policy products such as integrated assessments, impact assessments, climate models, etc. The project duration and funding under ARCP, the average grant awarded for from the APN 2013/14 core budget was approximately US$45,000. The APN considers multi-year research proposals (maximum of 3 years), but only a limited number can be funded. If a multi-year proposal is approved, continued funding for year two and beyond is not guaranteed and the project will be subject to rigorous review after year one.

The CAPaBLE Scientific Capacity Building launched in 2003 is the second pillar of APN supporting capacity development projects/activities. The CAPaBLE programme enhances the scientific capacity in developing countries to improve decision-making relating to issues that are directly linked to their sustainable development. This effort is being achieved through a two-track process of capacity enhancement for experienced leading scientists and capacity development for early-career scientists.

The types of activities eligible for APN funding under CAPaBLE include scientific capacity development for sustainable development; science-policy interfacing; awareness raising activities and dissemination activities. The project duration and funding under CAPaBLE, while it is expected that capacity building projects will have one-year duration, each proposal will be considered on a case by case basis. The average grant awarded for 2013 projects with duration of 12 months was US$ 35,000.

The proposal under ARCP and CAPaBLE is reviewed in four phases namely Advisory Service, a voluntary component of the ARCP and CAPaBLE Calls for Proposals to provide advice on the appropriateness of the proposal intended for submission for APN funding consideration; Stage 1 which is the

submission of a Summary Proposal by the proponent and a compulsory review of the Summary Proposal by the SPG and Capacity Development Committee (CDC) and selection of Summary Proposals; Stage 2 which is the submission and review of Full Proposal (compulsory and by invitation); and Stage 3 which is the Final Decision-Making. In this stage, the SPG-SC makes recommendations to the SPG Pre-Meeting. The APN's IGM approves which proposals to fund, following recommendations from the SPG Pre-Meeting. The APN Secretariat informs proponents of the final decision in April 2014.

6.3 The Role of SPG Members and nFPs in Reviewing APN Proposals

- Dr. Jariya Boonjawat (SPG member for Thailand)

The structure of the APN is built around a joint annual meeting of policy-makers (IGM) and scientists (SPG). The IGM is the main decision-making body of the APN and approves its programme of work and budget for the ensuing year(s), including scientific research, capacity development and related activities, based largely on recommendations from the SPG. The Sub-Committee (SC) is core to APN's activities and functions as a steering body and a governing body during the IGM intersession(s). The APN Secretariat provides full-time professional support. To implement IGM decisions, APN receives expert advice from the CDC and SPG-SC who also review the APN scientific research & capacity agendas and proposals submitted for APN funding and for further consideration by the SPG. The APN funds its regional research (ARCP) and capacity development (CAPaBLE) programmes based on two annual open calls for proposals.

The main responsibilities of SPG members are to review research and capacity building proposals (ARCP and CAPaBLE), recommend prioritized proposals (through SPG meeting) to the IGM for funding approval and give scientific advice to the IGM. The main responsibility of the nFPs include the approve policies, rules and procedures for the APN; approve projects and activities based on recommendation made by the SPG; review and approve

annual financial report and budget; and review and update research themes based on national reports.

The role of SPG members in the review process:

- Initial Considerations for both ARCP & CAPaBLE:

    1. Does the proposal duplicate past or current efforts?
    2. Does it contribute towards any/some/all of the 4 goals of the APN?
    3. Is the proposal scientifically/methodologically sound?
    4. Does the proposal meet any/some/all of the eleven weighted criteria?
    5. Are the proposed project activities realistic and achievable within the timeframe and funding requested?
    6. Has co-funding and/or in-kind contributions been secured?
    7. Does it contribute towards any/some/all of the 4 goals of the APN?
    8. Does it represent good value for money?
    9. What are the proposed outputs?
    10. Will publications in peer-reviewed journals be considered?
    11. Does the proposed study really involve regional collaboration by 3 (or more) countries?

