



# Linking Disaster Risk Reduction, Climate Change Adaptation and Loss & Damage

*Activities under the APN Climate Adaptation Framework*

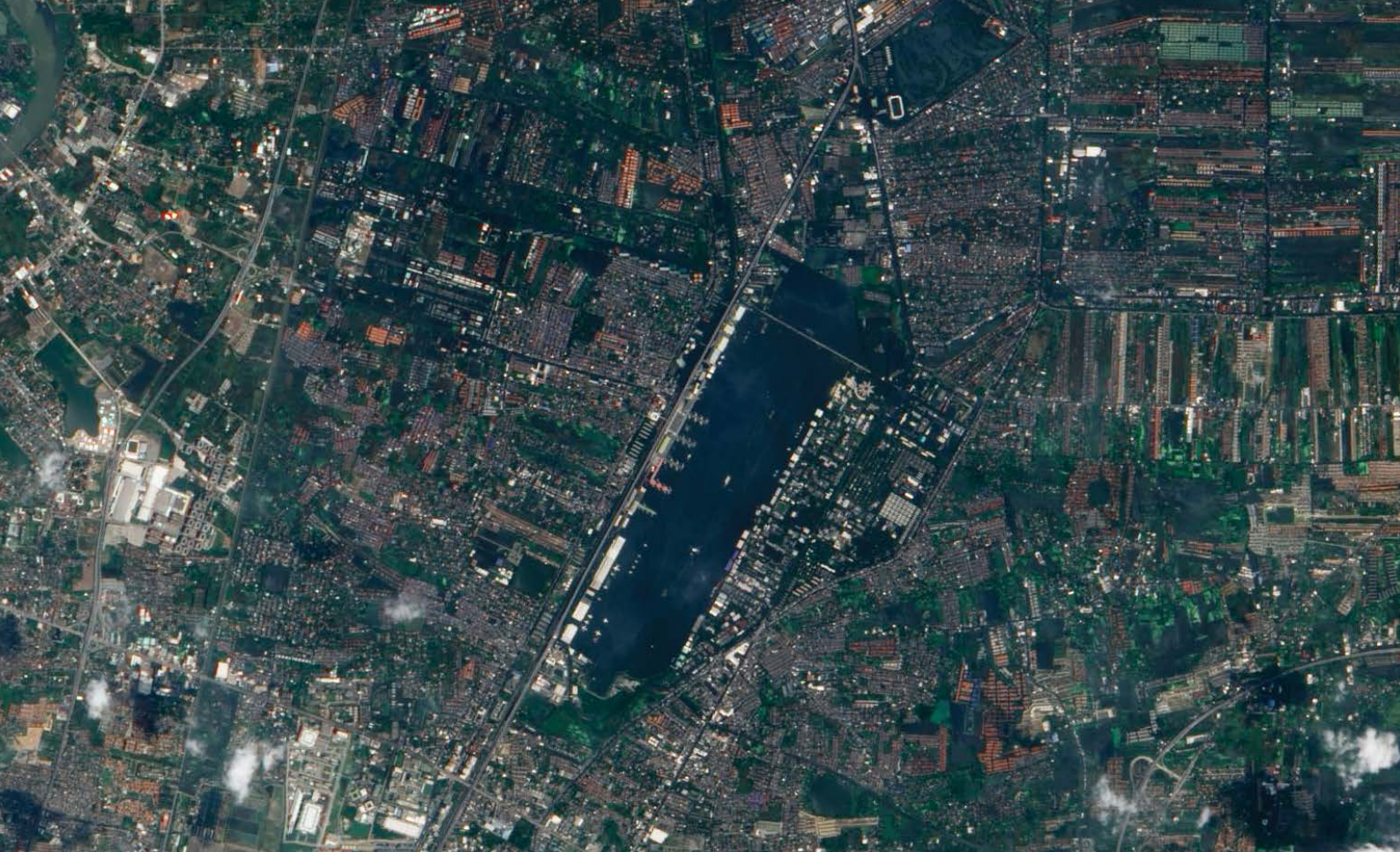


# A PARTNERSHIP APPROACH

towards Research and Capacity Development  
in Climate Change Adaptation

Climate change adaptation is receiving increasing attention, particularly among developing countries. The United Nations Framework Convention on Climate Change (UNFCCC), at their 17th Conference of Parties (COP17) in Durban, South Africa in 2011, reaffirmed the Cancun Adaptation Framework and decided on modalities and procedures for the Adaptation Committee. It is with this background that the APN 18th Inter-Governmental Meeting (April 2013) fully endorsed and launched its Climate Adaptation Framework (CAF) to enhance science-based adaptation activities of APN developing countries.

As part of the work under the Cancun Adaptation Framework, Parties established the Warsaw International Mechanism for Loss and Damage (L&D) associated with Climate Change Impacts at COP19 (November 2013) to consider approaches to address L&D associated with climate change impacts in countries particularly vulnerable to climate change.



▲ The Don Mueang Airport, a domestic airport in Thailand, stopped operations after the runways were flooded due to unusually heavy monsoon rains and a tropical cyclone (October 2011). Satellite image by NASA's Earth Observatory/Flickr (CC BY 2.0)

## WORKING DEFINITIONS OF “LOSS AND DAMAGE”

“Negative effects of climate variability and climate change that people have not been able to cope with or adapt to.”

