



Synthesis Report on outcomes and good practices from APAN organised capacity building training workshops (2010-2015)



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Asia Pacific Adaptation Network (APAN)

APAN Regional Hub at the IGES Regional Centre

604 SG Tower, 6th Floor

161/1 Soi Mahadlek Luang 3

Rajdamri Road, Patumwan

Bangkok 10330, Thailand

Telephone: +66 2 651 8794 • Facsimile: +66 2 651 8798 • Website: www.asiapacificadapt.net

For general queries, feedback or comments, contact: info@asiapacificadapt.net

Table of Contents

List of Abbreviations	4
Executive Summary	5
1. Introduction	6
2. Outcomes from the capacity building training workshops	6
2.1 Sub- regional.....	7
Central Asia	7
South Asia.....	9
Southeast Asia	10
Northeast Asia	11
Pacific.....	12
2.2 Thematic.....	14
Water	14
Mountain.....	15
Agriculture.....	16
2.3 Capacity building training workshops co- organised with partner institutes	17
3. Conclusion.....	18
Appendix 1- APAN organised capacity building training workshops (FY 2010-2015)	19

List of Abbreviations

ADAPT	Adaptive, Dynamic, Active, Participatory and Thorough principles
ADB	Asian Development Bank
APAN	Asia Pacific Adaptation Network
CCA	climate change adaptation
DRR	disaster risk reduction
GAN	Global Adaptation Network
IWRM	integrated water resource management
KEI	Korean Environment Institute
M&E	monitoring and evaluation
SRN	APAN Sub-regional Node
TN	APAN Thematic Node
TNA	Capacity building training workshop Needs Assessment (TNA)
UNEP	United Nations Environment Programme

Executive Summary

The mission of the Asia Pacific Adaptation Network (APAN) is to build climate change resilient and sustainable human systems, ecosystems and economies through the mobilisation of knowledge, enhanced institutional capacity & informed decision making-processes, and facilitated access to finance and technologies. Hence building the capacity of policy makers is one of the core activities undertaken by APAN since its inception. The APAN has organised 22 capacity building training workshops in the Asia Pacific region with partner organisations and APAN sub- regional nodes and thematic nodes besides organising and co-organising numerous sub- regional conferences and the climate change adaptation Forum since 2010.

This report provides a synthesis of the key challenges, needs, gaps, outcomes and good practices from the capacity building training workshops. A few of the key challenges that emerged from the capacity building training workshops include lack of knowledge regarding adaptation, striking the balance between development and climate change needs, prioritisation of adaptation, setting mechanism to mobilise collective action on adaptation at the sub- regional level, mainstreaming adaptation in sectoral policies and plans, and securing adequate finances for implementing adaptation projects and plans.

Adaptation needs identified include enhanced knowledge on climate adaptation and its interlinkages with disaster risk reduction; integrated development planning; lack of technical capacity to collect, interpret and downscale climate data and models for better planning and preparedness; capacity development to formulate proposal for fund raising and adaptation plans; and need for sustainable development strategy that promotes improved governance, economic growth, poverty reduction & improved resource management.

A few of the good practices shared include community involvement in risk management by introducing new methods in agriculture practices in Kazakhstan, adaptation strategy based on biodiversity and ecosystem service in Bhutan, agro farming in Mongolia, and the Pacific Adaptation to Climate Change (PACC) project in Tuvalu.

1. Introduction

Adapting to climate change requires building the capacity to adapt to and respond to the changing climate in a sustainable and cost effective manner. The available capacity of the stakeholders, including policy makers, policy implementers of other stakeholders and institutions in the region is currently inadequate, which acts as a major constraint in mainstreaming climate change adaptation (CCA) into national policies and plans.

Addressing these needs, the United Nations Environment Programme (UNEP) under the Global Adaptation Network (GAN) is fostering the generation and sharing of knowledge and best practices and building capacities of stakeholders on CCA since 2009. The APAN is the first regional network under GAN which was set up in 2009.