The evaluation of proposal is performed against the following criteria:

- ARCP proposals are judged against 11 criteria:

    1. Extent and quality of regional collaboration
    2. Technical soundness and degree of consistency and sustainability
    3. Building regional and national capacity for global change research and problem solving
    4. Policy relevancy, mainstreaming results into policy processes, developing/strengthening links with government policy and programmes, and contributing to sustainable development

5. Adequate administrative support
6. Adequate consideration of funding options
7. Increasing synthesis and analysis work at national and regional levels
8. Developing and strengthening relations with regional and international global change programmes and inter-governmental bodies and mechanisms
9. Meeting standardized data collection and user needs, and open access to research sites- APN Data policy
10. Raising awareness of global change issues with civil society
11. Improving communications

(Criteria 1 to 4 are considered as High Weight, 5 to 6 as Medium Weight and 7 to 11 as Lower Weight)

The CAPaBLE proposals each has 10 criteria in which they are to be judged:

1. Extent and quality of collaboration (at the local, national or regional level. Note: One-country projects are acceptable under the CAPaBLE programme, as long as the country is considered a developing nation)
2. Enhancing local, national and/or regional scientific capacity for global change research and problem solving in developing countries
3. Technical soundness and degree of consistency and sustainability
4. Raising awareness of global change issues among policy-makers and civil society of the developing countries and improving communications, publications and dissemination
5. Policy-relevancy, developing, and strengthening links with government policy and programmes
6. Adequate consideration of funding options
7. Adequate administrative and salary support
8. Developing and strengthening partnerships with regional and international global change programmes, institutions, and other inter-governmental bodies and mechanisms

9. Support from APN Scientific Planning Group Member and/or national Focal Point
10. Meeting standardised data collection and user needs, and open access to data and research sites according to the APN's new policy on "Data Sharing and Data Management

Relating to the approval processes, after receiving the evaluation sheets from the all reviewers (SPG members), the Secretariat compiles the comments/ questions of the reviewers and makes average score from 1 to 10. Subsequently, the comments/questions are sent to the proponents and asked them to respond. The revised proposals/modifications provided by the proponents are sent back to the reviewers for their information and re-scoring of earlier ratings if needed. SPG (reviewer) re-assesses the proposals/ modifications and re-scoring the rating if modifications/answers are satisfactory. After that, the Secretariat compiles the final ratings/scores and discuss the results among the SPG Sub-Committee for prioritizing and recommending to the next SPG meeting (APN funding resource availability is also considered). The recommendations are then placed and discussed at the SPG pre-meeting, revised as necessary and then submitted to the IGM for approval.

In the Inter-Governmental Meeting, the nFPs are the final authority for funding approval. The potential proposals recommended by the SPG meeting are critically discussed by the nFPs in the IGM where SPG members present as observers and then approved the potential proposals unanimously.

6.4 Writing a Proposal for the APN - *Dr. Linda Anne Stevenson, Head Communication and Scientific Affairs Division, APN*

A good proposal must presents a good idea that is well expressed, provides a clear indication of methods for pursuing the idea and evaluating the findings and provides a well thought out plan for making the information known to all who needs to know. To determine the long-term research aims, proponent

needs to develop bright idea, survey the literature & the APN Website (APN E-LIB), contact investigators, prepare a brief concept paper & discuss with colleagues/mentors and submit a letter of intent outlining the concept to the APN advisory service. To prepare to do the research, proponent needs to determine available resources, realistically assess needs, develop preliminary data, share with interested regional partners and assess their willingness to collaborate and continue self-assessment by discussing with colleagues/ mentors. To determine the possible funding sources, the proponent needs to determine for the possible funding sources as stronger proposals can get the matching funds but the weaker gets only APN funds. To write the proposal, proponent needs to address the evaluation criteria, show the work is relevant to policy by clearly addressing the relevant literature and engage policy/decision-makers as early as possible. The reasons for declining proposals by APN are due to:

- Improper submission format/missed deadline
- Lack of new or original ideas
- Diffuse, superficial, or unfocused research plan
- Lack of knowledge or published, relevant work
- Lack of experience in essential methodology
- Uncertainty concerning future direction
- Questionable reasoning in experimental approach
- Absence of acceptable scientific rationale
- Unrealistically large amount of work
- Lack of sufficient detail
- Uncritical approach
- Lack of funds/no support from institution
- No real regional collaboration