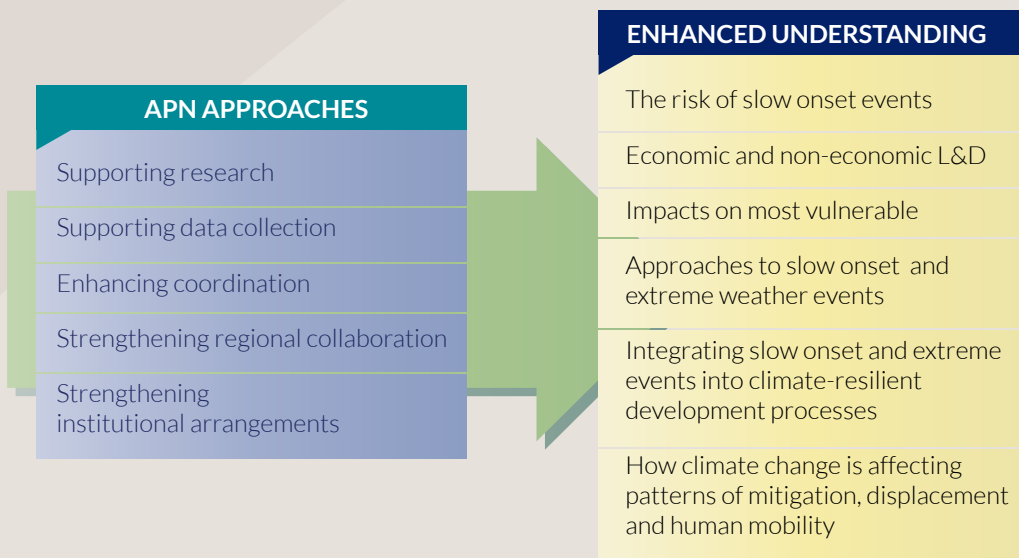
(Warner et al., 2012)

“Current or future negative impacts of climate change that will not be addressed by adaptation efforts.”

(Nishat et al., 2013)

“The residual costs, which are not avoided through adaptation and mitigation, and which can be further split into economic and non-economic losses.”

(UNFCCC, 2013)



# Assessing and Reducing Climate Change Risks across **Sectors & Timescales**

**T**he adverse effects of climate change will impact all sectors of economy, although the form and magnitude of the impacts will vary in different sectors and across geographic and temporal scales. In order to reduce climate change risk, a comprehensive application of existing tools is needed for estimating risk and the possible L&D associated with climate change.

In assessing climate change risk, it is important to take into account uncertainties, especially for slow onset events, as it is crucial to address the interests of different sectors.

## Climate Change Risk Assessment and Adaptation for L&D of Urban Transportation Infrastructure in Southeast Asia



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### Why?

Despite the general awareness of potential negative impacts of climate change on urban transportation infrastructure (UTI), there is a need to improve understanding of climate change-induced L&D as well as linkages between hazards, vulnerabilities and adaptive capacity, especially in Southeast Asia. For UTI, there is a lack of practical methods for estimating L&D associated with climate change. Findings from comprehensive climate change risk assessments will help decision makers translate climate change adaptation into more resilient UTI management, which requires new ways of thinking

and doing in the context of climate change adaptation.

### How?

A combination of participatory rural appraisal (PRA), impact matrix and multiple criteria analysis (MCA) will be applied in six selected cities (two each in Cambodia, Thailand and Viet Nam) for rapid assessments focusing on L&D of UTI associated with climate change. Based on the findings, vulnerability assessments at the community level will be undertaken in one of the selected cities in each country, using GIS-based modelling to estimate L&D for each type of UTI associated with main hazards.



▲ Cars stranded near Don Mueang Airport, Thailand, 24 October 2011. Photo by Cpl. Robert J. Maurer/U.S. Pacific Command/Flickr (CC BY-NC-ND 2.0)

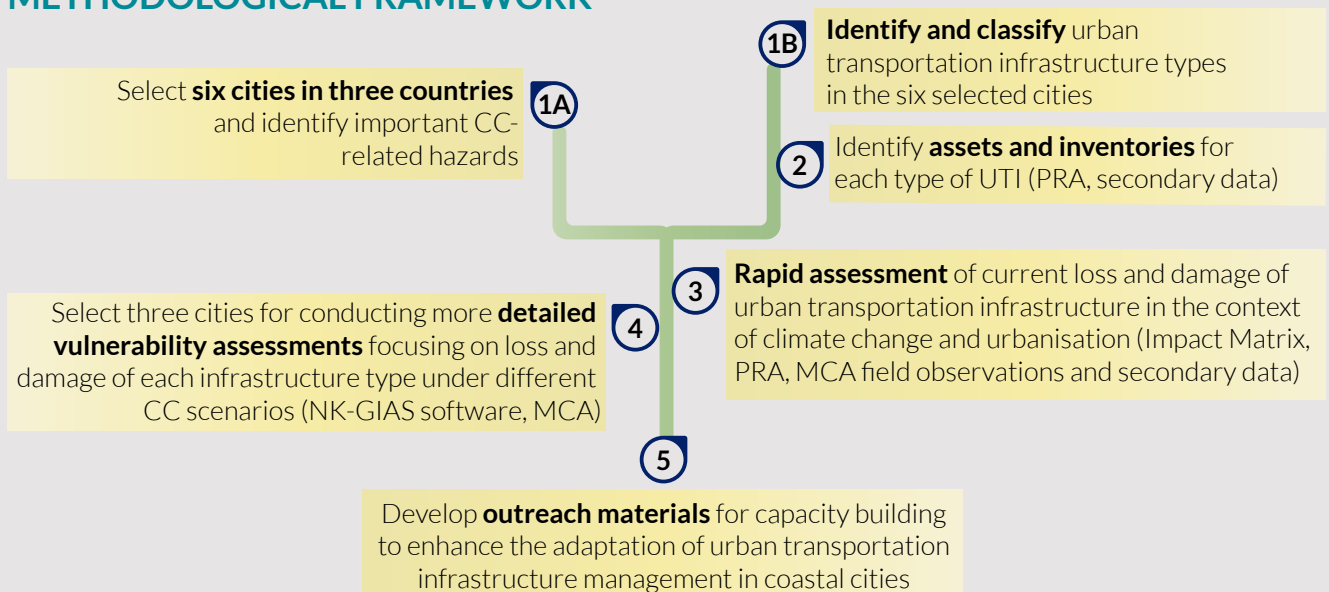
### Expected Outcomes

The project will facilitate sharing of climate change risk-related knowledge among stakeholders of UTI planning and management, while enhancing the understanding of decision makers on climate change adaptation. This is expected to

generate more long-term integration of adaptive measures/strategies into the urban transportation sector. Open-access data, peer-reviewed papers and outreach materials will be the main outputs, with briefing sessions held with decision makers

to disseminate findings and explore approaches for integrating the findings into policy and planning. 🌱

## METHODOLOGICAL FRAMEWORK



# Building Capacity for Reducing L&D Resulting from Slow and Rapid Onset Climatic Extremes through Risk Reduction and Proactive Adaptation within the Broader Context of Sustainable Development

planning using logical framework analysis and Atkisson's methodology to develop and implement interdisciplinary risk reduction projects.



