Cities on Climate Change Initiative (CCCI-Asia and the Pacific) – Creating Climate Change Champions for STEWARDS: Training of Trainers

March 8-11, 2010

Local Government Academy Training Center, Los Baños, Laguna

DAILY HIGHLIGHTS

Day 1
March 8, 2010

Opening Preliminaries

After the prayer and singing of the Philippine National Anthem, Mr. Leovigildo Resol started with the introduction of participants. He summarized the breakdown of participants per country. 20 participants were members of the Cities on Climate Change Initiative (CCCI), present countries were Samoa, Indonesia, Fiji, Vanuatu, China, Sri Lanka, Vietnam, Papua New Guinea and Mongolia. There were four (4) participants from LOGOTRI – Asia Pacific Network - Bangladesh, Indonesia, Bhutan and India. Participants from the LOGOTRI-Phil Net and the Department of the Interior and Local Government were also introduced. The Training Management Team from UN HABITAT and the Local Government Academy were also acknowledged. He then called on LGA Executive Director Marivel C. Sacendoncillo to give her message.

Messages

Dir. Marivel C. Sacendoncillo
Executive Director, LGA

Ms. Sacendoncillo welcomed the participants to the Philippines and expressed that it is an honor for the Philippines to host this International activity. She expressed that this undertaking is very timely since the Philippines have recently passed the Climate Change Act, a law that provides for the implementation of climate

change initiatives in the country. She expressed the significance of the LGA Training Center as an institution in playing a significant role in training community development workers; enhancing the capacity of both local and national governments to address the challenges that are faced by the country; and now, training champions on a valuable undertaking in Climate Change.

Climate change has taken its toll especially on archipelagic countries such as the Philippines. The urgency of this phenomenon serves as a challenge as this program aims to inspire us in moving our own institutions to address issues on climate change. Collaboration among various stakeholders with the government taking the lead role in climate change adaptation is needed to address this challenge.

Finally, she thanked the UN HABITAT for giving the Local Government Academy an opportunity to host this Training of Champions for Climate Change. In conclusion, she wished everyone a fruitful and enjoyable stay in the Training Center.

Ms. Eden P. Garde
Programme Manager, UN-HABITAT

Ms. Eden Garde, the Program Manager of UN HABITAT started her message by welcoming the participants to the Philippines. She then explained that UN HABITAT has been operating in the country for the past seven (7) years and has been supporting the government and other Civil Society Organizations (CSOs) through technical assistance in addressing good urban governance and shelter issues. Their program on Localizing the MDGs allowed them to deal directly with cities in developing their capacities in mainstreaming the MDG goals in their development plans, programs and budget.

The current work on climate change is a progression from their previous activity which allowed them to re-examine and strengthen schemes and approaches in view of the changing climate. For a year now, UN HABITAT has been implementing the United Nations (UN) joint program on climate change in Sorsogon which aims to demonstrate climate change resilient human settlements in a coastal setting.

She said that the Philippines is lucky to be the only pilot country in Asia of the UN HABITAT Citizen Climate Change initiative, which further strengthen their work in Sorsogon City through capacity development of the city, tools development, knowledge sharing and network building which allows the possibility to elevate our advocacies on the national level.

Since climate change is a new term, there is a pressing need to explain it fully to the Local Chief Executives and to the community. We need to train more believers and champions who have the technical skills, heart, passion, interest and readiness to help the cities and communities in understanding climate change and in preparing their action plans that will be mainstreamed in the Comprehensive City Development Plan to create viable action plans for climate change adaptation.

She congratulated the Local Government Academy for successfully organizing the activity. She ended her message by saying that she looks forward to sharing the results of the UN HABITAT's Climate Change initiative with Sorsogon City through this Training.

Program Overview
Bernhard Barth
Associate Human Settlements Officer
UN-HABITAT

Mr. Bernard Barth gave the participants an Overview of the 4-day Training-Workshop. He began with the statement of the training objectives to target specific groups (LGA and LOGOTRI-Phil partners; Local Government Training Institutes; and City and National Government representatives and their Climate Change partners [CCCI countries]. The training intends to share experiences on climate change related training, test curricula, test tools and support development of tailored / country specific and in-depth courses; and share CCCI experiences, familiarization with tools, to develop country-specific work plans. After explaining the objectives thoroughly, he introduced the topics to be discussed on each day and the methodologies that the workshop will use to be able to attain the objectives.

Session 1a: Introducing Climate Change to Local Governments (Bernhard Barth)

Mr. Bernhard Barth began Session 1: Introducing Climate Change to Local Government by explaining the challenges that are being faced by the world such as rapid urbanization which is manifested in the rapid growth of slums. He then proceeded with explaining what human settlements mean in the perspective of the UN HABITAT and how climate change affects the issue of urbanization as it is taking its toll on us, as depicted by urban influx and the attribution of poverty to urbanization. Other key facts on current challenges that are being faced by local governments such as waste and pollution were also presented.

The fundamentals of climate change were explained in the presentation. Climate change is triggered as greenhouse gases from various emissions are trapped in the atmosphere. He also mentioned the sectors contributing to greenhouse gases emissions such as energy supply, industry, forestry, agriculture, transport, residential and commercial buildings and waste and waste water. Greenhouse gases are prevalent especially in cities where various industries are situated. Surprisingly, sectors such as agriculture and forestry also contribute to greenhouse gas emissions.

The impact of global warming has been felt evidenced by an increase in the world temperature since the beginning of the Industrial Revolution.

Scenarios were shown to reflect what things to expect as climate change affects the world in the long run. Change in the amount of rainfall, sea-level rise, tropical cyclones, flooding, drought and bigger variation in weather and temperature are expected especially in countries like the Philippines.

In view of the fact that urbanization affects climate change, resulting in impacts to cities, ecosystems and livelihoods and that the severest burden is born by urban poor in slums and most of the local initiatives are often disconnected from national action plans, there is a need to enhance climate change mitigation and adaptation capacity of cities in developing & least developed countries.

The participants were led to a workshop. Each of them was given a sheet of paper containing either a mitigation or adaptation strategy, activities and other various programs for climate change. Definitions of mitigation and adaptation were posted at the board; the participants were tasked to choose whether the mechanism on their sheet of paper is considered a mitigation or adaptation strategy or both. Mr. Barth took rounds on each table, asking each participant to classify their answers.

Their output was as follows:

Mitigation and Adaptation Mechanisms

Mitigation: To avoid the unmanageable; reducing GHG emissions		
Adaptation: To manage the unavailable; preparing for Climate Change		
Mitigation Mechanism	**Adaptation Mechanism**	**Adaptation and Mitigation Mechanism**
• Upgrading of slums • Phase out plastic shopping bag • Improve road, bridges infrastructure (to avoid disruptions during natural disasters) • Convert from 2-stroke to 4-stroke engines • Urban agriculture • Improve public transport • Introduce congestion charge (to reduce private transport in city centre) • Tax reductions (including reduced permit fees, etc.) for Green Buildings (Rated) • Provide tax breaks for retro-fitting of buildings	• Develop currently marginally land (highlands) • Forest clearance (to prevent forest trees) community fire response • Prepare for increasing number of rural migrants • Family planning • Sun smart strategy (hats and sunscreen to prevent sun burn) • Introduce an integrated waste management strategy (3Rs) • Sea walls/dykes • Evaluation maps, plans and drills • Building regulations to increase urban density • Improve building standards • Promote typhoon resilient houses	• Conduct climate change assessment • Hazard mapping • Supporting social networks • Supporting building back quick (store and provide building materials, tools, etc.) • Increasing urban green spaces (parks, trees in streets, green roofs, etc.) • Measures to reduce urban sprawl • Development (improvement of) Disaster Risk Management Plans • Review of Land Use Plan (integrating Disaster Risk Reduction) • Promotion of green jobs • Mangrove rehabilitation • Promotion of non-

	• Improve emergency services • Hardening of urban infrastructure (climate proofing) • Upgrading storm water drainage • Introduce climate change education in schools • Elevate the land (e.g. in Bangladesh, sand from river estuary dredged and used to elevate land for new settlements) • Resettlements of communities living in flood prone areas • Promote houses on stilts (e.g., through revised building regulations)	motorized transport • Enforce building standards • Greening of slopes • Poverty alleviation measures • Passive cooling for houses • Introduce water meters (and appropriate water pricing policies)

After the workshop, Mr. Barth continued his discussion on the impact of climate change and the role of the local governments in climate change adaptation and mitigation. Some of the mitigation mechanisms that were mentioned are the following:

- Better urban planning (reduced sprawl)
- Green Building
- Sustainable Transport
- Integrated Energy Planning
- Waste to Energy
- Renewable Energy Technology

He also discussed the policy advocacy of Cities in Climate Change Initiative (CCCI) which is on the global, regional and national levels. On the global level, CCCI work in partnership with many organizations to ensure that the global climate change negotiations address the challenge brought about by climate change.

On the national and local levels, CCCI engage with partners to assess how governance impacts climate change on the following areas:

- Decentralization and Autonomy: urban climate change resilience is more easily built where national, state and city levels can work together quickly and effectively; national governments with sound climate strategies.
- Transparency and Accountability: maintaining a relationship of accountability to citizens and openness in financial management in key climate sectors such as urban planning, water and waste.
- Responsiveness and Flexibility: an interagency cross-government body dedicated to tackle the potential and actual impact of climate change based on scenarios is desirable.
- Participation and Inclusion: involve marginalized groups in decision making and monitoring of adaptation plans; people-centered early warning systems.