The mission of APAN is to build climate change resilient and sustainable human systems, ecosystems and economies through the mobilisation of knowledge, enhanced institutional capacity & informed decision making-processes, and facilitated access to finance and technologies.¹ Thus APAN through its four core activities - Knowledge management, Knowledge synthesis/generation, the Asia-Pacific Climate Change Adaptation Forum and targeted capacity building training workshops aims to fulfil APAN's mission. The overall goal of APAN is to equip key actors in Asia and the Pacific Region with adequate knowledge for designing and implementing CCA measures, building capacity to access technologies and finance in support of CCA, and integrating CCA into policies, strategies and plans thereby strengthening the ability to integrate adaptation into development policies, strategies, and plans.²

The APAN along with other partner institutions and APAN sub- regional nodes (SRNs) and thematic nodes (TNs), have organised 22 capacity building training workshops in the five sub-regions, namely, Central Asia, South Asia, Southeast Asia, Northeast Asia and the Pacific since 2010 (Annex 1). The capacity building training workshops have successfully increased the capacity of government officials on CCA for better decision making. The capacity building training workshops have provided an excellent avenue to address the adaptation needs, key gaps, and challenges, and identified good practices.

2. Outcomes from the capacity building training workshops

The APAN has organised 22 capacity building training workshops targeting government officers from various ministries, including the ministries of environment, water, agriculture, planning, health, finance etc. with partner institutions and through the SRNs and TNs. Through the capacity building activities, APAN has facilitated knowledge transfer to the policy makers; highlighted and addressed pertinent issues in the sub- regions; raised awareness on various issues regarding CCA and built their capacities for better adaptation planning and implementation of

¹ As per the draft APAN Principles and Guidelines, 24th September, 2014.

² As per the draft APAN Principles and Guidelines, 24th September, 2014.

policies, plans and projects; and provided a platform to discuss about common challenges and solutions related to CCA at the sub region level.

In 2011, with the aim to facilitate mainstreaming adaptation in developing countries, three training module development workshops were organised with the objectives to review training module development concepts, techniques and framework to enable preparation of training modules on agriculture, water and food security. A total of ten modules were developed for in-service and induction staff. The modules developed were successfully pilot tested in a few countries in South and Southeast Asia. The regional capacity building training workshop on cross-sectoral CCA planning in 2011 improved the capacity of national and local authorities in their adaptation planning for climate change. The capacity building training workshop enabled the participants to gain deeper understanding regarding the general concepts on impacts of climate change, vulnerabilities and risk assessment, CCA and mitigation, familiarised the policy makers with different dimensions and approaches of CCA and available adaptation measures in the most vulnerable sectors and areas, methods to incorporate or integrate adaptation approaches into their national planning processes for different sectors, and on how to incorporate climate change in cross sectoral planning.

2.1 Sub- regional

Prior to undertaking capacity building at the sub- regional level, sub regional assessments regarding the current adaptation status, gaps and needs were conducted in 2010 . The co-organisation of two regional capacity building training workshops on module development, capacity building training workshop on cross-sectoral climate change adaptation planning, discussion with various international organisations and experts, and five consultation meetings were organised in each of the APAN sub- regions (2011-2012) to further identify current adaptation status, gaps and needs and corroborate the findings made by the sub regional assessment. The consultation meetings provided a venue to get opinions from various stakeholders at the sub- regional level and facilitated discussions regarding CCA in each of the sub- regions. The consultation meetings were also used for identifying good adaptation practices, and the national & sub-regional priorities.

Based on the identified priorities, APAN has organised 13 capacity building training workshops with the five APAN sub-regional nodes- Regional Environmental Centre for Central Asia (CAREC), Central Asia; Research Center for Climate Change Adaptation (RCCCA), Keio University , Northeast Asia; Secretariat of the Pacific Regional Environment Programme (SPREP); Pacific Islands; Climate Action Network for South Asia (CANSAs), South Asia; and Local Governments for Sustainability (ICLEI) Southeast Asia, Southeast Asia since 2011.

Central Asia

The consultation meeting in Central Asia assessed the major challenges in addressing climate change in the sub-region; identified support needed to overcome the challenges, and discussed

how to synergise between adaptation and mitigation. The meeting also provided a venue for exchange of views and identified topics to be addressed in future capacity building training workshops in the sub- region.

The discussions in Central Asia highlighted the priority given to mitigation as opposed to adaptation, in part because of the relative newness of the concept of CCA in Central Asia; and the difficulty in defining ‘Adaptation’ in a manner compatible with the needs and backgrounds of decision-makers and politicians. Additionally, insufficient linkages between projects and government strategies on sustainable development, and absence of a mechanism for sharing information and experiences among the countries hinder progress on adaptation in the region. Lack of coordination among the five Central Asian countries in terms of governance, makes it difficult to get the countries to approve a common charter of activities. Strengthening the capacity to increase awareness regarding CCA and mainstreaming CCA in the policies and plans were identified as the priority focus in Central Asia.