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## Why?

Proactive anticipatory preparation and more robust recovery measures, in contrast to hasty reactionary relief and rehabilitation, are key to long term preparedness and resilience. Risk should be defined more inclusively to cover "rapid onset, high impact" events (floods, typhoons, etc.) and "slow onset, high impact" events (rising temperatures, degradation, drought, etc.) so that we can progress from events-based intervention strategies for disaster risk management (DRM) to process-

based. In this way, vulnerable communities can become active participants rather than passive victims.

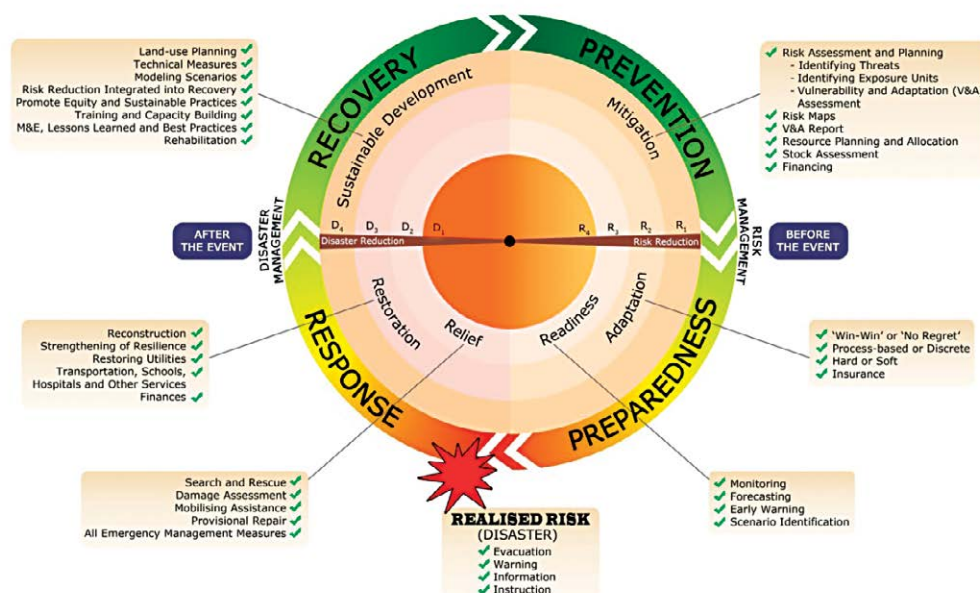
## How?

This project will conduct four in-country "learning labs" in Cambodia, Lao PDR, Malaysia and Viet Nam to consider process-based approaches by factoring in sustainable development considerations in the four major phases of DRM – prevention, preparedness, response and recovery. The three-day workshop will address all technicalities involved in the DRM cycle, explain the connection between DRM and sustainable development, train participants on the use of an easy-to-use risk assessment methodology, expose them to L&D assessment approaches, help prioritise adaptation options, and provide training on risk reduction

## Expected Outcomes

The primary outcome of the project will be a group of well-trained "climate scientists" who will have a clear understanding of the connection between CCA, DRR and L&D and their overall linkages to national development and, in particular, to the broader concept of sustainable development. There will also be a set of secondary outcomes in terms of increased regional ability to plan and implement climate adaptation projects, engage in international conferences where national interests need to be highlighted, train more local people, influence academic curricula at all levels, increase climate documentation and publications, and be leaders in CCA and DRM leading to reduced loss and damages. 🌱

## Disaster Risk Management for Sustainable Development





- ◀ A Mongolian herder uses a motorcycle to maintain an age-old tradition of horse herding. Photo by Chris Kealy/Flickr (CC BY-NC-SA 2.0)
- ▼ A massive multi-ton dump truck winds its way down the ramps into the depths of the Erdenet open-pit mine. Photo by Alex Yule/Flickr (CC BY-NC-SA 2.0)

## Can Traditional Livelihoods and Mining Coexist in a Changing Climate: Strengthening Public-Private Partnerships in Mongolia to Reduce Risk and Address L&D



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### Why?

With Mongolia's dependence on pastoralism, water availability and quality in an arid landscape is vital to the survival of rural communities. Both herding and mining—two of Mongolia's key economic sectors—bear the brunt of impacts of climatic changes in varied forms, despite having competing needs over access to land and water resources. To better manage climate risks and address L&D in affected rural communities, the two sectors need to build trust and partnerships, working in collaboration with multiple government agencies and civil society.

### How?

A series of workshops will be

undertaken in Mongolia that brainstorms key multi-stakeholder concerns, including current and potential risks from climate change, local stakeholder priorities and knowledge gaps; and take stock of current knowledge, resources and instruments.

### Expected Outcomes

The project will develop practical plans for implementation and partnership-building. It is expected that the workshops will:

- » share knowledge on climatic impacts on both sectors, traditional response mechanisms, existing awareness of disaster risk management strategies, and