6.5 How Do You Deal with the Finances? - *Ms. Taniya Koswatta, APN Secretariat*

Some of the important tips to prepare a budget plan in the proposal are to write down all necessary expenses/identify cost item; decide on the need for a concise budget plan or a detailed year by year budget plan; refer to APN Financial regulations and sample budget; adjust the budget; find other potential financial sources to cover the remaining expenses; send the tentative budget to project collaborators and university grant officer for opinion; and readjust the budget and submit it to APN. Meanwhile, the common errors in budget planning are the overestimated or underestimated budget; not planned according to APN Financial Rules & Regulations; not related to project plan; insufficient information; insufficient justification; and not compatible with project leader or collaborator institution's financial regulations

For more information on the APN project-related policies and regulations, please visit http://www.apn-gcr.org/programmes-and-activities/project-policies-and-regulations/.

6.6 Sharing Experience on APN Proposal Submission: Southeast Asia Regional Climate Downscaling (SEACLID) - *Prof. Fredolin Tangang, APN Project Leader/Research Centre for Tropical Climate Change System (IKLIM), Faculty of Science and Technology, UKM*

The Southeast Asia Regional Climate Downscaling (SEACLID) is a collaborative climate downscaling project involving a number of countries in the Southeast Asia region. SEACLID project is mainly funded by the Asia-Pacific Network (APN)'s ARCP programme. The project was developed to focus on the scientific theme identified in the APN's Science Agenda of APN's Third Strategic Plan (2010-2015), which is the Climate Change and Climate Variability.

The criteria used to develop the proposal on Climate Change and Climate Variability include:

- Global/regional scale
- Improving understanding
- Capacity building
- Enhancing visibility in publication on regional climate change
- Create datacenter that would increase impact assessment study in the region
- Create product that is relevant to policy-makers

The challenges faced in developing the proposal in particular relating to the APN Application Form:

- Tedious with many restrictions for each section/column in terms of how many words we can put
- Budgeting even more tedious
- Require careful planning and consideration among members
- Doing it online was really a challenge

In October 2012, SEACLID proposal was developed and submitted to APN. The APN requested for inclusion of two additional and requested for a clear plan on how this project can be linked to CORDEX. In May 2013, SEACLID was conditionally approved with total fund of USD135K for 3 years and about 2-3 weeks ago documents for fund disbursement were received.

The SEACLID/CORDEX-SEA, participated by Indonesia, Malaysia, Philippines, Thailand, Vietnam, Cambodia and Lao PDR, will provide a platform for capacity building and training especially for young scientists from within the region in regional climate modeling. The SEACLID/CORDEX-SEA outcome will enhance scientific understanding of regional climate change in the region. With the availability of high-resolution regional climate change scenarios, the number of climate change impact assessment studies is

expected to increase. Eventually, this project would lead to increase in peer-review publications in the scientific, impacts and policy-related aspects of regional climate change and will narrow knowledge gaps in the region.

6.7 Sharing Experience on APN Proposal Submission and Project Implementation: Strengthening capacity for policy research on mainstreaming adaptation to climate change in agriculture and water sectors - *Prof. Joy Jacqueline Pereira, Former Project Leader of APN projects/Institute for Environment and Development (LESTARI), UKM*

The Strengthening capacity for policy research on mainstreaming adaptation to climate change in agriculture and water sectors project was approved for APN funding under the APN's CAPaBLE programme. The Grant awarded to this project was US$ 70,000 each for Year 1, Year 2 and Year 3. The Project was initiated in August 2009 to strengthen research capacity on mainstreaming climate change adaptation concerns into agricultural and water policies and foster networking for adaptation policy research in Asia. Research activities were carried out collaboratively by four institutes from India, Japan, Malaysia and Vietnam, and had later been expanded to involve researchers from Cambodia, Indonesia and the Philippines. The technical, institutional and regulatory barriers to integrating climate change adaptation concerns at both policy and operational levels were assessed and approaches for addressing the barriers were identified. The priority issues in developing indicators to monitor mainstreaming of adaptation measures were identified and country-specific menu of indicators to track effectiveness of such measures were developed. Case studies were conducted in evaluating effectiveness and to identify characteristics of selected policies that will enhance adaptive capacity. The Project played a catalytic role in exchange of information between policy makers and researchers. Linkages have been established with several of the active networks and institutions that have on-going work on climate change adaptation at the regional level. Multiple channels were established for disseminating research findings, including a Project website, leaflet, dialogues and workshops, and publishing in two

special issue of a peer-reviewed academic journal.