Climate resilience must be a product of balanced citizen-led processes with timely and efficient multi-level implementation.

The following were the issues and questions that emerged during the discussion:

Issues/Questions	Resolutions/Answers
Confusing terminology of disaster risk mitigation as a means of climate change adaptation	
Surface level understanding of activities and programs on climate change	
While doing an adaptation measure, we don't really mitigate. I think it's important for us to start thinking whenever its possible, to do adaptation measure while thinking of measures to do mitigation otherwise we might mix all those measures and don't really fix issues.	Clustering mitigation and adaptation becomes less useful as we advance in addressing the issues of climate change. Every adaptation measure must include environmental/GHG impact assessment.
Climate Change mitigation and adaptation entails resources. The Philippines has already incurred loans from foreign	Climate change adaptation is really expensive, though the cost was not reflected in the presentation. If we look at various

financial institutions, does this mean that we have to borrow again?	mitigation and adaptation strategies, many of them cost little. There are many local ways of adaptation, the adaptation strategy depends on what school of adaptation you are coming from. Adaptation is also about poverty reduction. There are many areas of adaptation where national and local governments can venture.
Why do we use the clustering of mitigation and adaptation strategies than talk about comprehensive climate change responses?	Climate change in the international policy arena was primarily treated a scientific issue, reduction of GHG, then an assessment report came out, wherein adaptation eventually became a key agenda. 4 key pillars: mitigation, adaptation: coping the change, technology transfer – support mitigation and adaptation and lastly, financing. Mutual subsidiarity and funding even the Copenhagen was not passed remains a challenge.
Are there any plans on Climate Change for highly mountainous cities like Nepal and Bhutan? Why is there an emphasis on tropical and coastal areas?	As we start this initiative, we were looking for real commitment of cities and mayors and it's there where people really feel the impact of climate change already. We've actually looked into a number of countries and cities not necessarily belonging to either coastline or tropical country category and in the future, we would also look into other countries but in the mean time, our focus is on these countries.
What do contributors *(developed countries)* of GHG emissions do in terms of mitigation and adaptation on climate change? Why don't we collectively put pressure on the major contributors of GHG emissions (China and USA) to address the issues of	Adaptation needs are higher in developing countries but there are countries in the north who invest very heavily on adaptation. Netherlands, for example would be case in point. When you look at the history of adaptation strategies of cities in the north, they also went through the same

climate change?	process of adapting to climate change. There are countries who contribute relatively small to emissions therefore it doesn't make sense that they invest in mitigation strategies.

Session 1b: Climate Change and Local Government Training – entry points for Climate Change specific training (debate in 3 groups)

Getting LGTIs to Understand City Government Training Needs to Address Climate Change Impacts

For this session the participants were divided into three (3) groups to undergo different workshops regarding the climate change training needs of the local governments. The group breakdown are as follows:

(a) CCCI
(b) LOGOTRI Asia Pacific (LGTI)
(c) Phil-Net, DILG / LGA

(a) Cities on Climate Change Initiative (CCCI)

Having known the different issues that comes with climate change, the group was tasked to assess how these issues can affect their cities and communities. After assessing the situation, they were tasked to define prioritize the key city climate change issues or the Climate Change Response and Management Areas that need training support. They wrote their answers on the meta cards provided to them.

The training support needs were further classified according to the following categories:

a) Training that is information and awareness-raising based
b) Training that helps map issues and impacts
c) Training that is technically specialized
d) Training that strengthens coordination and participation
e) Training to strengthen specialized technical responses (other Departments)
f) Others

Their output was as follows:

Getting LGTIs to Understand City Government Training Needs to Address Climate Change Impacts

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d) Training that strengthens coordination and participation
e) Training to strengthen specialized technical responses (other Departments)
f) Others

Country	(a)	(b)	(c)	(d)	(e)	(f)
Samoa	Issues: • More intense rainfall • More intense cyclones • Sea level rise	• Information needed on more intense rainfall	• Technical capacity building (ex. GIS, Mapping tools) • Planning-urban areas • Flooding in city areas • Sea-walls/buildings (infrastructure)	• Awareness/ education • Capacity building/ technical • Preparedness • Collaboration • Strengthening collaboration between government and stakeholders	• Specialized personnel skills on policy making/planning/project management • Construction standards and regulations • Capacity building gaps - Lack of technical	• Stronger D12 management • Technical upgrading of skills/ management of health/sanitation issues shelters recovery and reconstruction after disasters

				• Preparedness regarding sea-level rising • Disseminating information coordination and participation of all individuals from government to community and individual families	skilled personnel - Financial constraints - Disaster responses (at all levels) and preparedness	
Indonesia	• Flood • Draught • Information and awareness training		• Flood and draught training (technical) • Warning system • Evacuation during flood • Provision of clean water during drought	• Training on strengthening coordination and participation		

Vietnam	• Information awareness raising on threats of climate change to citizens	Land use planning/mapping hazards climate change impacts	• Planning • Assessment /monitoring methods -Vulnerability assessment - Risks assessment - Impacts assessment - Indicator observation	• Governance (institutional strengthening)		
Mongolia	• Awareness on whole systems and processes with object oriented approaches		Waste management (households in slum areas)	• Management method and tools for integration and coordination - Inter-sectoral activities - Multidisciplinary team • Collaboration and partnership	• Heat wave attack on health • Flood • Drought • Local area planning	• Fund raising mechanisms

				development tools • Facilitate city stakeholders including community		
Vanuatu	• Awareness on climate change and DRR - Mayors/councilors - Planners				• specialized training on climate change and cities/town planning planners	• financial mechanisms and management - accountants - finance officers • policy formulation and institutional set-up - CEOs - Town clerks - administrators
Sri Lanka	• Climate change priority issues - Sea level rise	• Awareness for elected members on	• Capacity building training	• Sea level rise and flooding-training for		

	- More intense rainfall - More intense cyclones - Urban heating *(awareness training for all)* • Awareness program on climate change issues for selected members • Should be able to make decision on climate change response actions proposed by technical staff • Obtaining funds from government and donor	climate change issues • Capacity building training programs on adaptation and mitigation for officers and technical staff – use knowledge and skills to integrate climate change • Vulnerability assessment	program on mitigation and adaptation - Health department-epidemics - Engineers-infrastructure - Urban planners – design plans and regulations (technical specialized training)	coordination and participation (Adaptation Training)		

	agencies					
Fiji	• More intense cyclones • More intense rainfall • Sea-level rise (ground waste salt intrusion)	• Sea level rise • Land use development	• Natural disaster management and preparedness • Hazard mapping	• Natural disaster management and preparedness • Sea-level rise (foreshore areas) • Emergency drills for communities	• Flood (awareness and preparedness) • Solid waste management (at community level) • drought	• policy training and awareness and implementation
Papua New Guinea	• Awareness of these areas is very vital - National level - Provincial level - Local level/ government level	• Specialized training on GIS mapping of impact areas - Universities - Implementing agencies	• Strengthen capacity building in land use planning and supporting policies		• Specialized training in infrastructure developments - Water and sewerage - Waste management (collection and disposal) - Building design	

(b) LOGOTRI Asia Pacific (LGTI)

The objective of the workshop is to understand how LGTIs approach climate change training at present and how they see it addressed in the future. They were tasked to select a Chairperson that will facilitate the discussion and rapporteur to report the output to the plenary. The members of the group were asked to describe the mechanisms of their training institutes that they represent in addressing climate change at present. Part of the workshop is the crafting of a 3-day Training Program for City Officials (mayors, councilors, city managers, etc.) in their respective countries on Climate Change. For discussion purposes, the group was divided into two (2).

As expected, each participant gave an overview on how they are doing their trainings in their respective institutions.

In Indonesia, trainings on climate change are not yet localized. Learning dialogues were conducted in 2 cities (Bandalama and Samara) to develop awareness, understanding and familiarity with climate change issues. The conduct of vulnerability assessment is hard because of the absence of policy in Indonesia with regards the integration of Climate Change on local development plans because the efforts are more on climate change adaptation.

The Society for Development Studies in India have not conducted any program for officials; most of the initiatives were more on adaptation on small pilot projects to demonstrate to LGUs how climate change issues can be addressed. Solid Waste Management (SWM) project was implemented and it yielded to zero-waste management. This SWM project has been taken over by the community. Some of the major problems in India are the informal settlers that were extracting the soil; air pollution in a city near Delhi; high deforestation; and fossil fuels coming out. SDS designed a pilot project to address the issues; however they are still in the process of designing a module since they have to train city managers to adapt to city plans. 2-3 trainings on SWM and how to make solid waste efficient, studies and research were conducted and LGU officials were trained using the researches. Training workshops on how to manage the city specifically on urban governance were conducted for foreign officials. They also ran seminars and workshops on the information dissemination on how to cope with Climate Change. India has an existing National Adaptation Policy Action on Climate Change which includes the conduct of series of workshops and discussions to increase awareness on Climate Change.