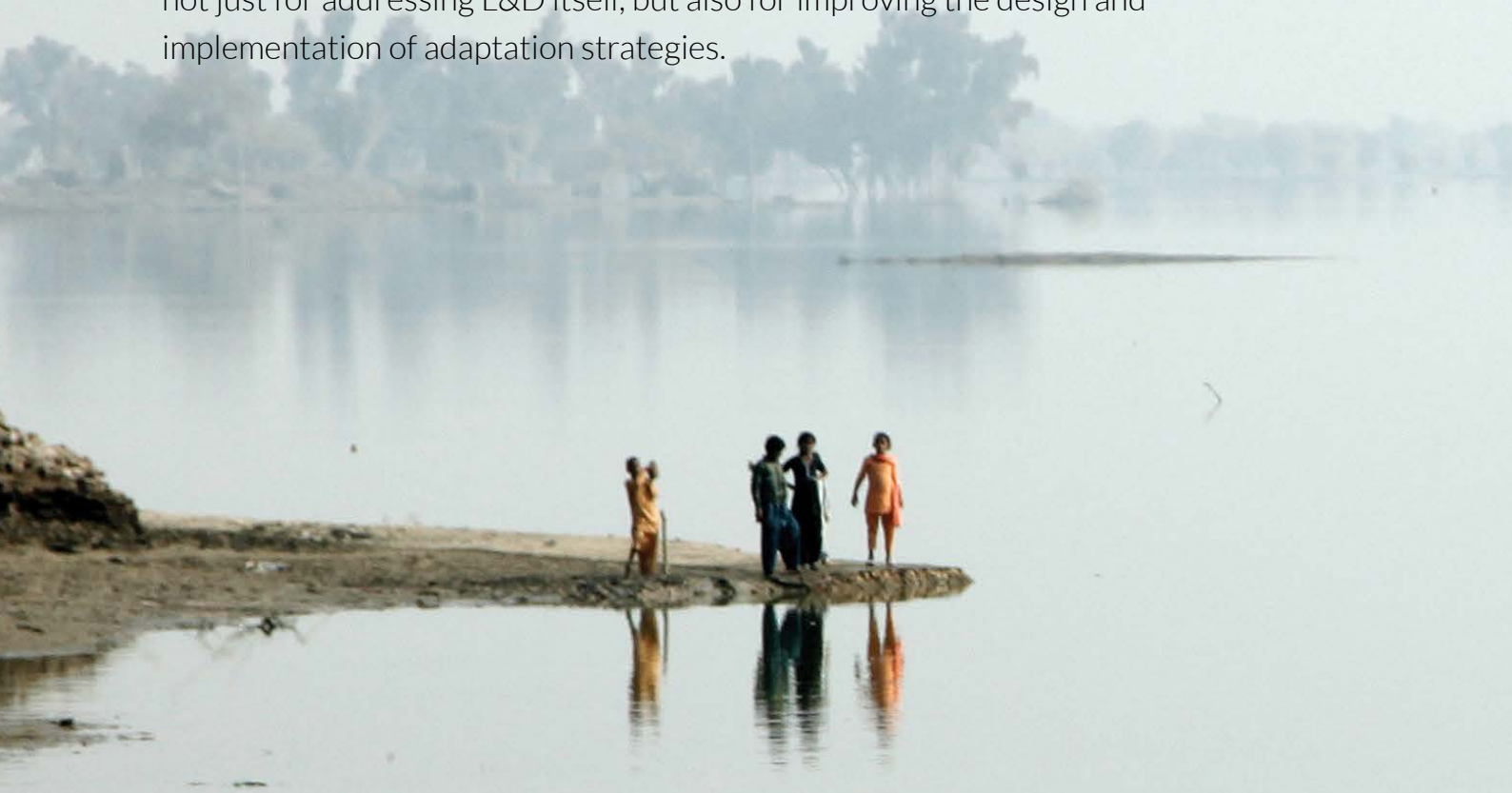
available institutional sources to address L&D;

- » identify key industry-specific enablers and impediments to climate risk management;
- » map existing capacities of private and public institutions to undertake disaster risk reduction;
- » identify opportunities for building synergies to address local climatic risks and prevent L&D where possible; and
- » undertake scenario mapping exercises to foster resilience within the two industries and inform national policy pathways on disaster risk reduction and management of L&D. 🌱



# Developing Tools for Assessing Economic & Non-economic Loss and Damage

Loss and damage (L&D) can be categorised into economic and non-economic losses. According to the Global Facility for Disaster Reduction and Recovery, economic losses are losses in the flows of the economy arising from the temporary absence of the damaged assets. Unlike economic losses, non-economic losses are not easy to value and not captured in assessments—thus, it can be said that the overall L&D is usually under-evaluated. Properly measuring L&D is imperative, not just for addressing L&D itself, but also for improving the design and implementation of adaptation strategies.



- ▲ On 7 December 2010, vast tracts of land in Pakistan's Sindh province are still submerged under water, six months on from the extreme monsoon rainfall that forced more than 20 million people from their homes. Photo by UK-DFID/Flickr (CC BY 2.0)



## Developing Climate Inclusive Potential L&D Assessment Methodology for Flood Hazards



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### Why?

Flood events have been more intense and frequent in most Asian countries in recent decades creating hardship for ecosystems and livelihoods. Estimation of L&D due to impending flood events is crucial to take proactive measures to minimise flood disaster risk through climate-smart disaster risk reduction (DRR) and climate change adaptation (CCA) interventions. For local government officials' better understanding, a

guidebook on mainstreaming climate-smart DRR and CCA practices for development and planning at the local level is needed.

### How?

The project will develop an econometric methodology for estimating economic L&D in the agricultural sector using climate change-induced flood risk assessment maps for pilot sites in Nepal, Sri Lanka and Thailand. The project intends to explore science-based DRR and CCA interventions. These include strengthening early warning systems; incorporating behavioural changes of farming communities to adopt changes in cropping calendars and crop varieties; as well as incorporating climate-smart technological packages. This initiative will build capacity via regional training workshops on climate-inclusive risk assessment for floods and L&D for crops due to impending flood hazards.

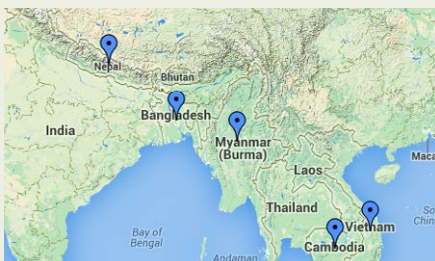
### Expected Outcomes

- » Improved methodology for risk assessment for flood hazards in consideration of climate change;
- » Improved methodology for estimation of L&D in the agriculture sector due to slow onset flood hazards; and
- » Improved science-based DRR and CCA interventions for minimising flood damage for agricultural crops. 🌿



▲ Community-based disaster risk reduction project collects data from women in Central Asia. Photo by Luke Bostian, Aga Khan Foundation/Flickr (CC BY-NC 2.0)

## Developing and Promoting a People-centred Approach to Assess and Address Impacts of Climate Change Induced L&D



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### Why?