The main objectives of the project include:

- To assess technical, institutional and regulatory barriers to integrating climate change adaptation concerns at both policy and operational levels and propose countermeasures;
- To develop metrics for monitoring the progress in mainstreaming adaptation in sectoral policies and operations;
- To identify characteristics of selected policies that will enhance adaptive capacity;
- To create a ARPNAP network linking adaptation research and policymakers in Asia; and
- To disseminate project outcomes to a wider audience and enhance knowledge of adaptation in Asia through research-policy dialogues and project publications.

This study is based on literature review, questionnaire surveys, consultation workshop, and interviews conducted with stakeholders at various government agencies, academic and research institutes, and extension agencies. Reviewed literatures include the reports and documents published by the national/local governments and research institutes, peer reviewed journals, academic remarks, and other technical books. Information from both primary and secondary sources was collected and evaluated through multi-criteria analysis methods, including the analytical hierarchy process (AHP). Several workshops were also organized to consult further opinions from stakeholders while to disseminate results attained through the project activities. A Project website (http://www.ukm.my/apn) and leaflet was prepared for dissemination of project information.

The Project held a total of six meetings. Four meetings were held in Malaysia and one each in Bangkok, Thailand and Incheon, Republic of Korea, respectively. The meetings were mainly carried out in conjunction with other

events that UKM jointly organised. Therefore it provided opportunities for Project Partners to share respective research findings with stakeholders, who are essentially policy-makers and researchers in the region.

6.8 Group Presentations

On the first day of the PDTW, the young scientists were gathered in their 4 working groups to discuss and write a 4-page summary of the assigned topic of their proposal with the mentorship from assigned mentors consisted of the APN nFP, SPG member and invited expert. The topics assigned to the groups are related to climate change impact on biodiversity in South East Asian region, solid waste management, water security and water management and global change implication of urban development/urban land use. The group discussions were actively participated both by the trainees and their mentors. The working groups presented their summary proposals by highlighting the main aspects and at the end of every presentation, constructive feedbacks were received from the floor.

On the second day, the working groups gathered again to revise the summary proposal they have developed based on the feedback received. Subsequently, before moving on to the peer-review session, the groups were briefed on the peer-review process by Dr. Linda Anne Stevenson, Head Communication and Scientific Affairs Division, APN. Some of the important points to consider in the peer-review process include whether the proposed activity is related to the global change research, APN goals and APN science themes that are identified in APN 3rd Strategic Plan. The proposal also needs to have strong regional collaboration in which at least three countries participate in the project and a reasonable budget. Other important considerations in the review process include whether the proposal involved decision-makers, will the outcomes be useful for end-users, does the project adopt interdisciplinary approaches and represent value for money as well as realistic in terms of timescale and work to be done. The rating for the summary proposal is as the following:

- Excellent - Significantly contributes to APN goals
- 7-8 (Very Good) - Fundamentally sound but needs some modification
- 5-6 (Good) - Could be sound but requires important modifications
- 3-4 (Fair) - Not yet sound and does not meet most of the criteria
- 1-2 (Poor) - Has fundamental flaws and need not be reconsidered

Subsequently, the working groups performed a review on the summary proposals of their respective peer groups and presented their reviews on the general strength and weaknesses of the proposals including general suggestions for improving the proposals. This session has given the trainees with the assistance from their mentors the opportunity to experience themselves on how to perform proposal reviews in an effective manner. Moreover, it has provided a lot of information on the global change related issues and enhanced the networking among the Southeast Asia country representatives. Before the session ended, the best proposal for this PDTW was picked and announced to the participants.