Subsequent capacity building training workshops in the region were conducted based on the outcomes of the consultation meeting. At every capacity building training workshop, the participants identified priority topics for capacity building, new and emerging issues, key challenges, gaps and needs, good practices and areas where APAN can support capacity building for effective adaptation.

The capacity building training workshops have led to improved understanding of the priority needs and practices on CCA; improved understanding on climatic risks, natural disaster risks, risk management (risk assessment, risk mitigation, retention and transfer); and led to a common understanding of the adaptation challenge in the region; acquired knowledge on evaluation methods and strengthened practical capacity on evaluating the effectiveness of existing and potential adaptation practices. The capacity building training workshops further facilitated mutual exchange of information amongst the participants, and helped the participants in developing skills in to formulating strategies and adaptation plans to reduce local communities’ vulnerability to natural disasters; identified sub regional priorities and identified common actions. .

Some of the key challenges and gaps identified, included the need for effective planning of future adaptation activities given the lack of comprehensive evaluation of the progress in the sub-region and need to enhance monitoring and evaluation (M&E). Additionally, prior needs assessments and gap analysis on CCA in 2010 and subsequent capacity building training workshops identified water, agriculture and natural disasters as priority sectors in urgent need of adaptation actions in the Central Asia region.

A few good practices identified include the ADAPT principles (Adaptive, Dynamic, Active, Participatory and Thorough) which guide the development of future M&E approaches, frameworks and indicators which embrace learning and contribute to build an evidence-based

understanding of the processes that lead to adaptation. A perspective on M&E that enhances learning and knowledge promotion should examine the linkages between capacity and action by looking at the driving forces of individuals and communities towards change. The approach captures the complexities and dynamics in the changing environment.

Another good practice identified is strengthening resilience of mountain-based communities in four districts of Tajikistan through extension of agro-forestry; collection of rain water; establishment of mini-nurseries; fruit crop grafting for steadier seedling stocks; and applying energy efficient stoves & heat insulation of houses.

Community level CCA: examples from Kazakhstan on community involvement into risk management by introducing new methods in agriculture practices capable of helping the rural communities to adapt to climate change. Eight projects were implemented in different natural climatic zones of Kazakhstan and included the introduction of technologies such as drip irrigation; green belts charge irrigation; sustainable pasture management; and creation of the forage grasslands on the degraded lands.

Feedback received from the participants in at the capacity building training workshops was quite positive. The participants expressed their appreciation of the relevance of the topics discussed, the high quality of the presentations, and the high level of participant involvement during the practical sessions. They appreciated the opportunity to share and exchange views and information on topics of common important to the sub- region; learn about the activities in neighbouring countries and find ways of collaboration.

South Asia

The consultation meeting in South Asia assessed the country and sub-regional needs for adaptation. The meeting identified topics to be addressed in future capacity building training workshops in South Asia.

The discussions at the subsequent capacity building training workshops emphasised the need for capacity building for local climate change action planning and development. The need to assist local governments for efficient and effective channelling of and accessing to adaptation funds, proposal preparation and the need to foster regional cooperation for addressing CCA was underscored.

Priority actions identified in South Asia include capacity building training workshops for the policy makers on pertinent adaptation issues, capacity building training workshop of trainers in key national-level institutions, conducting awareness raising capacity building workshops at the sub-regional level and integration of CCA knowledge into existing capacity building training programmes. The need to strengthen South-South cooperation builds capacity to access finance; knowledge management and enhanced public-private participation were recommended. The role

of APAN in facilitating these activities was also highlighted at the capacity building training workshops.

Subsequent capacity building training workshops in the region were conducted based on the outcomes of the consultation meeting and feedback from participants.

Some of the key challenges, gaps and needs for South Asia include low adaptive capacity; lack of expertise; limited availability of studies and research on CCA; low levels of awareness regarding CCA; need to look at macro-linkage and address the underlying issues that improve policy frameworks and governance structures; need for a sustainable development strategy that promotes improved governance, economic growth, poverty reduction and improved resource management the key to CCA; need for additional climate financing resources; and the need for an innovative market mechanism for CCA financing.