L&D has emerged as a new challenge for scientists, policy makers, development professionals and the climate community. While several scientific studies are being conducted, there are not many examples of methodologies that blend scientific analysis and community-level participatory vulnerability assessment.

### How?

ActionAid, along with the Asian Disaster Reduction and Response Network (ADRRN) and Climate Action Network South Asia (CANSA), will implement a pilot research and capacity building project in five

countries, which aims to develop community-level assessments using participatory and scientific methodologies to integrate L&D perspective into existing resilience thinking, practice and policies. Specifically, the following activities will be implemented:

- » Mapping of and working with relevant institutions and agencies to develop assessment methodology;
- » Creating local forums for scientist-practitioner-community interface on DRR, CCA and L&D to jointly develop impact scenarios based on scientific temperature rise predictions;
- » Conducting local level assessments in seven villages in five countries covering various geo-climatic zones;
- » Developing case studies of the seven villages capturing various impact scenarios and possible approaches, including DRR and CCA to address L&D;
- » Publishing general methodology to assess L&D in different

impact scenarios and developing approaches to address it;

- » Implementing science-policy-practice interfaces with relevant stakeholders at national and local levels to disseminate general assessment methodology;
- » Organising two science-policy-practitioner regional capacity building workshops in South Asia and Southeast Asia; and
- » Disseminating policy-relevant findings at various international/regional forums.

### Expected Outcomes

The project targets to document methodology assessing L&D vis-à-vis different hazards and impact scenarios and develop a range of approaches to effectively link DRR, CCA and L&D, for practitioners and policy makers. The methodology will be published and shared in two capacity building workshops and at relevant international and regional meetings and conferences to enhance capacity of DRR and CCA networks across South Asia and Southeast Asia on comprehensive resilience approaches linking DRR, CCA and L&D. 🌱

# Integrated Flood Modelling and Pre-Disaster Loss Estimation in Asian Countries



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## Why?

Flood is one the most common and destructive disasters in developing countries in Asia and the Pacific. With the projected future climate change, damage due to floods is expected to increase. In countries mostly affected by flood, land use planning and disaster mitigation policies should be revisited and improved.

Essentially, an integrated flood analysis that looks into both the probabilities and impacts of flooding is needed. This project intends to test

the developed methodology on flood analysis combined with flood loss estimation in China and Thailand. The tested pre-disaster loss estimation model for floods will be modified appropriately and supplemented for Myanmar to develop the country's flood disaster risk management and prevention strategy, under future climate change.

## How?

The project will conduct a comprehensive study on flood analysis combined with flood loss estimation in Japan, China and Thailand. An existing GIS-based integrated model for flood loss estimation, which combines physically based distributed hydrological model and distributed flood loss estimation model developed in Japan, will be modified for other countries and study areas using their own flood information and damage categories.

The loss estimation model consists of three kinds of direct tangible flood damage: urban, rural and infrastructure damage. Through

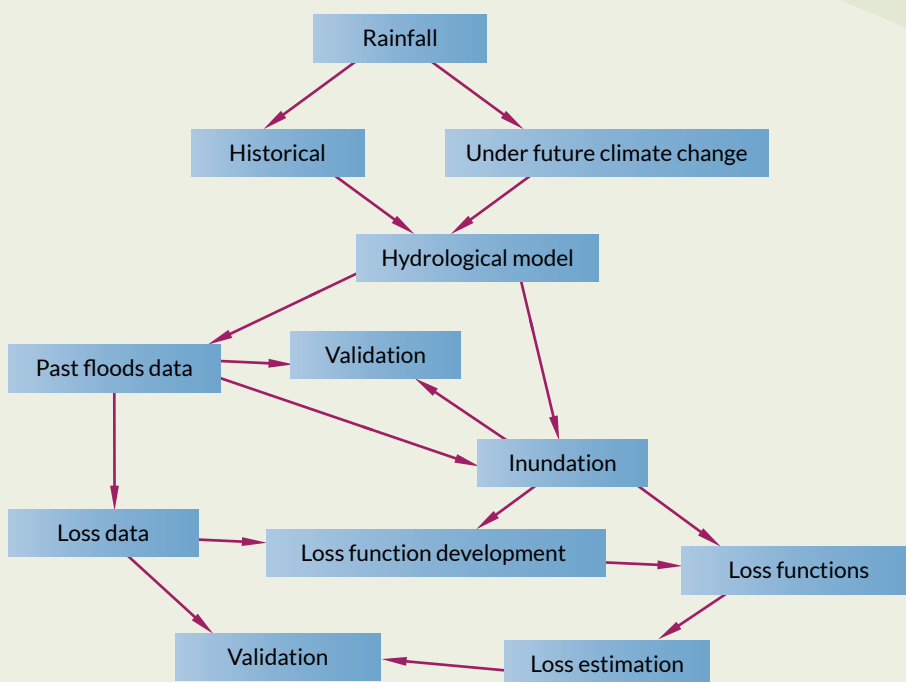
systematic flood loss data collection in the collaborating countries, the proposed flood loss estimation model will be applied to China and Thailand with the end goal of adapting and validating the model in different regions.

## Expected Outcomes

- » Suitably modified flood simulation and flood loss estimation model for Myanmar;
- » Database on historical flood losses and damage;
- » High resolution downscaled future climate scenarios, which would help sector-specific stakeholders to assess vulnerability and impacts of climate change;
- » Capacity building and training materials targeting flood forecasting, flood disaster management, finance mobilisation, land-use planning; and
- » Enhanced capacity of government officials to assess L&D of major flood events to take proactive measures to minimise disaster risk.



◀ Flow chart of the flood analysis and damage estimation process to be used by the project.



## Methods Toolbox for Assessing L&D at Local Level



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### Why?

L&D is already a significant consequence of inadequate mitigation efforts and limited capacity and funding for adaptation to climatic change. Policy makers, particularly in the most vulnerable countries, grapple with addressing current and future climate-related L&D. Urgent action is needed to prevent the adverse effects of climatic stressors on sustainable development pathways. To address L&D adequately, and make the right, evidence-based policy decisions, good assessments of L&D are needed first.