Discussion of the Working Group of Young Scientists with the Assistance of the nFPs, SPG Members and Resource Persons

7.0 Concluding Remarks

The concluding remarks were given by Ms. Fariza Yunus, SPG member for Malaysia. She mentioned about one of APN's four goals is improving the scientific and technical capabilities of nations in the region. The APN believes that research must involve local scientists and thus they must be given the capacity to continue

their research. Hence, this workshop is one of the APN efforts to realise the said goal. With the establishment of CAPaBLE programme, APN is providing young scientists in the region with opportunities to develop their knowledge and capabilities in global change research. She hoped that all participants have benefited a lot from the workshop and eager to start preparing the proposal for submission to APN as APN is looking forward to work with all participants in the future. She further mentioned that any further questions or queries on the proposal writing, participants could forward them to the APN secretariat or their SPG member. On behalf of the APN, Ms Fariza thanked all the participants for their attendance and active participation as well as idea sharing throughout the 2-day workshop. She added that without active participation and enthusiasm shown, the workshop may not be concluded successfully.

8.0 Closing Session

The Session was closed by Mr. Subramaniam Moten, APN SPG invited expert. Mr. Subra thanked all the nFPs, SPG members, APN Secretariat and workshop participants involved in the workshop. He hoped that all young scientists have benefited from the workshop and will submit their proposals for APN funding. He ended his remarks by wishing everybody a safe journey back home. Subsequently, the workshop concluded with a group photograph session.

APN PDTW Participants at the Closing Session

ANNEXES:

ANNEX I: List of Participants

ANNEX II: Programme Schedule

ANNEX I

PARTICIPANT LIST OF THE 6TH SOUTHEAST ASIA SUB-REGIONAL COOPERATION MEETING, ECONOMICS OF CLIMATE CHANGE SEMINAR AND PROPOSAL DEVELOPMENT TRAINING WORKSHOP

25-29 NOVEMBER 2013, KUALA LUMPUR, MALAYSIA

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ANNEX II

ASIA-PACIFIC NETWORK FOR GLOBAL CHANGE RESEARCH
6TH SOUTHEAST ASIA SUB-REGIONAL COOPERATION MEETING, ECONOMICS OF CLIMATE CHANGE SEMINAR AND PROPOSAL DEVELOPMENT TRAINING WORKSHOP
(6th APN SEA-SRC, ECCS dan PDTW)

25-29 NOVEMBER 2013, KUALA LUMPUR, MALAYSIA

6thAPN Southeast Asia Sub-Regional Cooperation Meeting
25-26 November 2013

Day 1: Monday, 25 November 2013

08:30-9:00 (30 min) — **Registration**

Chairperson: Madam Che Gayah Ismail, Director General of Malaysian Meteorological Department and APN national Focal Point (nFP) for Malaysia

SESSION 1: Opening Session

09:00-09:05 (5 min) — **Doa Recitation**

09:05-09:15 (10 min) — **Welcome Remarks**
Madam Che Gayah Ismail
Director General of Malaysian Meteorological Department and APN national Focal Point (nFP) for Malaysia

Dr. Linda Anne Stevenson
Head Communication and Scientific Affairs Division
APN Secretariat

09:15-9:35 (20 min) — **Opening Address**
YBhg. Dato' Dr.Rosli Mohamed
Secretary General
Ministry of Science, Technology and Innovation, Malaysia

9:35-10:45 — **Group Photo Session followed by Coffee/Tea Break**

10:45-11:00 (15 min) — **Self-Introduction and Election of Officers**
Members of the Southeast Asia Sub-Regional Cooperation Committee (SEA-SRCom) introduce themselves and elect a Chairperson and Vice-Chairperson for the Meeting.

11:00-11:10 (10 min) — **Item 1. Adoption of the Draft Agenda**
The elected Chairperson of the Meeting will seek adoption of the agenda. Items of Any Other Business (AOB) may be raised at this

point for discussion prior to closing the meeting.