The capacity building training workshops have led to improved understanding of the priority needs and practices in South Asia; identified key priority sectors for the sub-region - water, agriculture and mountainous regions; initiated regional cooperation and coordination through exchange of knowledge, skills and resources for strengthening climate actions across South Asia; and identified sources of adaptation finance. The capacity building training workshops have also led to increased understanding on National Adaptation Plans preparation; identified stakeholders at the national and regional level for strategizing adaptation; facilitated experience sharing on lessons learnt; and generates ideas for joint research to ensure informed decision making.

Some of the good practices which emerged for the capacity building training workshops include Bhutan's Adaptation strategy based on biodiversity and ecosystem service; Bangladesh government response to climate change by incorporating climate issues in the sectoral national policies; and Sri Lankan government's strategies and actions for CCA including developing national climate change policy and national adaptation strategy.

Feedback received from the participants in these capacity building training workshops indicated the usefulness and relevance of the capacity building workshop contents and high probability of the participants to apply the knowledge acquired from the capacity building training workshops. The participants expressed satisfaction at the high level of participant involvement during the capacity building training workshops. They further suggested topics for future capacity building training workshops include the exploration of various adaptation financing options which were addressed in the capacity building training workshop organised in 2013.

Southeast Asia

The consultation meeting in Southeast Asia assessed major challenges in addressing climate change in the sub-region, and country specific needs for capacity building and capacity building training workshop. The meeting successfully provided a platform to exchange views, and identified topics for future capacity building training workshops in the sub- region.

The discussion identified the priority sectors for Southeast Asia- urban, coastal and agriculture; and identified tools, policies and best practices that would help promoting adaptation; the need to translate science, experiences and best practices into decision making processes, and the need to link the policy to ensure effective implementation.

Subsequent capacity building training workshops in the region were conducted based on the outcomes of the consultation meeting. Each capacity building training workshop, identified priority topics for capacity building, new and emerging issues, key challenges, gaps and needs, good practices and areas for APAN's intervention to enable the formulation of policies, plans and activities leading to effective adaptation.

The key challenges included: the development of adaptation technologies due to lack of data/information, estimation of adaptation cost and benefits, involvement of all relevant stakeholders in CCA, policies and strategies to remove barriers, and procedures to access international, bilateral and multilateral finance. The needs include public awareness on adaptation; enhanced cooperation at the national, regional and international levels; technological transfer; and data archiving for sharing information. The need for skills-based activities such as designing monitoring and evaluation systems, and developing key indicators in succeeding capacity building activities were emphasised.

The capacity building training workshops have led to enhanced understanding on CCA, and on practical adaptation approaches; led to improved understanding of priority needs and practices on CCA; provided examples on adaptation technologies in vulnerable sectors (agriculture and water); and provided conceptual knowledge on M&E, as well as practical tools and case studies on how M&E can be conducted in the context of CCA.

Some of the good practices identified include Cambodia's information dissemination to local community and early warning system, rehabilitating irrigation system, and water resource technology in tackling flood and drought issues; Vietnam's rooftop rain fall harvesting, integrated river basin management, and harvesting runoff water in adapting to changes on river flow regimes and water supply; Indonesia's improvement of drainage system and construction of seawall to address issues of floods due to tidal inundation and coastal erosion; and Lao's drainage system, water catchment and irrigation system to address flood and drought issues.

Many participants appreciated the relevance of the capacity building training workshop content and the enhanced understanding on different approaches of CCA. Topics for future capacity building training workshops identified include capacity building on tools and methodologies used in CCA and best practices in adaptation initiatives in Southeast Asia.

Northeast Asia

The consultation meeting in Northeast Asia assessed the capacity building needs, knowledge gaps and major challenges to CCA. The meeting successfully provided an avenue to promote

exchange of views and established a basis for topics to be addressed in future capacity building training workshops. As the sub- region comprises of countries at different levels of development- China, Japan, Mongolia, and the Republic of Korea, the focus of APAN activities in Northeast Asia was essentially on Mongolia as it was felt that the need for capacity building was the greatest in Mongolia.

Subsequent capacity building training workshops were conducted in Mongolia based on the outcomes of the consultation meeting. Each capacity building training workshop was developed based on the needs identified at the consultation meeting and at subsequent capacity building training workshops. The participants identified priority topics for capacity building, key challenges, new and emerging issues, gaps and needs, good practices and avenues for APAN to build the capacities in Mongolia.