### How?

The proposed activity involves developing a methods toolbox for local-level assessment of L&D from climate-related stressors, including

sudden onset events and slow onset processes. Conceptually and methodologically, the proposed work on L&D combines CCA and DRR perspectives, as it looks into adaptation to slow onset climatic changes (including adaptation limits and constraints), as well as the risk-management strategies that people adopt to prevent or minimise disaster losses.

The project aims to build on experiences from the first ever multi-country study on L&D ([www.lossanddamage.net/empirical-research](http://www.lossanddamage.net/empirical-research)) from the perspective of affected people in least developed and other vulnerable countries in Bangladesh, Bhutan and Nepal.

Based on the experiences and lessons learned on strengths and weaknesses of the existing method, the project will design a methods toolbox for future assessments of L&D by researchers and organisations across the world and particularly in the Asia-Pacific region.

### Expected Outcomes

The developed toolkit will be tested by national researchers within the APN member countries. This will contribute to building the capacity of researchers in the region to assess L&D, while at the same time, yield high-quality research findings. 🌿

- ▼ The Island Peak in the Himalayas of eastern Nepal. Imja Tsho (foreground) has been identified as one of the fastest-growing lake in terms of water volume in the Himalayas. Photo by Matt Westoby/Flickr (CC BY-NC-ND 2.0)



# Addressing Non-Economic Losses and Damages Associated with Climate Change: Learning from Recent Past Extreme Climatic Events for Future Planning



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## Why?

Recent past climatic extreme events in countries such as Bangladesh (floods), India (droughts), Philippines and Japan (typhoons), and Thailand (urban floods) have brought non-economic L&D which were not fully assessed. For key policy makers and practitioners, it is important to highlight best practices and develop policies that mainstream guidelines addressing non-economic losses and damages. These should be coupled with improving understanding on the non-economic damages associated with extreme climatic events (rapid and slow onset), risk reduction and

transfer and pooling measures that include risk insurance, compensation and microfinance.

## How?

Focusing on non-economic L&D associated with climate change through case studies of recent past climatic extreme events in Bangladesh (floods), India (droughts), Philippines and Japan (typhoons), and Thailand (urban floods), the project will develop an analytical framework to assess intangible and non-economic impacts of extreme climate events experienced in selected countries in South and Southeast Asia. The following are the specific targets of the project:

- » Non-economic and intangible impacts are to be identified, prioritised and measured in a participatory manner through structured questionnaire surveys, focused group discussions and associated quantitative analytical techniques;
- » Expert consultation to prioritise pertinent technical, practical and policy issues will be undertaken; and

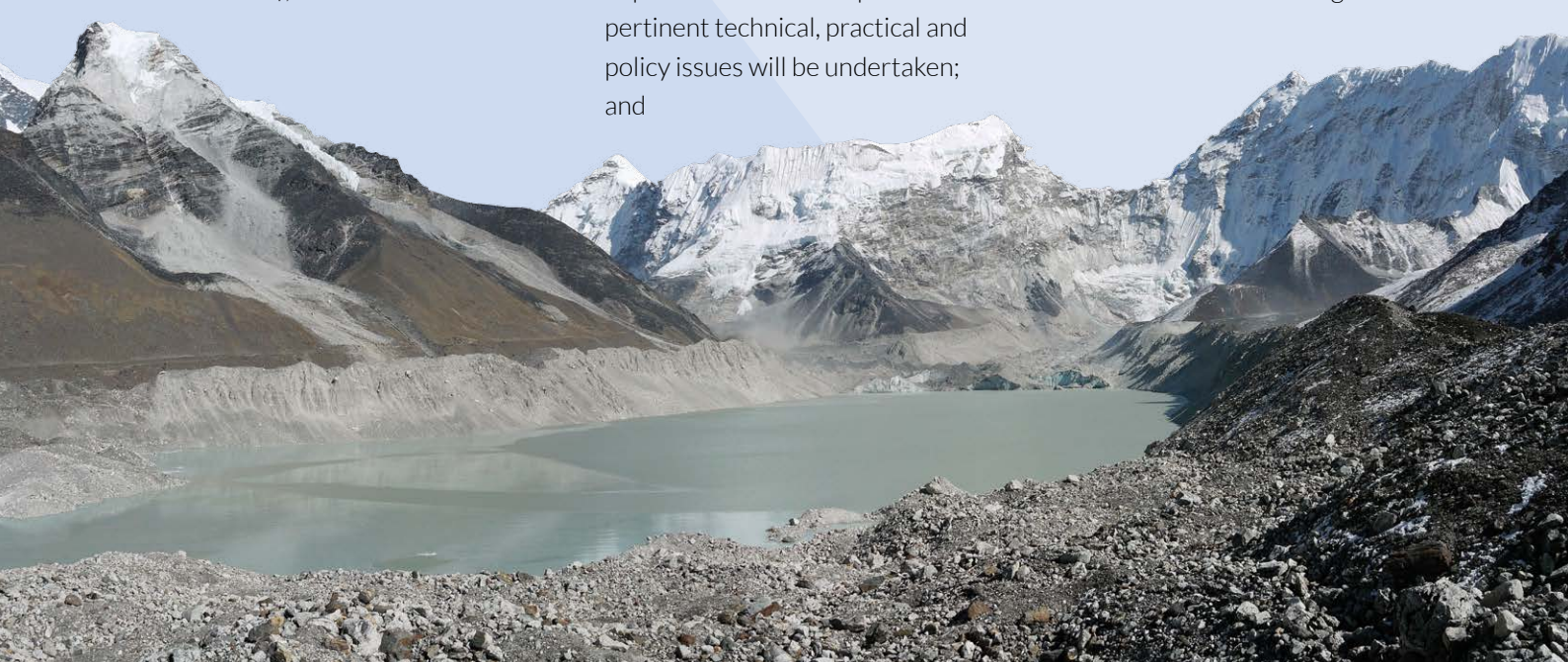
- » Comparative analysis of the “anxiety-productivity and income interrelationship approach” and damage indices approach to evaluate relevance to other natural disasters.