SESSION 2: Sub-Regional Cooperation Update

11:10-11:30 (20 min)
Item 2. Background and Objectives of the Meeting
Ms. Taniya Koswatta, APN Secretariat will provide brief explanation about the background of APN Sub-Regional Cooperation and Meeting objectives. Short discussion with the members will follow to level off expectations.

11:30-12:00 (30 min)
Item 3. Review of the 5th APN SEA-SRC Meeting
Dr. Veasna Kum APN SPG for Cambodia, will present the highlights of the 5th SEA-SRC Meeting and SEA-SRC Ad Hoc meeting which were held during the 18th IGM.

12:00-12:10 (10 min)
Logistical Arrangements and Other Announcements
Local host will provide logistical details and other necessary information.

12:10-13:30
Lunch Break

SESSION 3: SEA-SRC activities

13:30-14:15 (45 min)
Item 4. Status update of Seed Grant proposal on Scoping Workshop on Climate Change Adaptation in Urban Planning in SEA
Dr. Erna SRI Adiningsih, APN SPG Member for Indonesia will provide information on the details output of the scoping workshop held on May 2013, Jakarta and facilitate the discussion on submission of full proposal now deferred to the 2014 APN calls for proposals. If time allows, the proposal may be viewed and finalised by members for next year's submission. Also need to discuss the technical and financial report to the APN to close out the Seed Grant activity.

14:15-14:45 (30 min)
Item 5: Open discussion on improving communications among the SEA member countries and between other Southeast Asia regional networks
Dr. Wan AZLI, Director, Technical Development Division, Malaysian Meteorological Department will facilitate discussion.

14:45-15:15 (30 min)
Item 6: Identify potential scientist from Myanmar to engage APN and SEA-SRC activities
Mr. SangkhaneThiangthammavong, APN nFP member for Lao PDR will lead a discussion and members will follow up the discussion.

15:15-15:45
Coffee/Tea Break

15:45-16:15 (30 min)
Item 7: Institutionalising Sub-Regional committees in APN Framework Document
Ms. Taniya Koswatta, APN Secretariat, will give an overview of planned institutional structure on formal establishment of sub regional committee under APN framework then follow up discussion among the members to discuss the structure.

16:15-16:45 (30 min)	**Item 8: Evaluation of South East Asia Sub-regional committee** Dr. Linda Stevenson, APN Secretariat will present an overview on work to date on 3SP Evaluation and 4SP Planning and evaluation process. She will also discuss the financial viability of continuing SRC activities and PDTW and sustaining these in the future.
16:45-17:15 (30 min)	**Item 9: APN framework updates** Dr. Linda Stevenson, APN Secretariat will present updates on three frameworks: - Low Carbon Initiatives (LCI) Framework - Climate Adaptation Framework (CAF) and Focussed call for CCA-DRR-L+D activities - Biodiversity and Ecosystem service Framework
17:15-17:30 (15 min)	**Concluding Day 1 and Logistical Arrangements** The Chairperson will adjourn the Meeting for the day and the local host will make announcements.
20:00-22:00	**Reception Dinner Hosted by Secretary General** **Ministry of Science, Technology and Innovation, Malaysia**

Day 2: Tuesday, 26 November 2013

SESSION 4: Strategic Initiatives and the APN Opportunity Fund

09:00-10:00 (60 min)	**Item 10: APN Opportunity Fund** Dr. Linda Stevenson, APN Secretariat will present over view of the APN Opportunity Fund, including funds available and allocations.

SESSION 5: Way Forward for SEA-SRC

10:00-10:30 (30 min)	**Item 11: Future Plans/Activities** Facilitated by the Chair/Vice-Chair, a discussion will ensue on specific goals with timeframe as well as plans for future events and activities.
10:30-11:00	**Coffee/Tea Break**
11:00-11:20 (20 min)	**Item 12: The7th APN SEA-SRC Meeting** For the next SEA-SRC Meeting, consider the following: • Host country/institution • Date/Venue • Objective(s) • Expected outcome(s) • SEA-SRCom Meeting to be conducted back-to-back with the Proposal Development Training Workshop Include a short discussion on the report for the next IGM and issues that the SEA-SRCom would like to discuss during the SRCom Ad hoc Meeting.
11:20-11:30 (10 min)	**Any Other Business**

11:30-12:00 (30 min)	**Closing and Final Remarks** The Chairperson, Vice-Chairperson will deliver their concluding remarks. Local host will provide logistical details.
12:00-13:30	**Lunch Break**

Economics of Climate Change Seminar
26 November 2013

Day 2: Tuesday, 26 November 2013 (continued . . . .)