Key challenges, gaps and needs identified for the sub-region included the desertification & addressing trans- boundary problems caused by dust storms. At the national level, key challenges, gaps and needs identified included risk and resilience building across the trans-border region related to agro-pastoral livelihoods, development patterns, policy implementation and landscape constraints; encroachment of deserts and its impact on the livelihoods of the people; lack of data for predicting climate change; and need for international cooperation on technology and education. The biggest challenge faced by Mongolia is the balancing development and climate change, especially between development and the nomadic population of herders in Mongolia. Hence the urgent need to develop adaptive methods that combine herding with other activities such as well-managed mining, local tourism, agriculture, and marketing. The need for the development of early warning systems, infrastructure development, facility development for agriculture, and local tourism development were also identified. The participants expressed the importance of a quick and accurate information delivery system for both local governance and local communities to enable effective decision-making and preparedness which would consider local variability in disaster preparedness and response.

Good practices from Mongolia include sedentary livestock production technology, country-level subsidy policies such as Sloping Land, agro farming and pasture herding.

Most of the participants who've attended the APAN capacity building workshops expressed a high likelihood of using the practical knowledge and training that they had acquired. One of the suggestions was for APAN to organise more events that provide knowledge exchange and technical assistance to facilitate cross learning from good practices in other parts of the Northeast Asia and other parts of the Asia Pacific region.

Pacific

The consultation meeting assessed the capacity gaps for adaptation in the Pacific Island countries, the resources needed to bridge the gaps, as well as identified major challenges for the sub-region.

The meeting provided a venue to exchange views and identified topics for future capacity building training workshops.

The identified capacity needs and knowledge gaps in the Pacific include the need to enhance capacity (human and institutional) to assess priority national plans and sectors that are vulnerable; improve knowledge on cost effective and culturally appropriate robust technologies to enhance communities resilience to climate related risks; and raise awareness on climate change issues, vulnerability and impacts at all levels. The capacity building training workshops identified the key stakeholders in the region; key national and regional priorities and the key actions; and areas of intervention and contribution of APAN to the sub- region.

Subsequent capacity building training workshops in the region were conducted based on the outcomes of the consultation meeting and capacity building training workshops.

Key CCA challenges, gaps and needs identified include: the need to utilise an open, transparent and highly-participatory process that engages the community in the exploration of options to reduce vulnerability which balances the needs and interests of different stakeholders. A strong need to enhance the countries capacity to access financial resources for climate change was also identified. Pacific Island countries also need to increase the skill and capacity in analysis and interpretation of climatic data on future projections essential for effective and appropriate implementation of actions. Other needs and priorities identified for future capacity building include the need for training on environmental impact assessment and incorporating climate into the environmental impact assessment process, as well as the need for an in-depth understanding of the M&E framework and process.

The capacity building training workshops have led to improved understanding of the priority needs and practices on CCA in the Pacific; and improved understanding and skills of the Pacific Island countries on climate finance- the type of financing available, individual donor policies and financing criteria, as well as monitoring, evaluation, and reporting requirements for donors. The capacity building workshops also familiarised the participants with the concept of climate risks, disaster risk reduction and strategy for disaster and climate development.

Good practices which emerged for the capacity building workshops highlighted key lessons learned in climate change initiatives at the national level. For example, community water tanks in Tuvalu.

Participants feedback from the capacity building training workshops indicate the relevance of the capacity building training workshops and the participants willingness to apply the learnings from the workshops. The 'Donor Pitch' simulation which was conducted as part of the training on climate finance, and the proposal development simulation exercise proved quite useful for the participants and was highly appreciated.

2.2 Thematic

Previous needs assessments and gap analysis conducted by APAN, as well as the consultation meeting organised in each of the sub- regions prior to the sub- regional capacity building workshops, helped identify the priority sectors for CCA. Priority sectors were identified based on those sectors the countries felt the need of urgent adaptation action. Though each sub- region had identified national and regional priority sectors requiring CCA, the three common sectors which emerged as the top priority sectors in the region as a whole were- water, mountains and agriculture. Based on the identified priorities, APAN has organised six capacity building capacity building workshops on the three themes- water, mountains and agriculture with the three thematic nodes of APAN- the Global Water Partnership South Asia (GWP SAS), International Centre for Integrated Mountain Development (ICIMOD) and Southeast Asia Regional Centre for Graduate Study and Research in Agriculture (SEARCA) since 2011.