The project will also assess existing disaster risk reduction and climate change adaptation measures by:

- » Using financial instruments such as risk insurance and compensation mechanisms, identifying the extent to which non-economic damages be considered in designing these responses; and
- » Reviewing and preparing guidelines for strengthening adaptation and disaster risk reduction plans and policies at national and sub-national levels addressing non-economic damages.

## Expected Outcomes

The methodology developed for assessing the non-economic damages associated with extreme events and relevant case studies will help research, development and the policy community in developing climate change adaptation and disaster risk reduction solutions addressing non-economic losses and damages. 🌿



# Integrating CCA, DRR and L&D Reduction into Policy Development

There is a significant overlap of concepts and shared goals between disaster risk reduction (DRR) and climate change adaptation (CCA), especially in the context of L&D. As climate change brings a series of disaster and societal impacts to vulnerable countries and communities, it is also putting development at risk due to L&D. Thus, it is critical that adaptation to climate change and disaster risk management is integrated across sectors and scales. Simultaneously, partnerships between scientists, governments, communities and other stakeholders should be strengthened.

At present, the need to integrate adaptation to climate change into development planning is becoming increasingly urgent. However, there is a lack of understanding on climate change and disaster risk management issues and how these should be addressed strategically among policy and decision makers. In addition, there is uncertainty as to how strong the linkages are between national adaptation-related policies and local implementation, and thus, assessment of sustainability of efforts and approaches in the past is relevant.

## Integrating CCA, DRR and L&D to Address Emerging Challenges due to Slow Onset Processes



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### Why?

This initiative aims to leave a legacy of enhanced capability and collaboration

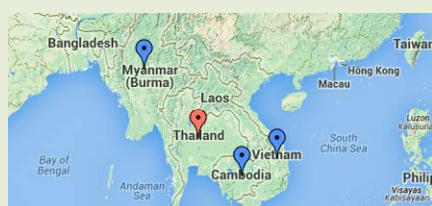
in multidisciplinary research that links CCA, DRR and L&D while providing positive outcomes relevant for all stakeholders. Prior to doing so, the need to identify characteristics, priorities and emerging issues related to slow onset processes such as sea level rise, salinisation, land degradation, drought and loss of biodiversity in low-lying coastal areas, floodplains and highlands that impacts the livelihood and well-

being of communities should be met. Assessing limits to adaptation based on the “best available science” and proposed integrated climate and DRR approaches is also necessary.

### How?

The project will establish methodologies to evaluate L&D (both economic and non-economic) associated with adverse impacts of climate change using the best available data, drawing on lessons from disaster risk management and discerning natural and anthropogenic

# An Analysis of Longer-term (5-10 years) Recovery Following Major Disasters in the Asia-Pacific Region: Lessons for Resilient Development



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## Why?

Early decisions and “L&D systems” have implications for longer-term (5-10 years) recovery. Each of these disasters has triggered a considerable global response in humanitarian aid and post-disaster relief and reconstruction. Key goals of post-disaster response and long-term recovery efforts include putting emphasis on environmental sustainability and strengthening the resilience of communities at risk to be able to cope with and adapt to a range of future environmental changes and risks. While these are

laudable objectives, it is important to check if these goals are kept and followed through over a longer time period. This project intends to answer whether the existing L&D systems enable or hamper longer-term recovery efforts. It also aims to identify pathways through which resilience can be built long-term by conducting critical analysis of the recovery process in five selected case studies of disasters that occurred in the Asia-Pacific region in the last ten years.

## How?

Five selected cases representing a range of hazard types (flood, tropical cyclone, earthquake, tsunami) and characterising a diverse quality of recovery will be investigated. These include the 2008 Cyclone Nargis (Myanmar), the 2011 Bangkok floods (Thailand), the 2001 Mekong Delta Floods (Viet Nam and Cambodia), and the 2004 Indian Ocean Tsunami

(Indonesia). The two-year project will employ a qualitative research approach consisting of a literature review and document analysis, case study research, interviews with key researchers and actors in each case study, and an expert synthesis workshop. Some quantitative analysis of development and recovery indicators in secondary datasets will also be undertaken if appropriate data can be found.

## Expected Outcomes

Expected outputs will be a high impact short paper targeted at decision makers in the region and a high impact research paper in publications such as Science, Nature Climate Change, and Proceedings of the National Academies of Sciences (PNAS) or Global Environmental Change. In addition, progress and key insights arising from the project will be communicated regularly through the Sustainable Mekong Research Network (SUMERNET) and the Asia Pacific Adaptation Network (APAN).



causes of climate change. In order to recommend policy and planning strategies that integrates DRR, CCA and L&D into development plans taking into account inherent governance systems and regional arrangements, the following activities will be implemented:

- » Meta-analysis of peer-reviewed research to identify the state of science (biophysical, social and economic and non-economic valuation) and policy;
- » Participatory appraisals to identify and rank local-level hazards and

processes;

- » Questionnaire surveys and interviews to supplement information for evaluating L&D
- » Comparative studies through local-level pilots in selected countries to develop and test approaches; and
- » Dialogues between researchers and policy makers of multi-disciplinary backgrounds on effective options to address and integrate DRR, CCA and L&D in development plans.

## Expected Outcomes

- » Harmonised L&D terminology and well-developed methodology for replication;
- » Informed stakeholders to scale up new risk-based approaches;
- » Routine interaction of multidisciplinary researchers; and
- » Practical case studies. 

## Assessing the Linkages between CCA, DRR and L&D: Case Studies in the Floodplains of Cambodia, Indonesia, Philippines, Thailand and Viet Nam



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### Why?

Major low-lying coastal cities in Southeast Asia suffer significant L&D from climate-related disaster events, particularly flooding. Without well-established systems in assessing economic L&D, all sectors, particularly the agriculture sector, will face increased challenges as projected climate changes are expected to worsen the impacts of climate-related disasters. By reviewing existing frameworks for assessing L&D due to climate-related disasters and identifying emerging issues, gaps and opportunities, the project aims to develop a robust framework that integrates CCA, DRR and L&D to address gaps and improve existing systems related to research and capacity development. This project will also recommend R&D and policy agenda to ensure communities' and ecosystem resilience.