13:30-14:00 (30 min)	**Registration**
14:00-14:05 (5 min)	**Welcome Remarks** Dr. Linda Anne STEVENSON APN Division Head for Communication and Scientific Affairs
14: 05-14:10 (5 min)	**Opening Address** Madam Che Gayah Ismail Director General of Malaysian Meteorological Department and APN national Focal Point (nFP) for Malaysia
14:10-14:20 (10 min)	**Self-Introduction** All participants and resource persons of Economics of Climate Change Seminar will be asked to introduce themselves.
14:20-14:30 (10 min)	**Group Photo Session**
14:30-15:30 (60 min)	**Keynote 1**: **Economic of Climate Change in Malaysia: Key Issues from Selected Sectors** Mr.Chang Yii Tan, Consultant for Economic Planning Unit, Prime Minister's Department, Malaysia
15:30-16:30 (60 Min)	**Keynote 2:Macro Economic Analysis of Climate ChangeFocussingon Energy and Power Sectors in Malaysia** Professor Jamal Othman, School of Economics, Faculty of Economics & Management, National University of Malaysia
16:30-17:00	**Coffee/Tea Break**
17:00-17:15 (15 min)	**Speaker 1 (nFP/SPG Member)** Dr. Erna Sri ADININGSIH, APN Scientific Planning Group (SPG) Member for Indonesia
17:15-17:30 (15 min)	**Speaker 2 (nFP/SPG Member)** Dr. Jariya BOONJAWAT, APN SPG Member for Thailand
17:30-17:45 (15 min)	**Speaker 3 (nFP/SPG Member)** Dr. Kim Chi NGO,APN SPG Member for Vietnam

Field Trip
27 November 2013

09:00-12:00 **Kuala Lumpur Flood Mitigation System: Stormwater Management and Road Tunnel (SMART)**

12:30-14:30 **Lunch**

14:30-17:30 **Kuala Lumpur Weather Familiarisation**

19:30-10:00 **Working Reception Dinner for APN Members and Young Scientists**

Southeast Asia Proposal Development Training Workshop (SEA-PDTW)
28-29 November 2013

Day 1, Thursday, 28 November 2013

Chairperson: **Ms. Fariza Yunus SPG Member of Malaysia**

09:00-09:10 (10 min)
Opening and Welcome
• Ms Fariza Yunus, APN Scientific Planning Group (SPG) Member for Malaysia will welcome the participants and provide a short message.
• Dr. Linda Anne STEVENSON, APN Division Head for Communication and Scientific Affairs will open the PDTW and provide her remarks.

09:10-09:20 (10 min)
Group Placements and Self-Introduction
Participants will be asked to form in their groups of peers and mentors. All participants will then be asked to introduce themselves.

09:20-9:40 (20 min)
An Overview of the APN
Dr. Linda Anne STEVENSON, APN Secretariat will provide information about the APN, past PDTWs and additional information.

09:40-10:00 (20 min)
Objectives of the Workshop and the APN's Calls for Proposals Process
Ms. Taniya Koswatta, APN Secretariat will discuss the workshop objectives and provide information on the APN's Annual Calls for Proposals Processes and address the criteria for submission.

10:00-10:30 (30 min)
The Role of SPG Members and nFPs in Reviewing APN Proposals
Dr. Jariya Boonjawat (SPG Thailand) will talk about the roles of SPG Members and national Focal Points in the APN review procedure and subsequent steps for IGM approval of SPG recommendations.

10:30-11:00 **COFFEE BREAK**

11:00-11:15 (15 min)
Writing a Proposal for the APN
Dr. Linda Stevenson, APN Secretariat will share advice in developing and writing a competitive proposal for the APN.