Water

The capacity building training workshops assessed the training needs and gaps for adaptation and resilience building for CCA in the water sector. Success stories and good practices for developing water security (country specific examples) were also discussed at the capacity building workshops. Integrated approaches, utilisation of indigenous knowledge and modern technology and the importance of water cooperation are important topics requiring the region's attention in order to enable the framing of coherent policies and strategies in relation to integrated water resource management (IWRM) in the region. The importance of basin wide management and cooperation for effective and sustainable water resources management was emphasised as it allows solving cross boundary water issues. The capacity building training workshops also underlined the need to balance and make a decision on whether to scale up development activities or activities that are related to CCA in the implementation process. The capacity building training workshops emphasised the importance of participation of different stakeholders in the decision-making process in an equitable and inclusive manner.

Key challenges, gaps and needs include gaps in IWRM- water governance, community-based adaptation, sharing of data and information within the target audiences, methodologies and tools. The capacity building training workshops underlined the lack of information on climate impacts in some of the region's most vulnerable areas, which are climate change hotspots, and the lack of research and knowledge across a range of interconnected issues. Current adaptation policies need to address the issue of water quality which will be the major end point of the pressure applied by extreme weather events to water supply and sanitation systems.

As for the needs, there is a need for framing coherent policies and strategies in relation to IWRM in the region; the need for water cooperation to attain climate resiliency; capacity building on weather forecasting system, and Regional Corporation in space technology and early warning systems; and the need for adopting an inclusive approach. Though the post-disaster cooperation

is visible between countries in sub region's such as South Asia, the gaps in the pre-disaster phase needs to be addressed. Adaptive resilience strategies require an inter-disciplinary approach. One of the common challenges identified is water scarcity, hence the need to address the challenge at the regional level. What is required is a cohesive, robust generation of data and knowledge on the process of CCA, the need for formalised channels of information sharing centred specifically on CCA, which will be critical in building climate resiliency in the region.

The capacity building training workshops have showcased good practices on water security progress, indigenous knowledge and modern technology working towards resilience in the water sector; rain water harvesting to respond to forecasted water shortage in the region; drip irrigation; desalination; backyard gardening, to ensure food security; revitalisation of irrigation institutions for transformation of irrigation services; and the use of modern communication techniques such as mobile phones/ early warning messages which can reach a high percentage of the vulnerable communities regarding flood level data etc. to minimise impacts of floods/ typhoons.

Mountain

The capacity building training workshops assessed the capacity building needs and gaps for adaptation and resilience building for changing climate, in the contest of mountains. Effective communication approaches which can help support CCA policy and action in the Hindu Kush Himalayas along with approaches to strengthen science-policy-practice interface were emphasised. The capacity building workshops led to an improved understanding of evidence-based knowledge to improve actions for adaptation, various adaptation options, and highlighted the cross-border mountainous issues.

Some key challenges, gaps, needs and challenges were also identified in the capacity building training workshops. These include the gap between knowledge and practices on different issues related to CCA; and the importance of improving communication for local, national, and international engagement. Knowledge gaps in climate change particularly with regards to the science and adaption options continue to be a serious concern to policy makers constraining their ability to design effective policy action and programme to enhance adaptation. Lack of effective information and knowledge flow has emerged as a critical challenge to policy makers. There is also a lack of knowledge and information regarding the various adaptation practices being implemented by local communities, institutions, and individuals in the mountains.

Several needs were emphasised in the capacity building training workshops, including the need for simplified interpretation of scientific findings for policy makers and general public, and the need to build capacities of those who can simplify the scientific findings into easy to understand language in order to lead to better policy formulation. Similarly, channels for effective communication between scientists and policymakers through dialogue must be strengthened. As adaptation approaches can be implemented at the individual, community, national, and regional level, the capacity building workshops future underlined the need to share knowledge on practical on-the-ground options for climate change adaptation.

The capacity building training workshops showcased good practices and useful technologies, including adaptation practices on spring water recharge technologies and water treatment method; the use of rehabilitated ponds as source of recharge for ground water; the development of community based flood early warning system as an integrated system of tools and plans to detect and respond to flood emergencies; and the use of satellite imagery.