As for the 3-day proposed Training Program for City Officials, the following is the group's output:

Title of the Training: Making Cities Resilient in Climate Change
Issues to be Addressed: Transportation, Solid Waste Management and Land Use
Participants: City Officials, Planners and Managers
Training Objectives • To increase awareness and knowledge of city officials, planners and managers on climate change • To come up with a policy and action plan focusing on the three issues (finance on implementing the action plan? It can be at the city level action plan, need not be exhaustive in resources)
Modules: • Transport • Solid Waste Management • Land Use Plan *(How can land use plan serve as mitigation strategy in Climate Change?)* • Resource Mobilization

(c) LOGOTRI-PhilNet and DILG

Ms. Pamela Oppus, Climate Change Consultant of the Local Government Academy facilitated the workshop. She briefly explained the mechanics of the workshop and introduced the Executive Director of the Academy who will be presenting the proposed DILG Capacity Development Framework for Local Government Units for Climate Change Adaptation. The proposed framework was a result of various consultations with key actors that plays a significant role in addressing climate change issues in the country such as the DILG Regional Offices, National Government Agencies, Non-Government Organizations, Private Sectors, Academe and other stakeholders.

Under Section 15 of Republic Act No. 7279, the role of the Department of the Interior and Local Government (DILG) and the Local Government Academy (LGA) is to facilitate the development and provision of a training program for LGUs on climate change. The training program shall include socioeconomic, geophysical, policy, and other contents necessary to address the prevailing and forecasted conditions and risks of particular LGUs. It shall likewise focus on women and children, especially in the rural areas, since they are the most vulnerable group on this.

Director Sacendoncillo emphasizes that the framework will be delivered through three (3) major strategies anchored by the Local Governance Resource Center of the Department. These are the following:

1. Knowledge Management through Local Governance Resource Center
    - **Multimedia and knowledge information**
        - Repository and channel of communication and information
        - Sharing of books, publications, exemplary and replicate practices, audio & video materials and other knowledge products
        - Provides access to: LGRC website, Integrated Library System & Local Governance Performance Management System
    - **Capacity Development Program**
        - Venue to deliver or facilitate the delivery of quality, strategic and responsive capacity development for promoting and understanding replication of exemplary practices through Go-FAR

- ∗ Provide support to local development planning. Activities include: content development and technical assistance

- **Linkage Program**
  - ∗ Brokers link between LGUs and other local governance stakeholders and programs
  - ∗ Allow access to CD resources e.g. Network of LRIs, Pool of experts and coaches, NGAs, NGOs and the Private sector
- **Public Education on Good Governance & Development, Citizenship Program**
  - ∗ Promote good local governance practices and innovations
  - ∗ Knowledge sharing and exchange through conferences, round table discussions and forums on exemplary practices, tools and processes, policy issues and governance needs
  - ∗ Partnerships with media for public education.

2. Financing Climate Options

3. Performance Audit, Monitoring and Evaluation LGU Adaptation Plans

Why promote the Local Governance Resource Centers (LGRCs)?

- To promote a culture of learning and knowledge-sharing in pursuit of sustainable development through excellence in local governance.
- To support DILG in its role as enabler for capacity development for LGUs.

Right after the discussion, Ms. Oppus asked the participants regarding the extent on how their institutions address the issue on climate change in their respective locality. Responses are shown below:

Climate Change Mainstreaming Strategies of Philippine Universities—Civil Society Track

- Researches of students (e.g., biofuels, biodiversity)
- Integration of climate change in curriculum for basic, masteral and doctorate programs
- University as member of a network of climate change advocates (e.g., Ateneo de Davao, ECAP)
- Students encouraged to initiate CC fora as part of the requirements for the course
- Pilot projects on waste reduction
- Databanking within the university's policy center

Climate Change Mainstreaming for Local Governments

- DILG Regional Officers have attended training programs on CDP/CLUP and will share learnings in orientation programs for local executives (e.g., NEO)
- DILG field officers are working with municipal mayors in identifying vulnerable areas (e.g., coastal areas in Tabena
- DILG orientation for Philippine Councilor's League

Challenge for the LogoTri-PhilNET

- How to make the network a functional learning/KM network where members/training institutions/trainers could make tools accessible to more universities and DILG field staff

The table below contains the issue/ question that emerged after the presentation of the workshop outputs during the plenary session:

Issues/Questions	Resolutions/Answers
Is there a gap between the local governments and the training institute?	Papua New Guinea: In Papua New Guinea, there is a very big gap between the training institutions especially the university and the municipal authority. Hopefully after the training that would be bridged and the relationship will continue from there. Mr. Barth: I think there are two gaps. The universities with the technical knowledge are in most cases not the training providers for local governments so there is an institutional and knowledge gap. Most Local Government Training Institution are completely under resourced. They can only provide some of the most basic management training and basic training for local governments.

Session 2: Climate Change and Sustainable Urban Development (Bernhard Barth)

Workshop: Mainstreaming Climate Change in existing LG training/responses

For this workshop, the participants were asked to choose one sector from among the eight (8) sectoral working groups on which they would want to be assigned. The following are the sectoral groups:

- Gender and Governance
- Disaster Risk Reduction
- Slum Upgrading
- Transportation
- Coastal Zone Management
- Leadership Training
- Water and Sanitation
- Solid Waste

Mr. Barth gave a brief explanation on each sectoral group. He discussed some adaptation and mitigation measures for each sector. Following the discussion, he explained the flow of the workshop. Each group was tasked to develop a half-day training module integrating climate change either into an existing sectoral training that might take place or a training that is related to the identified sectors. They were given a Session Plan template to work on which they have to fill out with details such as the name of the session; objective of the session; activities and their detailed description if necessary; time allocation per activity learning outcomes; responsible individual/institution; and resources needed.

The following were the outputs of the workshop:

Session Plan

Name of Training: DRR in the context of CC: Basic training for local planners and community leaders of Mongolia, Philippines and Vietnam

Name of Session: Climate Change and Sustainable Urban Development

Objectives of Session: Understand opportunities that training on urban sustainability

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
9.00-9.15	15 minutes	Video Presentation Q and A	Basic Concepts and principles, issues and approaches on DRR and Climate Change	Facilitator Participants	Video Player/Projector and Video document
9.15-9.45	30 Minutes	Identification of Issues/problems/ Challenges related to CC and DRR	Issues identified Hazard, Vulnerability Risk and Challenges	Facilitator and Participants	Meta card, pencil, pen, scotch tape, easel sheet
9.45-10.45	1 hour	Break-Out session	Analysis of the Issues and Ideas for suggested solutions and recommendations	Participants	Meta card, pencil pen, scotch tape, easel sheet
10.45-11.15	30 minutes	Tea break			Food and drinks
11.15 – 11.40	25	Presentation of outputs	Synthesis of Ideas, recommendations,	Facilitators, participants	LCD projector, computer

			suggested solutions		
11.40 – 12.00	20	Conclusions	Additional input from trainers, technical experts	Experts,	LCD projector, computer

Session Plan

Name of Training: Gender, Local Government and Climate Change

Name of Session: Climate Change and Sustainable Urban Development

Objectives of Session: Understand opportunities that training on urban sustainability

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
9.00am	15mins	Session 1: Intro – What is the gender dimension of Climate Change?			
	45mins	Session 2: Case Study – Typoon Season in Catanduanes Province			
	15mins	Group Feedback			
	20mins	Session 3: Plenary on how to integrate gender into climate policies and programs			
		How can policies on climate issues such as *emergency shelters, epidemic/outbreak of water borne diseases, water & sanitation, rehabilitation programs for farmers* incorporate gender analysis/awareness?			

	30mins	Session 4: Group Work – Barriers & Strategies to implement gender & climate policies & programs			
	15mins	Group Feedback			
	10mins	Session 5: Wrap up			
Total	2.5hrs				

Session Plan

Name of Training: Training on the Impacts of Climate Change on Water and Sanitation

Name of Session: Climate Change and Sustainable Urban Development

Objectives of Session: Understand opportunities that training on urban sustainability

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
	5	Introduction: Identify impacts of climate change on water and sanitation	Knowledge of water and sanitation problems caused by CC	• Facilitator • Participants	• PPT presentation • Papers and colored pens • Whiteboard
	10	Presentation of data and case studies – water and sanitation problems associated with climate change	Knowledge of existing data on water & sanitation problems	Facilitator	PPT presentation
	20	Identification of existing programs /initiatives to address water and sanitation problems due to climate change	Knowledge of existing programs/ initiatives	Participants	Papers and pens

	20	CC adaptation and mitigation measures for water and sanitation programs and improve it	Knowledge of options	• Facilitator • Participants	• Papers and colored pens • Whiteboard
	30	Stakeholder's analysis	Identification of roles	Participants	• Papers and pens • Whiteboard
	5	Presentation of Matrix as implementation and monitoring	Plans for CCA	Facilitator	• Matrix • PPT presentation

Session Plan

Name of Training: Slum Upgrading

Name of Session: Slum Upgrading

Objectives of Session: Improvement of Slums and squatter settlement through upgrading of their living condition

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?