11:15-11:30 (15 min) **How do you deal with the Finances?**
Ms. TaniyaKoswatta, APN Secretariat will discuss important aspects in preparing proposal budgets.

11:30-11:40 (10 min) **Sharing experience on APN proposal submission**
Prof. FredolinTangang, APN project leader will share his experience on APN proposal submission.

11:40-11:50 (10 min) **Sharing experience on APN proposal submission and project implementation**
Prof. Joy Jacqueline Pereira, former Project Leader of APN projects, will share his thoughts APN proposal submission and project implementation.

11:50-12:30 (40 min) **Q&A Session and Overview of the Hands-on Training Session**
Speakers will respond to questions raised by the trainees. Dr. Linda Stevenson of the APN Secretariat will provide an overview of the hands-on training session.

12:30-13:30 LUNCH BREAK

13:30-15:30 (120 min) **Task One: Completing Summary Proposal Writing Assignment**
Participants will gather in their 4 working groups and discuss the summary proposal they have been collaborating on in their pre-assignments. With mentorship from assigned APN Members, each group of trainees will spend two hours drafting/revising their 4-page summary proposal, based on the criteria provided by the APN and advice from assigned mentors.

15:30-16:00 COFFEE BREAK

16:00-17:00 (60 min) **Continue Task One: Completing Summary Proposal Writing Assignment**
Participants will gather in their 4 working groups and discuss the summary proposal they have been collaborating on in their pre-assignments. With mentorship from assigned APN Members, each group of trainees will spend two hours drafting/revising their 4-page summary proposal, based on the criteria provided by the APN and advice from assigned mentors.

17:00-18:00 (60 min) **Task Two: Group Oral Presentations**
A member from each working group will provide a 10-minute PowerPoint presentation highlight the main aspects of his/her group's proposal. 5-minute Q & A will follow each presentation. Based on the feedback from the proponents, the summary proposals may be revised in the evening but should be submitted by 10:30 a.m. to allow for photocopying and peer-review.

Day 2: Friday, 29 November 2013

Chairperson: Ms. FarizaYunus SPG Member of Malaysia

09:00-10:30 (90 min) **Task Three: Revising Summary Proposal according to feed-back on previous day**
Participants will gather in their 4 working groups and discuss feedback and revise the summary proposal that they have been working on

previous day. With mentorship from assigned APN Members, each group of trainees will spend one and half-hours to revise their 4-page summary proposal.

10:30-11:00 COFFEE BREAK

11:00-11:30 Overview of the Review Process
(30 min) Dr. Linda Stevenson, APN Secretariat will provide a brief overview of the criteria to be used for the review of the summary proposals.

11:30-12:30 Task Four: Review Process
(60 min) Each group will be asked to perform a review on the summary proposals of their respective peer groups (i.e. 3 proposals) with approximately 20-minutes per proposal. They will prepare a PowerPoint presentation with the results also indicating the best proposal and why (this will be presented after the lunch break)

- Review Group 1: Reviews Proposals from Groups 2, 3 and 4
- Review Group 2: Reviews Proposals from Groups 1, 3 and 4
- Review Group 3: Reviews Proposals from Groups 1, 2 and 4
- Review Group 4: Reviews Proposals from Groups 1, 2 and 3

12:30-13:30 LUNCH BREAK

13:30-15:00 Continue Task Four: Review Process
(90 min)

15:00-15:20 COFFEE BREAK

15:20-16:40 Task Five: Four Group Oral Presentations with discussion session (15min/group)
(80 min)
Each group will present on:

- General strengths and weaknesses of the summary proposals
- General suggestions for improving the summary proposals
- Selection of best proposal and why

The resource persons and trainees will discuss the writing and review process addressing issues of concerns and steps for improvement.

16:40-17:10 Questionnaire: Review of the Training Workshop and Suggestions for Improvement
(30 min)
The APN Secretariat will ask the participants to complete a questionnaire on how they viewed the 2-day workshop, providing comments and suggestions for improvement.

17:10-17:30 Concluding Remarks and Group Photograph
(20 min) Following a group photograph, Ms. Fariza Yunus will conclude the workshop.