Feedback received from the participants in these capacity building training workshops was positive. Some expressed that the capacity building workshops were an important initial step to increase knowledge on adaptation issues in the mountain area. The participants also called for similar capacity building training workshops and suggested topics for the future events such as sharing of traditional knowledge and practices on adaptation, business incubation programs that support adaptation, capacity building training workshop of stakeholders from the region and discussion on upstream and downstream concerns on adaptation issues.

Agriculture

The capacity building training workshops assessed the needs and gaps for adaptation and resilience building. Good practices for building capacities for the agriculture sector were also discussed. The capacity building training workshops emphasised adaptation strategies for coping with the challenges in agriculture and food under the changing climate; enhanced knowledge of CCA financing options; and improved level of awareness on various facets of mainstreaming CCA, including approaches, entry points and challenges. The capacity building training workshops also highlighted the importance of integrating adaptation considerations into policy-making, budgeting and implementation at the national, sectoral, and sub-national levels, this integration would eventually lead to changes at the national climate change policy which can guide and synchronise action more effectively, reduce risks and vulnerabilities, and promote greater efficiency.

Some of the key challenges, gaps and needs identified in the capacity building training workshops include the need for climate finance alignment with country strategic priorities, the need to improve accountability to enhance climate finance effectiveness, and the need for collaboration and cooperation in climate policy among the countries as many impacts of climate change go beyond national borders. The necessity of knowledge sharing, particularly as many countries share common ecological attributes and coastlines, was expressed. The need for considering climate change impact on poverty and formulation of plans and policies which minimise adverse effects on the poor and the vulnerable was also emphasised. The need for stakeholder's involvement including local communities in the decisions making process such as formulating plans for CCA was highlighted.

Among the challenges and prospects discussed for mainstreaming CCA were communicating and coordinating it vertically and horizontally from national to sectoral to local levels, provision of wide and financial support, capacity strengthening, ensuring political will, engagement of

stakeholders, with due emphasis on the importance of robust and reliable research and development. A common challenge for capacity strengthening and climate financing emerged as countries such as Cambodia, Lao PDR, Myanmar, and Vietnam revealed varying extents of CCA and mitigation mainstreaming integrated with disaster risk management and green growth in national policy, strategy and action planning down to local levels.

The capacity building training workshops also showcased good practices, for instance, eco-town implementation approach, Philippine. Cambodia also identified best practices which can serve as models that others may adopt or adapt.

Feedback received from the participants in these capacity building training workshops indicated the usefulness of the content and its relevance to the work of the policy makers in the region. Many expressed their willingness to proactively promote mainstreaming of CCA in their respective countries. Some participants further suggested APAN to organise similar events which provide knowledge and promote exchange.

2.3 Capacity building training workshops co-organised with partner institutes

In addition to the capacity building training workshop organised by APAN nodes, two capacity building training workshops were co-organised in collaboration with capacity building programs that are being implemented in the Asia Pacific region by APAN's major partners in FY 2014:

- KEI- "The 6th International Symposium on Climate Change Adaptation" –

The symposium helped improve understanding and knowledge of the crucial sectors in adaptation including national efforts, information and finance; facilitated share information and experiences of past and current initiatives, and contributed to enhancing adaptive capacity of practitioners through sharing international and national good practices on climate change adaptation.

- ADB on "Climate Risk Management in Planning and Investment Projects"-

The capacity building training workshop provided the participants with a comprehensive training on climate risk management approaches, climate data utilisation for impact and vulnerability assessments, economic and technical analysis in adaptation assessment and planning, and financial architecture on climate change adaptation initiatives in partnership with the private sector. Case studies addressing climate change risks in some investment projects were also presented.

3. Conclusion

The capacity building training workshops which have been organised by APAN for the past five years have successfully identified the issues, priorities, challenges, gaps and needs of the region. The capacity building training workshops were able to address the needs and fill the gaps identified by the countries in the region. Though capacity building is an on-going process, the capacity building training workshops undertaken by APAN since 2010 have contributed to capacity building of government officials for more informed decision making in climate adaptation. They have provided a venue for cross learning and sharing and highlighted the importance of providing a platform to discuss issues of common concerns. The capacity building workshops highlighted the need for continuous capacity building, not only of the government officials but also other stakeholders in the region on different aspects of climate adaptation. The need for improved interface between science-policy and practice, and for tailor made solutions to meet the needs of the policy makers and other stakeholders was highlighted through the capacity building training workshops. In addition, new and emerging areas of concern, as well as areas requiring further training and capacity building needs in the region were identified. These include the needs for capacity building on technical aspects such as weather forecasting system, regional corporation and sharing of scientific knowledge, capacity building and strengthening the role of young professional and future leaders for CCA, and avenues to involve local communities in the decisions making process. Mainstreaming climate change in the development policy process and fostering 'cross sectorial integration' of climate change remain as major challenges which would need continuous capacity building and knowledge and experience sharing.