		• Giving and understanding the LG that slums are resources, not burden
		• Improvement of the economy of slum by the efforts of the LG.
		• Relocation of slums of they are in vulnerable places due to climate change
		• Improvement of environmental infrastructure in slum areas
		• Slums to be recognized as an interrelated part of city system, economically, socially and physically (and also environmentally)
			• LG officials to appreciate squatter slums as resource base
			  ○ All the activities should be in place
			• Improve socio-economic well being
			  ○ Economic
			  ○ Social
			  ○ Cultural
			  ○ Environmental
			• Reducing socio-economic disparity
			• Inclusive society
				LG officials, councilors, functionaries, NGOs and also community leaders	• Resources
					• Trained people to train LG
					• Foundation for training
					• Network development

Session Plan

Name of Training: COASTAL ZONE MANAGEMENT

Name of Session: Introduction to Climate Change Impact to Coastal Zone

Objectives of Session: a) Present the current situation of their coastal zone; and b) Identify mitigation and adaptation measures applicable to their locality

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
9:00 – 9:30	30 min	WORKSHOP 1 – Presentation of the Current Situation of the Coastal Zone 1. What is the present situation of your coastal area? 2. What are the ordinances/resolutions/measures passed relative to coastal zone management? 3. How important is the coastal zone to you?	➢ Present the current local situation ➢ Identify the local ordinances/resolutions/measures passed ➢ Express the value they put on the coastal zone	Grouping: 1- Executive Group 2- Legislative group	Flip chart, pentel pens Manila papers, pictures LCDs, laptop
9:30-10:00	30min	Plenary Presentation (by group)	Group presentation	Group rapporteur	
10:00-10:15	15 min	COFFEE BREAK			
10:15-11:15	60 min	INPUT: Introduction to Climate Change and its impact on Coastal zone	➢ Understanding of the current and future impact of CC on	Resource Person	Laptop,LCD, Videos &

			coastal zone ➢ Examples of possible mitigation and adaptation measures		pictures
11:15 – 11:45	30 min	WORKSHOP 2 – Localized Mitigation and Adaptation Measures for Coastal Zone	➢ Identification of mitigation and adaptation options application to the community or locality	Same as WS 1	Action plan template (per group)
11:45-12:15	30 mins	Plenary presentation of Group Action Plan	Group Action Plan	Group rapporteur	

Session Plan

Name of Training: Solid Waste Management (SWM)

Name of Session: Climate Change and Sustainable Development

Objectives of Session: To develop a training program guidelines for SWM

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
	10min	Introduction of SWM 1. Definition of SWM 2. Types of Solid Waste • Domestic Waste • Construction Waste • Industrial Waste • Biomedical Waste • Electronic Waste • Hazardous Waste • Non-Biodegradable Waste	Discuss the concept and type of solid waste	Resource Person	Projector & its associated facilities, PPT program

	10min	Existing SW Disposal Mechanisms	Identification of existing SW Disposal Methods	Technical Person (SWM Division)	Images, Table listing the disposal methods and where it is practiced as examples
	10min	Collection of SW 1. Household Level to Collection Point 2. Collection Point to Final Disposal	Discuss the various methods of collecting solid waste	Resource Person	Images
	30min	Effects of Inappropriate SW Disposal • Water – groundwater contamination, water quality pollution and ecological impacts. • Air – Emission of GHG's through landfill, open burning, odor issues	Identify and intensify the adverse effects of inappropriate SW Disposal and its relation to Climate Change	Environmental Impact Resource	Video, Images, PPT

		• Land – land degradation affecting agricultural activities, land use, etc • Visual impacts • Social & Health Impacts • Economic Impacts – tourism, agriculture, high operation costs of managing SW issues, etc			
	30min	Addressing SW through Adaptation & Mitigation: **1. <u>Adaptation</u>** • Sorting of SW prior to final disposal at HH level • Raising Community Awareness • Environmental	Identify practical adaptation & mitigation mechanisms to address SWM and its associated effects in exacerbating Climate Change effects	Resource person	Images, examples, PPT, game to role play the role of LG and City Stakeholders in compliance monitoring

		Law enforcement • Compliance monitoring • LG to implement SW policies directly targeting industries (particularly those that produce a significant amount of SW) **2. <u>Mitigation</u>** • Sanitary Landfill Sites with collection of methane gas • Implement 3R concept • Composting in aerobic conditions			

Session Plan

Name of Training: Leadership Training

Name of Session: Redefining the Leadership Roles of Mayors in Dealing the Challenges of Climate Change

Objectives of Session: Increase awareness of mayors to motivate mayors to deliver their leadership role to address climate change

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
	5	Introduction	Knowledge about the session	Facilitator	Sound system
	15	Video presentation of the adverse effects of CC	Motivation and mind-setting of participants	Facilitator	LCD, computer Video documentary
	60	Discussion/Brainstorming _ Open questions to mayors _ Groupings - Consolidation - Group Report	Identification of the roles of mayor on their respective leadership roles to solve the challenges of C.C.	Participants	Meta cards, fliup charts, pens, adhesive tapes
	10	Consolidation/Synthesis	Summary	Facilitator	
	5	Introduction	Knowledge about the session	Facilitator	Sound system
	15	Video presentation of the adverse effects of CC	Motivation and mind-setting of participants	Facilitator	LCD, computer Video documentary

Session Plan

Name of Training: Local Government Officials in charge for Transport Sector

Name of Session: Contribution of Transport to GHG

Objectives of Session: To enhance knowledge on the impact of transport in GHG

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
	20	Transportation and its contribution to CC	Understanding magnitude and urgency of the current situation		PPT
	15	Tools and methods to measure GHG in from transport	Understanding knowledge of tools and methods		PPT, discussion
	20	Adaptation to avoid impact of GHG in transport context	Understanding of adaptation in context of transport		PPT group discussion
	20	Mitigation of GHG from transport	Understanding mitigation in context of transport		PPT, video, group discussion

	15	Best practices in adaptation and mitigation in transport	Knowledge sharing for replication		Group discussions, video documentation

Session 3: Climate Change Training – Experiences of LGTI

Session 3 is a plenary discussion and sharing of tools and experiences on climate change adaptation and mitigation of the different Local Government Training Institutions.

Climate Change Initiatives of the Local Government Academy- Philippines

Mr. Leovigildo Resol discussed the three (3) interrelated courses that were designed and implemented by the Local Government Academy in response to climate change. The three courses are the following:

1. Governance on Climate Change: A Challenge for Local Governments
2. Training on Social Transformation through Environmental Program (STEP) for Effective Waste Management
3. Governance on Water Sanitation (GO WATSAN) for Local Government Units

Governance on Climate Change: A Challenge for Local Governments introduced the participants to the science of climate change, climate change impacts, response to climate change and issues and challenges for LGUs. As an output of the training, participating LGUs were required to prepare their local action plan as their contribution to the global effort to mitigate the adverse effect of climate change.

Training on Social Transformation through Environmental Program (STEP) for Effective Waste Management capacitated the participant with new and effective ways to address the problem in solid waste management. The training focuses on the governance side of SWM, Special attention is also given to topics such as: effective communication, change in attitude and participatory approaches that can make the solid waste management program effective.

Governance on Water Sanitation (GO WATSAN) for Local Government Units is designed to provide participants with a better understanding on the pressing issues on water and sanitation and its impact on health, education, environment and

climate change. The participants of this training were required to prepare their strategic plans for an effective Water and Sanitation program in their locality.

He also shared some strategies used by the Academy in implementing said climate change programs. He also mentioned that the newly enacted law on climate change bestows the responsibility to the Department of the Interior and Local Government (DILG) and the Local Government Academy (LGA) to develop capacity building programs and other training activities on climate change for local governments. Towards the end of his presentation, he said that the Academy is on the process of developing the Training Framework for Climate Change Adaptation for the LGUs to be facilitated by the DILG.

CCCI/UN HABITAT

Mr. Barth enumerated the different initiatives of CCCI on tools development. They have divided it into four categories, namely: advocacy; user series; issues series; and scaling up.

Under the advocacy category are the Handbook for Mayors in partnership with the World Bank and UNEP; the Global Report on Human Settlements (2011) which will be the ultimate documentation on climate change and human settlements.

The development of tools for urban planners is on the user series category. They are also developing a Climate Change Leadership Tool; Documentation of Good Practices on city experiences on climate change; and vulnerability and assessment tools.

On the issues series, the following issues were included: Clean Development Mechanisms tool for Local Governments; making carbon finance work for the cities; measuring the carbon footprint of cities; GHG inventory; sustainable construction focusing on low income housing; and insurance tool.

In scaling up the tool development, UN HABITAT is looking into university partnership through an online facility that will be called Cities in Climate Change Academy (CCCA) wherein there would be 20 modules that can be integrated to

urban studies and planning courses; Local Government Training Institutes ToTs and Curriculum Development; and School Curricula on Cities Slums and Climate Change with UNICEF.

They also have plans to partner with different Local Government Training Institutions. There are plans to conduct a Regional Training of Trainers in Africa and Latin America; a 4-week course in partnership with the Institute of Housing and Urban Studies in the Netherlands that will tackle Urban Management Tools for Climate Change; and a regional capacity building workshop in partnership with UN-ESCAP.

Urban and Regional Development Institute (URDI) – Indonesia

Ms. Atik Kumala Dewi started her presentation by explaining that the Urban and Regional Development Institute is an independent, no-profit organization aimed at promoting sustainable urban and regional development in Indonesia through increasing communication and cooperation among the different stakeholders; publication and other means for exchange of knowledge and experience; improving people's understanding of the various aspects of development through research, study and policy analysis; and training and other local capacity building exercises to help prepare local governments to deal with current and future challenges.