- ▶ Entire fields would have been ready for harvest, but flood brought by Typhoon Ketsana damaged several hectares of rice fields in Laguna, Philippines, September 2009. Photo by IIRRI/Flickr (CC BY-NC-SA 2.0)

### How?

- » A workshop to discuss and identify priorities, issues and concerns, develop framework of analysis per country, and identify relevant stakeholders;
- » Review of related literature, focus group discussions and key informant interviews will be conducted;
- » Identify emerging issues, gaps and opportunities in linking CCA, DRR and L&D;
- » Develop CCA, DRR and L&D framework to serve as a guide for country and regional implementation;
- » Hold a Science-Policy Forum to recommend R&D and a policy agenda; and

- » Formulate Lecture Series, Publications and IEC materials to disseminate the outcomes of the information generated from the project.

### Expected Outcomes

Expected outputs include: (1) workshop report; (2) synthesis papers; (3) country assessment and analysis; (4) country and regional frameworks; (5) network of experts; (6) policy recommendations; (7) publications and IEC materials via online platforms, media (TV and print), and series of lectures. Results will be shared and sustained beyond the period of the project. Network of experts will be expected to continue even after project completion. Policy recommendations and framework are expected to contribute in furthering the national to global discussion on L&D. 🌿





## Enhancing Capacity of Policy Makers and Practitioners in India, Sri Lanka and Nepal on L&D Related to Slow Onset Events in the Region



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### Why?

South Asia is highly vulnerable to climate change impacts, including slow onset events: Sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinisation, land and forest degradation, loss of biodiversity and desertification; all of which are described as slow onset

events. The region, in which the population and economy are highly dependent on natural resources and climate sensitive sectors, is already witnessing the loss of livelihood, reduction in agricultural productivity, negative health impacts and displacement. Though various stakeholders are engaged actively in adaptation work and its integration into development policies, understanding on slow onset events causing L&D to various sectors is limited among stakeholders. The proposed project is aimed at diagnosing the extent to which the problem persists in areas and what approaches can be developed that link existing work in relation to DRR, CCA and development policies and practices.

### How?

Due to the impacts already visible on key sectors that support the livelihoods of a large population in South Asia, the project targets to build the capacity of local stakeholders in three countries (Nepal, India and Sri Lanka) and mobilise scientists, policy makers and practitioners to comprehensively assess the impact of slow onset events and prepare a wide-ranging response. Furthermore, the project will help raise awareness on L&D caused by slow onset events to people and ecosystems, and sensitise, engage and build capacity of stakeholders, particularly policy makers and practitioners to develop appropriate solutions.

### Expected Outcomes

- » Background notes on slow onset events for various stakeholders specific to three chosen countries with institutional capacity and gaps in the policy framework in relation to DRR, CCA and L&D;
- » Collated information in the form of modules to build capacity on integrating L&D perspective, especially slow onset events, in DRR, CCA and development strategies;
- » Identified stakeholders involved in research and community-based practices with regard to DRR, CCA and L&D;
- » Outcomes of the project shared with 50 organisations in the three collaborating countries through national and regional consultations; and
- » Scaled-up programme on L&D through enhanced capacity and informed policy-making processes.



## Capacity Building for Resilience Planning in Fiji: Bridging the Science-Policy-Practice Interface in CCA, DRR and L&D



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### Why?

Prevention of L&D may be impossible in the face of threats that are both hard to predict and difficult to manage. A more realistic aim, therefore, is to adopt proactive pre-event and post-disaster DRR and use capacity building actions to be resilient and adapt to the “new normal” through resilience planning, which encompasses a wide array of technical and social strategies, engaging both formal and informal mechanisms of intervention, and informed by expert, local and indigenous knowledge. Despite offering huge potential, however, there is little focused attention on how to build resilience planning capacity, and virtually no focus on this in small island states despite its obvious strategic and practical merits.

### How?

- » Institutional buy-in, needs assessment and programme design: Raising awareness and securing institutional buy-in from both formal and informal role-players;
- » Capacity building: Training and

capacity building will be tailored to meet the needs of different institutions and stakeholders and communities; and

- » Review and dissemination of findings: A series of best practice recommendations for resilience planning will be developed and disseminated to all participants and relevant institutions.

### Expected Outcomes

This project will build capacity in Fiji to better understand and integrate CCA, DRR and L&D within resilience planning. A partnership between specialists from Fiji and New Zealand will raise awareness and strengthen capabilities in resilience planning taking into account distinctive Fijian cultural, environmental and governance features. Building on related initiatives in Fiji and developing and applying insights from resilience planning in New Zealand and Europe, it will identify opportunities to institutionalise best practices and create a regional resilience planning network to disseminate findings beyond the case study area to help bridge the science-policy-practice interface. 🌱



## Capacity Building for National, Provincial Stakeholders and Remote Communities on L&D Related to Disaster Risk Reduction and Climate Change Adaptation



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### Why?

Viet Nam recently suffers a significant increase in climate extremes with complicated occurrences of typhoons, floods and other extreme events. Although Viet Nam has been active in implementing Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) initiatives at all levels, L&D still occurs and severely affects vulnerable communities, especially remote communities. Recognising the risk of dealing with unavoidable L&D, the Office of the National Climate Change Committee (NCCC) leads a series of capacity building activities, including

a workshop at the national level, three training courses at provincial level and three training courses at the district and community levels.

### How?

- » Formation of expert group to review current policies and develop workshop and training plans and materials based on an in-depth assessment of current understanding and capacity in implementing DRR and CCA activities into policy-making and practice at the ground level; and
- » Field trips to collect reliable data.

### Expected Outcomes

- » Established comprehensive linkage between national agencies and local communities on developing and implementing activities in response to immediate impacts of disasters; and
- » Ensured and sustainable foundation of knowledge and knowledge transfer to effectively reduce long-term impacts of climate change. 🌿

▲ Typhoon Haiyan approaching the Philippines (13:00 UTC 11/7/2013). Image by NASA/Flickr (CC BY 2.0)

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**Linking Disaster Risk Reduction, Climate Change Adaptation and Loss and Damage:  
Activities under the APN Climate Adaptation Framework**

For more information about the APN Climate Adaptation Framework, visit [www.apn-gcr.org](http://www.apn-gcr.org).

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