Appendix 1- APAN organised capacity building training workshops (FY 2010-2015)

S.No	Name of capacity building training workshop	Date	Venue
1.	First Capacity building training workshop Needs Assessment	31 January 2011	Bangkok, Thailand
2.	Second Capacity building training workshop Needs Assessment	11 March 2011	Bangkok, Thailand
3.	Capacity building training workshop Modules Design capacity training workshop	10-12 August 2011	Bangkok, Thailand
4.	Regional capacity building training workshop on cross-sectoral climate change adaptation planning	25-26 October 2011	Bangkok, Thailand
5.	Capacity building training workshop on-Evaluating the effectiveness of climate change adaptation practices in Central Asia	11-12 July 2012	Almaty, Kazakastan
6.	Capacity building training workshop on - Educational program on a semi-arid environment susceptible to climate change in Northeast Asia”	26 August- 2 September, 2012	Inner Mongolia, China
7.	Capacity building training workshop on-Climate Change Adaptation Planning” with support and assistance from SEARCA on 20-21 September, 2012, Kuala Lumpur, Malaysia.	20-21 September, 2012	Kuala Lumpur, Malaysia
8.	Capacity building training workshop on climate change and financing	25-26 October, 2012	Apia, Samoa
9.	Capacity building training workshop on Preparing National Adaptation Plans in South Asia	5-6 November 2012	Kathmandu, Nepal
10.	6th International capacity building training workshop on Remote Sensing and Environmental Innovations in Mongolia	10-11 June 2013	Ulaanbaatar, Mongolia
11.	Capacity building training workshop on - Adaptation to Climate Change through Climate Risk Reduction, Disaster Preparedness and Response in Central Asia	29-30 of July 2013	Dushanbe, Tajikistan
12.	Regional capacity building training workshop on Strengthening Capacity on M&E of Climate Change Adaptation Initiatives in SEA Region	13-14 August 2013	Manila, Philippines
13.	Capacity building training workshop on -	19- 20	New Delhi, India

	Options for an Innovative Climate Finance Regime for South Asia” on 19- 20 August 2013 in New Delhi, India	August 2013	
14.	Capacity building training workshop Needs and Gaps Assessment on Adaptation and Resilience to a Changing Climate in South Asia	4-5 September 2013	Kathmandu, Nepal
15.	Capacity building training workshop on-Supporting Climate Change Policy Action in the HKH region: Strengthening Communication Approaches for Science-Policy-Practice interfacing	3-4 December 2013	Kathmandu, Nepal
16.	Capacity building training workshop on-Building Capacities for Agricultural Competitiveness of Transition Countries in Southeast Asia: Mainstreaming Climate Change Adaptation in the Agriculture Sector towards Food Security in Transition Southeast Asia	6-7 February 2014	Phnom Penh, Cambodia
17.	Capacity building training workshop on-Monitoring & Evaluation and the Pacific Islands Framework for Action on Climate Change	10-12 February 2014	Apia, Samoa
18.	The 6th International Symposium on Climate Change Adaptation	8 July 2014	Incheon, Republic of Korea
19.	2nd Asia-Pacific Youth Forum and Capacity building training workshop 2014: Adaptation in the Mountains – Issues and Gaps beyond Boundaries	21-24 September 2014	Kathmandu, Nepal
20.	Capacity building training workshop on-Climate Change Adaptation for Sustainability and Poverty Reduction	13 November 2014	Manila, The Philippines
21.	Capacity building training workshop on- From Risk to Resilience: South Asia Regional Framework for Sustainable Water Management	15 January 2015	New Delhi, India
22.	Capacity building training workshop on-Climate Risk Management in Planning and Investment Projects	9-10 February 2015	Manila, The Philippines