Their program focuses on hot topics in urban and regional development such as decentralization, planning and budgeting, environment, disaster risk reduction, climate change, housing and land issues, etc.

She also discussed the Asian Cities Climate Change Resilience Network (ACCRN) which supports urban climate resilience in Vietnam, India, Indonesia and Thailand. This network aims to build a flexible and dynamic system and institutions that identify and respond to the challenges climate change poses to urban areas.

They also conduct governance and institutional analysis that assessed how climate change adaptation are currently integrated in existing programmes and how these are effective to cope with future climate risks. Along with this, they also assess

strengths and weaknesses of government planning for integrating adaptation including fiscal capacity.

Lastly, she explained the Cities Resilience Planning Workshop that aimed to build the city's team capacity in preparing their city resilience strategy.

Society for Development Studies – India

Ms. Pragya Rajoria of LOGOTRI – India presented the Initiatives of Society for Development Studies (SDS) to Address Climate Change. To address climate change issues, SDS identified measures that promote development objectives while also yielding co-benefits for addressing climate change effectively. They also outlined a number of steps to simultaneously advance intermediary town development and climate change-related objectives of adaptation and mitigation.

The objectives of their initiatives is to protect the poor through an inclusive and sustainable development strategy, sensitive to climate change; address poverty alleviation while ensuring ecological sustainability; develop efficient and cost-effective strategies that can be used by end-user; have a new and innovative regulatory and voluntary mechanisms for sustainable development.

She shared one of the projects that they have done in Alwar City on Zero Waste Management. This project is implementable in the local context and the project highlighted the importance of community participation in the implementation and continuance of the activities. After the project was withdrawn, community took over the management and generated their own resources to make the activity self-financing. This initiative has resulted in the improvement in the environment and in cleanliness of the neighborhood. One of the most important output of that activity was the composting of the biodegradable waste, which is a major step as it is used as soil stabilizer and plant nutrients instead of getting putrefied on a dumpsite.

Another project to address poverty alleviation while ensuring ecological sustainability is the one conducted with the potters. The project focused on income enhancement of potters community through productivity and quality enhancement.

There are also other new and innovative voluntary mechanisms for sustainable development that are being done by SDS such as Sensitization of Resident Welfare Association, Sensitization of Students and Linking SHG with "Say No to Plastic Bags" initiative. Research studies on the Effect of Climate Change to Health and Environment Upgradation through Rural Sanitation were also conducted.

Academy of Managers for Construction and Cities - Vietnam

Dr. Pham Van Bo, Vice President of the Academy of Managers for Construction and Cities (AMC) shared the various initiatives of Vietnam in addressing climate change. He began by saying that AMC organized conferences, workshops and seminars on management, technological progress, sciences, laws in construction sector and cities.

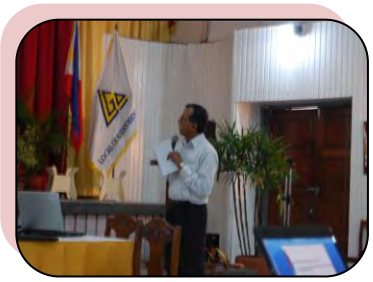
AMC started supporting urban local authorities to address climate change. They have formulated and Integrative Urban and Environmental Planning Framework for Adaptation to Climate Change. They also coordinated with the Department of Sciences, Technology and Environment to organize a forum on adaptation to climate change.

The following are the topics and next steps of AMC in relation to climate change adaptation:

- Introduction of green architecture
- Introduction of general Hanoi planning
- Formulation of action plan of construction sector to climate change
- Impact of climate change and sea level rise on urban infrastructure
- Program of coastal urban development adapting climate change and sea level rise

Toward the end of his presentation, he mentioned a training for mayors on urban development in climate change which will tackle the impacts of climate change on urban building and development; adaptation and mitigation to climate change in management of urban building and development; and international and domestic experiences on climate change.

Center for Urban Studies - Bangladesh



Dr. Nurul Islam Nazem presented the Climate Change and Its Impact on Cities in Bangladesh and the Role of Center for Urban Studies in addressing the issue. He began with stating the present concern which is the rapid change in climatic elements caused due to human action that is already being experienced around the world.

He explained that there can be three (3) response options on sectoral adaptations. One can do any of the following:

Retreat: no attempt to protect the land from the sea; abandon structures in currently inhabited areas; relocation of the population; new setback distances from the shoreline for future development.

Accommodate: continuation of the present occupancy of the vulnerable areas (i.e. acceptance of the probability of some submergence) with some adjustments in livelihood pattern through non-structural and structural measures.

Protect: protect the land from submergence, especially population clusters, economic activities and natural resources by constructing hard structures like sea walls, etc.

He also discussed the following proposed climate change adaptation measures:

1. Promoting adaptation to coastal crop agriculture to combat increased salinity;
2. Adaptation to agriculture systems in areas prone to enhanced flash flooding in northeast and central regions;
3. Promoting adaptation to coastal fisheries through culture of salt-tolerant fish especially in coastal areas;
4. Adaptation to fisheries in areas prone to enhanced flooding in northeastern and central regions through adaptive and diversified fish culture practices;
5. Construction of flood shelter and information and assistance center to cope with enhanced recurrent floods in major floodplains;

6. Reduction of climate change hazards through coastal afforestation with community participation;
7. Providing drinking water to coastal communities to combat enhanced salinity due to sea level rise; and
8. Enhancing resilience of urban infrastructure and industries to impacts of climate change including floods and cyclones.

He concluded his presentation by explaining the condition of the slum population in Bangladesh as increasingly more people would move into the urban areas, especially the large cities. He said that slum population will most likely increase with climate change and a policy should address this problem.

Huazhong University of Science and Technology, Wuhan - China

Prof. Xiaoming Wang's presentation was divided into three (3) parts: awareness, commitment and action of government; awareness and practice of professional organizations and universities; and practice and actions of local governments and communities.

For the awareness, commitment and action of government, he said that China has been building consensus and strengthening cooperation to advance the historical process of combating climate change. He also explained China's investments in pollution control from 1991-2004 and the number of area of nature reserves.

On awareness and practice of professional organizations and universities, he highlighted the training material developed by the Ministry of Science and Technology; and research and demonstration of key technology of urban low-carbon.

For the practice of local governments and communities, he explained the low carbon urban planning practice and exploration. He said that they have concluded a training on energy and emission reduction. They also reclaimed a water system in the community that provided the residents with a beautiful landscape of the water environment and it makes the waste water to be effectively addressed.

Catanduanes State Colleges - Philippines

Dr. Sonia Vargas started by explaining the mission of the Extension Services Unit of Catanduanes State Colleges (CSC) which is to develop strong human capabilities through quality instruction, research, extension and production programs. Their goal is to achieve excellence through quality and responsive extension service.

She explained the different programs that CSC has undergone. First, the Training Program for Environmental Governance that aimed to enhance the capability of elected barangay officials on environmental governance. Second, the Training of Trainers (Speakers Bureau) for Municipal Solid Waste Management Implementers Program that aimed to capacitate lead solid waste management implementers at the municipal and barangay LGUs with effective knowledge and basic facilitating skills to strengthen public education, information and communication ESWM. Third, the Institutional Training Workshop for SWM Implementers that zeroed in on the enhancement of capacities of maintenance and janitorial personnel in the proper implementation of SWM practices in the schools. Fourth, the Science, Technology and Environmental Camp that aspired to promote and understand of science, technology and environment protection among high school and elementary students.

The following were the issues and questions that emerged after the presentations of the different countries:

Issues/Questions	Resolutions/Answers
How successful are these initiatives? What are the indicators of success?	These programs are demand driven by the community. It has attracted the attention of other local government units. These initiatives are continuing because of the success it has attained.

Cultural Evening

A cultural show was organized by the Academy for the delegates. The evening started with a message from Ms. Twila Torres, Municipal Planning and Development Coordinator of Los Baños, Laguna.

Immediately after her message, Bulwagang Sining Lahi performed a dance called Binasuan, a skilled dance that originated from Pangasinan that entails balancing a glass with wine while dancing. Following the dance is a song number from Ms. Collene Vera Lato, she sang Maalala Mo Kaya and Sampaguita. After the two song numbers, the Pitik at Galaw Dance Troupe performed a contemporary dance called Sarong Banggi.

To cap off the presentations, the dance troupe performed the Tinikling, the National Dance of the Philippines. After the dance, they invited the foreign participants to join them in another round of fun and dancing.

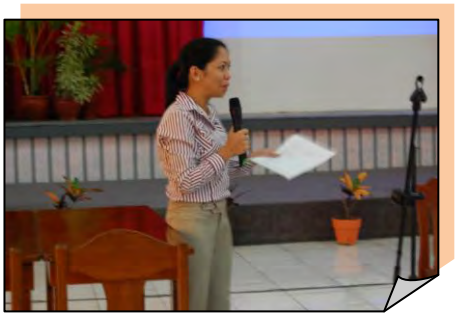
The program ended with the awarding of the Plaque of Appreciation to the performers and a message from Director Marivel Sacendoncillo, Executive Director of the Local Government Academy.

Day 2
March 9, 2010

Day 2 Proceedings

Session 4: Climate Change Vulnerability Assessments

Participatory Climate Change Vulnerability and Adaptation Assessment
Ms. Adelaida Mamonong
Project Coordinator



Ms. Adelaida Mamonong of UN HABITAT discussed the topic on Climate Change Vulnerability Assessments. She started her presentation by explaining reasons why local governments should conduct Vulnerability and Assessment viz: To satisfy reportorial requirements and commitments both to the national and global levels; To generate critical information and knowledge to define priority adaptation actions and mitigation strategies; To leverage technical and financial resources; and, To put forward the role of local governments and cities in the national and global discourse on climate change.

She then defined key concepts such as climate change, vulnerability, exposure, sensitivity and adaptive capacity. She followed it with the explanation of the Vulnerability and Assessment Framework. She highlighted the step by step process of the assessment. The following are the steps: (1) orient local leaders; (2) organize the assessment team; (3) agree on the assessment focus and scope; (4) map and mobilize stakeholders; (5) gather data/information; (6) determine/define local climate change exposure and sensitivity; (7) mapping the exposure *(visualizing the risks)*; (8 and 9) consolidating findings; and (10 and 11) strategy ID stage/adaptation assessment.

It is significant to note that during the process of the vulnerability assessment, validation of information (i.e. hazard maps) through engagement of the community is important because maps may not be relevant anymore. The example given is the process that the UN HABITAT has done with the Sorsogon Initiative.

The following were the issues / questions that emerged after the presentation:

Issues/Questions	Resolutions/Answers
We have to establish that Disaster Risk Reduction and Climate Change are related because eventually Disaster Risk Reduction will be looking into climate change prevention mitigation and preparedness. It would appear that these are different but somehow related as we must look at the issues as interrelated.	They are somehow related. It is the definition and parlance that makes the difference.
Whom are you talking about when you refer to the city? The mayor alone or other stakeholders involved in climate change vulnerability assessment?	The assessment team needs to seek and interact with potential stakeholders because their early involvement and commitment to the process will be crucial to the success of the Vulnerability Assessment appraisal.
Three (3) concerns must be emphasized in the process: exposure, governance and adaptive capacity. Climate Change cuts across disciplines, with this, themes on agro-forestry and watersheds should also be included in the Vulnerability Assessment.	The presentation just focused on the tool, but in the process, all the biophysical effects should be considered. Population data should be included in the exposure and adaptive capacity of the LGU. The outputs can be tailored-fit depending on the thrusts of why you are doing the vulnerability assessment.
Based on the Sorsogon initiative, how long did you finish the process? It is very important among local governments to be definite on the timeline since LGUs encounter the challenge of change in officials based on the term of office.	The Sorsogon initiative started around November 2008. However, there were lags during the implementation because of some priorities in the part of the LGU. With this, an important learning is that full time assessment teams should be in place to establish continuity of the process. Realistically, Stage 1 can take just a few weeks, if there is one person

	doing the orientation and data gathering. FGDs will take about 3-5 months and report writing and finalization can take around 1 month. 6 months will be a very good estimate for the timelines of the process. If a city has GIS and other technology, then it would be shorter since it's a lot easier to acquire maps and make decisions.
Is the framework, standard for every city or for cities only in the Philippines?	The government is promoting this framework. Most of the things are used with the guidance of the IFCC. For the indicators it depends on the users. If you want to add more, you can do so, tailor-fit it according to the context of your country.
If the LCEs would ask us, how much would it cost to implement the program on climate change? (specifically the Vulnerability Assessment process)	It depends on the LGU. LGUs don't need to spend on expensive consultants to provide them with the projections. Trainers could lessen the cost if mobilization on the existing community leaders to do the baseline data will be effectively done.
The Vulnerability Assessment Tool entails too many steps. Participants might require specific knowledge and the success depends on the capacity of the city. Bigger cities might need more cost than smaller cities. What is the participation of the household? Statistical information for VA may not be available. In case of Mongolia, LG officers are busy with regular work; it will be difficult for them to be involved within the 6 months prescribed period. Perhaps, some other organization must	We are working on the globally accepted terminologies like vulnerability, so that confusion is avoided. On the participatory side, in the course of the presentation, LGUs are always mentioned, but the process really entails community participation, baseline gathering, assessment done by communities. LGUs are only writing reports; they should be the prime mover, in coordination with various stakeholders. On involving Local leaders, I agree with you, we can't expect leaders

be involved in the process to compensate for the busy schedule of the LG people. Some terminologies (i.e vulnerability) are usually used by practitioners, how about having flexible terminologies that community people can easily understand?	to work with you for the whole duration, just get the buy-in, but it's their staff who do the continuity, their organization must realize and understand the process so that they will support your adaptation strategies. Local chief executive can be involved in the beginning, just get the buy-in and you can be assured to have help from the people on the LGU.

Break Out Session

The plenary was divided into two groups, the CCCI group and the LGTI Group. They were tasked to assess and review the Vulnerability and Adaptation Assessment tool that was presented in the previous session.

CCCI Group

The group was given ample time to discuss the tool among themselves. After discussion, they were asked about their comfortability with and understanding of the tool.

Their output is as follows:

CCCI Group Discussions and Feedback on Sorsogon City Experience and Vulnerability and Adaptation (VA) Tools

Participatory climate change vulnerability and adaptation assessment.

Each country's representative made a couple of remarks and comments, some are similar and supporting each other arguments, some others are more specific, especially with regard to the VA templates.

Here are some of those remarks:

- The tool that was given is okay in general. It is useful, yet it might be amended, adapted, and adjusted to the local condition in any particular country. More specific issues can be addressed that show the characteristics

of a particular city.

- The "effects" given in Worksheet 2, can also be developed and added to include some important or critical issues faced by the local city. Such additional effects can be related to, for example: education, public health, specific infrastructure (waterways, canals), and others.

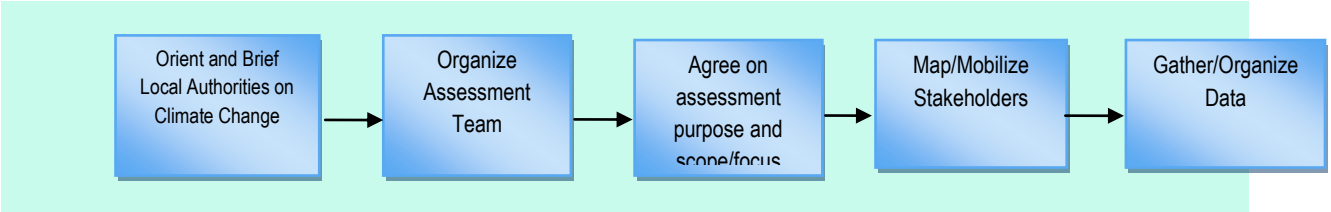
The Adaptive Capacity matrices need some refinement in the following areas:

- It can be simplified in the way the calculation was made. The way the calculation was made should be able to quickly show the priority of action needed, rather than a cumbersome numbering exercise.
- The template to be used shall be a step-by-step way to make it easier for the trainees to follow. Also, it should be clearly arrange to allow participatory discussion and argumentation on why particular indicators are important. The discussion should be allowed as a complement to the numeric calculation exercise.
- It can be more focused on the most relevant indicators in the local city, more directly related with the grass-root issues, rather than using a general/macro indicator (e.g., GDP). Local specific indicators could be clean water provision, evacuation place, etc.
- It can be added to include some qualitative indicators such as people's attitude toward risk, and other social values.
- It can be categorized into the vulnerable and less- (non) vulnerable areas, so there will be a separate measurement and different kinds of data and category (more sub-divisions).
- Scoring system can be made in a range, and indicated by its importance and its data reliability.
- More practice is needed before it should be given to the local governments on the real training session.

LGTI Group

The Local Government Training Institute Group was tasked to review the Vulnerability and Adaptation Assessment tool – making use of the "Pre-Assessment Stage" in Local Government Training.

The Pre-Assessment Stage



Based on the following guide questions, the LGTI group was able to come up with their own improvements concerning the tool:

a. Are all questions a local decision maker may have before embarking on a vulnerability assessment adequately addressed? What is missing?
b. Are the steps logical?
c. What additional information / tools would you recommend to improve the tool?
d. Draft a sample ½ -day workshop to address steps 1-4 which could be included in the tool.

Their output is as follows:

Are all questions a local decision maker may have before embarking on a vulnerability assessment adequately addressed? What is missing?
• Make sure that process include Multi-Stakeholder Participation • Costing or Fund Requirements /Fund raising opportunities • Tentative Timeline and a model from the Sorsogon initiative • Legal framework in which the process will be undertaken • Who in the local government (team) shall be involved to conduct the assessment ?
Are the steps logical?
• Before moving on the orientation, a courtesy call with the Mayor must be arranged to prepare for the orientation. In this way the Mayor can direct us with the focal person • Step 2 is the Orientation • At the end of steps 1 and 2, an Executive Order from the Mayor must be present to include the responsible persons/offices in the local government for the assessment

- Ensure commitment building through a Memorandum of Agreement
- Merge Steps 2 and 4 (Organize Assessment Team and Map and Mobilize Stakeholders)
- Exclude step 5 from Pre-Assessment Stage

What additional information / tools would you recommend to improve the tool?

- Mapping of existing tools in the local government
- Assessment tool on Knowledge and Competencies of the local government
- Assessment tool on mapping of facilities and available equipment and resources to address climate change
- Points to be shared:
  - Implications at the local level
  - Mapping of best practices
  - See Question No. 1 for reference
- City based information needed for Step 2
- Standard matrix where criteria should be highlighted: focus, scope and timeline (for Step 3)

Draft a sample ½ -day workshop to address steps 1-4 which could be included in the tool.

- Title: Stakeholders Forum on Climate Change
- Process:
  - Plenary Talk on the Impact of CC on communities: Orientation Approach
  - Open Forum
  - Workshop by group (sharing of perception and observation on the effects of Climate Change)
    - Agreeing on the Assessment Teams, Clarification of Roles and Responsibilities
    - Work plan -Information needed, sources, methodologies, timeline (matrix)
  - Presentation of Workshop outputs
  - Synthesis
  - Commitment Signing of the Stakeholders

The following were the issues and questions that emerged after the presentation of the workshop outputs:

Issues/Questions	Resolutions/Answers
Critiquing of the workshop outputs must be included in the proposed workshop process	
On Legal Framework: Is it like a Terms of Reference embedded in a Memorandum of Agreement?	Legal basis can be the RA on Climate Change (RA 9279). National Climate Change Action Plans (in countries like Bangladesh) can serve as legal basis Although, when the Sorsogon initiative started, there is no Climate Change Act yet, maybe an Executive Order from the Mayor highlighting the allocation resources can serve as the legal basis. Legal basis must not be too tight with the National Policies.

Towards the end, Ms. Mamonong said that the tool that the UN-HABITAT is advocating can be summarized with the experience of Sorsogon City. There is now a chance to develop a more responsive tool specific to the needs of cities. We are here to be informed on the tools and improve the tools. The next step is to apply the enhanced tool (for the next 3 months) in our respective areas of influence.

Session 5: Climate Footprint
Ms. Pamela Oppus
Board of Director, ICLEI

Ms. Pamela Oppus started her presentation by discussing an overview of ICLEI which stands for International Council for Local Environment Initiatives. ICLEI was created in 1990 when 200 local governments from 43 countries convened at its founding conference at the United Nations in New York. It is an association that represents

the interests of local authorities within the United Nations and at interpersonal policy fora. It is a movement driving positive change on a global scale through programs and campaigns on local sustainability. It is also a resource center offering information, tools, networking, training and consulting services.

ICLEI believed that a single municipality has a significant impact. On a global scale, the cumulative effect of concerted local action can be profound. ICLEI trains it members in their capacities as policy makers and managers to make informed decisions on sustainability. Since 1992 over 20,000 local authorities have participated in more than 500 capacity building events, organized by ICLEI's International Training Centre and regional offices.

One of ICLEI's Climate Protection Initiatives is the Cities for Climate Protection (CCP) Campaign which aims to reduce local greenhouse gas emissions; improve air quality; enhance urban livability (quality of life of inhabitants); and improve the resilience of local communities.

Ms. Oppus also discussed the Five Milestone Process. The process is considered as one of the unique features of CCP. Within this frame, following a political commitment statement of the representative of their local governments, participating cities are expected to:

1) *Measure* their emissions of greenhouse gases, generated through the actions of their local government administration (government emissions) and through the actions of the community they serve (community emissions);
2) *Commit* for an emissions (government or community) reduction target with respect to a base year and a target year;
3) *Plan* their actions (e.g. energy efficiency in buildings and transport, introduction of renewable energy, sustainable waste management) at the government and community level to reach this committed reduction target;
4) *Implement* their Local Climate Action Plan; and
5) *Monitor* emissions reductions achieved by their mitigation actions.

She then continued on discussing Climate Footprint with the objective to understand how cities contribute to climate change; understand how to conduct a GHG inventory; and understand that many GHG reductions have "co-benefits".

She explained that the Carbon Footprint is the representation of the effect of an entity or organization on the Earth's climate in terms of the total amount of greenhouse gases produced. We contribute to climate change through our day-to-

day activities such as transportation, cooking, electricity consumption, burning, material processing, etc. She also thoroughly explained the formula on how to compute carbon dioxide emissions.

The Contribution of Cities to Climate Change
Dr. David Dodman
Senior Researcher, Human Settlements and Climate Change Group

He started by explaining the global greenhouse gas emissions. These emissions come from energy supply; industry; forestry; agriculture; transport; residential and commercial buildings; and waste and wastewater.

The following are the features that are useful in accounting greenhouse gas emissions for inventory:

- Transparency - Assumptions and methodologies should be clearly explained.
- Consistency - The same methodology should be used for base and subsequent years.
- Comparability - Inventories should be able to be compared between different places.
- Completeness - Inventories should cover all relevant sources of emissions.
- Accuracy - Inventories should be neither over nor under true emissions.

He discussed the different direct sources of local government emissions. He also discussed the scopes of emissions of local government operations and urban emissions.

Lastly, he discussed the following underlying drivers of emissions: geographic situation; demographic variation; urban density and urban form; economic system; and other underlying factors.

The following were the issues and questions that emerged after the presentation:

Issues/Questions	Resolutions/Answers
Most of the industries concentrate in the local government and these industries are the main contributors of GHG, how could we get them to participate in the	Industries actually have to get their business permits in local governments where they are located. There can be regulation mechanisms to make them

carbon foot printing?	participate in the Climate footprint. In the case of China, the government industries cannot be solely blamed on the high GHG emissions but this be viewed as a way for industries to meet the demands for various human activities. China has recognized that they could not reduce production emissions but on GHG emissions per GDP.
We are always talking about physical boundaries, how about economical boundaries, issue of intangibles, like trading, in coming up with a GHG footprint.	The problem is how to implement policies to reduce emissions. Local authorities cannot regulate but is a function of the national government.
There is no data on GHG emissions in the Asia Pacific region; are there any programs in place to resolve this gap?	Some countries did their individual inventory, but more on energy emissions.
Is it possible to calculate land use conversions and forestry?	Aerial calculations are the basis for calculations on deforestation and degradation.

Session 6: Carbon Finance

Making Carbon Finance Work for your City
Mr. Adnan H. Aliani
Chief, Sustainable Urban Development Unit
United Nations ESCAP

He began the session by explaining that carbon financing is that organizations, individuals, and private sectors in the developed countries provide resources to organizations on projects that reduce carbon dioxide as a greenhouse gas in return for what are known as the carbon credits. It is a flow of providing resources from developed countries to developing countries to reduce greenhouse gases.

He then differentiated the two carbon markets, the compliance market which is governed by the Kyoto Protocol while voluntary market is governed by various statutory bodies.

To meet their GHG targets, developed counties are allowed to purchase Certified Emission Reductions (CERs) from developing countries

Clean Development Mechanism (CDM) allows organizations from developing countries to get investment from organizations in developed countries for projects that reduce GHG. The project proponents must prove additionality (the GHG reduction would not have occurred in the absence of the project) and must promote sustainable development Payment is provided for metric tons CERs reduced.

The following are the key considerations in CDM projects:

- Baseline and additionality
- Must use approved methodologies only
- Need to hire international consultants to prepare Programme Development Document
- Need third party validation and verification
- Need to get approval from the National Designated Authority and the CDM Executive Board
- What you reduce is what you get

In conclusion, he said that there is a need to develop a less strict adaptation financing system.

The following were the issues / questions that emerged after the presentation:

Issues/Questions	Resolutions/Answers
Is there a monitoring and evaluation mechanism in case the reduction of carbon emissions is not attained?	Money will not be given if the carbon emissions are not reduced. The funding for the project is not an upfront fund, this project sources out funding per carbon reduction.
There is a notion that developed countries aren't really reducing their carbon emission, they force developing countries to reduce. In addition to that many companies in developing	Developed countries, have committed to reduce 70-80%, but are having a hard time in achieving progress because of law of diminishing returns, it is more expensive to reduce 5% of carbon

countries, cheat by increasing CO2 emissions, that is why it is very difficult to monitor carbon reduction.	emissions in developed countries, in which the same amount of money can reduce 30% emissions in developing countries. ESCAP is implementing a co-benefit strategy- do it because it is good for you, and you get benefited for your project.
Is it mandatory for firms, to spend a certain portion of money for carbon reduction, then spend the other money to give and contribute to developing project?	It can be. This is the notion for these projects.
What is the potential of CDM revenues of carbon market in forests and ocean floors?	10-25% of the total investment that one can get out of CDM. Sanitary landfill with electricity generation is the largest because of the direct reduction on carbon
What is the conceptual basis of CDM?	The basis of CDM is to transfer funds to developing countries from developed countries.
Normally in the free markets, the buyer and seller, have equal access. Is there any available buyer of CDM Projects?	The treaty comes to end in 2012, there are more buyers. You must negotiate enough buyers but not enough projects.
The law in Vietnam, all landfills must be sanitary, but we can't implement it because it is expensive.	This is a loop hole of the laws/policies; you can have a controlled dumpsite or sanitary landfill. In controlled dumpsite, there is no collection and clearing of methane. Without CDM financing the law can't be able to be implemented. You can use that as an argument to get CDM.
Since CDM has been in operation for 50 years, how much was reduced in GHG?	Not much. One of the reasons behind the failure is because of the restrictions, and because of expenses, not enough trained people at the country level to implement

	CDM projects, and there are not enough validators to evaluate CDM projects. That is what we are trying to address, to train validators that can help local governments.
What's the experience of other countries on the scale of the project? So that it is worth the process? For example, projects in the Philippines that have been awarded with CDM are mostly large businesses, is there a need to come together to consolidate and what price?	You would need to reduce 70-100 tons of CO2 per day to make it worthwhile to go for CDM. There is process is bundling, programmatic CDM. Put projects together, bundle to undertake a big project, present it to a validator. Disadvantage is you wouldn't have a mechanism to ensure that one bundle serve as the weakest link in carbon reduction. On the other hand, Programmatic CDM is doing the same process several times. Do cross or spot check, if one is okay then everything else is okay. You have to maintain a higher standard of quality of documentation to verify that carbon emissions are reduced.

Day 3
March 10, 2010

Session 7: Group Work on Mitigation Options

For this workshop, the plenary was divided into four groups. Each group worked on different topics regarding mitigation options. The following were the topics assigned to each group:

- Group 1: CDM Case Study
- Group 2: PEER Review
- Group 3: Mitigation Measures / Audit
- Group 4: Emission Profiling

Group 1: CDM Case Study

The case study that was given to the group is as follows:

The Issue

Attorney Joseph Saldanhan has just been elected mayor for the first time of Las Bella, a town of 200,000 people. The town has an old open dumpsite where around 200 tons of solid wastes are being disposed every day. About 200 informal sector waste pickers make a living from separating recyclable materials from the open dump.

A recent JICA study has shown that 70 percent of the waste are organic. It has also shown that the open dump emits methane gas that is equivalent to 35 Metric Tons of carbon dioxide every day.

His Chief Sanitation Officer has told him that the open dump will reach its maximum capacity in two years. Attempts by the previous administration to find a new open dumpsite that have been unsuccessful because of NIMBY. Some communities have agreed to host a sanitary landfill site 30 kilometers away.

While he was a council member, the Mayor recalls that he attended a UN workshop in which some people had talked of CDM as a financing mechanism. Through an internet search, he has found out that the price of 1 metric ton of CERs is USD 20, which can be sold for a period of 20 years.

The Mayor has asked Prof. Premchand of the National Engineering University to work out the cost of a sanitary landfill site. Prof. Premchand has suggested a sanitary landfill site that will generate 1 megawatt of electricity per month. Under a new government programme, each watt can be sold to the national electricity grid for USD 0.20. The price for building the sanitary landfill is USD 1,000,000. Cost of collecting, transporting and disposing 1 ton of waste will be USD 20 at present. However, given fuel prices transport cost could go higher. He suggests that the landfill be given to a private company to operate. The company would control the site and restrict access only to its officials and inspectors from the Sanitation Department of the city.

Hearing about the Mayor's concern of NGO, NoMoreWaste proposes to build 20 ten-

ton compost plants in different neighborhoods. The plants would use box-composting methodology approved by UNFCCC that minimizes smell. Each ten-ton plant would cost USD 50,000 to build. It estimates that it can produce a total of 14 tons of compost per day to be sold in the market for USD 25 per ton. It will involve 300 waste pickers as workers in the plants. The cost of collecting transporting and treating 1 ton of waste will be USD 5 because transport costs could be minimized. As the whole process does not consume too much fossil fuel, the costs are likely rise but not too much.

Question

You are members of the Public Health Committee of the City. The Mayor puts both proposals in front of you. Which option would you recommend to the Mayor? Take social and ecological considerations into account as well.

The group discussed the case study thoroughly and they come up with the following table as they compare the pros and cons of the two options. At the end of discussion, the group chose to recommend the compost plant because of the greater social and ecological benefits.

Option 1: Sanitary Landfill		**Option 2: Compost Plant**	
ECONOMIC			
Construction Cost	1 M	Construction Cost	1 M
Operating Cost *(over 10 years)*	14.4 M	Operating Cost *(over 10 years)*	3.6 M
Total Cost	**15.4 M**	**Total Cost**	**4.6 M**
Electricity Revenue *(over 10 years)*	24 M	Compost Sale Revenue *(over 10 years)*	1.26 M
CDM Revenue *(over 10 years)*	2.52 M	CDM Revenue *(over 10 years)*	2.52 M
Total Revenue	**26.52 M**	**Total Revenue**	**3.78 M**
Net Revenue	**11.52 M**	**Net Revenue**	**-.82 M**
• Increase in fuel cost		• Less fuel cost	

• Will use 20 hectares of land • Requires a high level of technology • Would require large start up-capital	• Will only use 1,000 sq. meters of land per plant • Low level of technology requirement
SOCIAL	
• Loss of 300 jobs • Community 30 km away agreed to build it • Possibility of increasing garbage fees • Restricted access might result to violation • If people cannot afford the cost, it may result to illegal dumping • Health implications	• Will generate 300 jobs • Open access • People empowerment • Would still require a landfill for residual waste
ECOLOGICAL	
• Higher GHG emission due to fuel/operation • Requires large area (20 hectares) • Segregation is not required	• Less GHG due to less transport • Requires 2 hectares of land • Promotes segregation at source and resource recovery of recyclables • It will generate fertilizer that can be used to improve agricultural land and would also increase income for farmers later on

Group 2: PEER Review

The Peer Review Group was assigned to review the Session Plans out of the Outputs from Session 2's Workshop: Mainstreaming Climate Change in existing Local Government Trainings. Each Sectoral Session Plans were reviewed by one or two group member/s.

The following were the issues/critique of the group members on the session plans emerged during the breakout session:

Issues/Questions	Resolutions/Answers
Be definite about the target participants in doing the review	Specify the target groups according to sectors
Clarification of assumptions on the underlying assumptions on level of	Have an over-all learning outcome for the 4-hour session

understanding of CC of target group	Better description of activities to achieve learning outcomes

The following are the group's outputs:

Session Plan

Name of Training: DRR in the context of CC: Basic training for local planners and community leaders of Mongolia, Philippines and Vietnam

Name of Session: Climate Change and Sustainable Urban Development

Objectives of Session: Understand opportunities that training on urban sustainability

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
9.00-9.15	15 minutes	-Brief Introduction of the training with background & objectives -Video Presentation Q and A	Basic Concepts and principles, issues and approaches on DRR and Climate Change	Facilitator Participants	Video Player/Projector and Video document
9.15-9.45	30 Minutes	-Brief guidance on the session -Identification of Issues/problems/ Challenges related to CC and DRR	Issues identified Hazards, Vulnerability Risk and Challenges	Facilitator and Participants	Meta card, pencil, pen, scotch tape, easel sheet

9.45-10.45	1 hour	-Brief guidance on the session -Break-Out session(in groups)	Analysis of the Issues and Ideas for suggested solutions and recommendations	Participants	Meta card, pencil pen, scotch tape, easel sheet
10.45-11.15	30 minutes	Tea break			Food and drinks
11.15 – 11.40	25	-Presentation of outputs and plans(in groups) -Discussion-comments and inputs	Synthesis of Ideas, recommendations, suggested solutions	Facilitators, participants	LCD projector, computer
11.40 – 12.00	20	Conclusions	Additional input from trainers, technical experts	Experts, Participants	LCD projector, computer

*** Simple training evaluation form to be filled by the participants for further improvement for the next training

Session Plan

Name of Training: Basic Training for Gender and Local Governance

Name of Session: Gender Sensitivity of LGU's Response to Climate Change

Objectives of Session: a) To make LGU's understand the gender dimension of Climate Change; b) To assist LGU's review/ formulate gender sensitive policies and programs for climate change impacts.

Time	Minutes Per Activity	Activity and Detailed Description	Learning Outcomes	WHO	What is Needed?
9:00 – 9:35	10 minutes 20 minutes 5 minutes	Introduction to Climate Change (powerpoint / video presentation Adaptation vs mitigation (technology on participation by using metacards) Definition of gender and understanding vulnerability of certain sectors	- Understanding climate change and its impact on the different sectors of the community (men, women, children, elderly, Persons with disability) - Understanding the difference between adaptation and mitigation - Identifying vulnerable sectors	Facilitator/Resource Person	LCD projector Laptop Video presentation Metacards (assorted) Pentel pens (assorted) Masking tapes
9:35 – 10:35	(60 minutes) 5 minutes 30 minutes	Workshop 1 on Effects of Climate Change on the different sectors Grouping and giving the mechanics Discussion using the template based on given scenario	identifying the different impacts/effects of climate change on the different sectors of the community	Facilitator and participants	Template

	15 minutes 20 minutes	Reporting by group Critiquing and Synthesis			
10:35 – 10:50	15 minutes	Break			
10:50 – 11:50	(60 minutes) 5 minutes 30 minutes 15 minutes 20 minutes	Workshop 2 on Adaptation Policies/Programs that can be developed by the LGU Grouping and giving the mechanics Discussion using the template Reporting by group Critiquing and Synthesis	- recommending policies/ programs that can be developed by the LGU to adapt to situations for the different groups	Facilitator and participants	Template
11:50 – 12:50	(60 minutes) 5 minutes 30 minutes 15 minutes	Workshop 3 on Identifying barriers to implementation of the identified policies/programs and recommending strategies to meet the barriers Grouping and giving the mechanics Discussion using the template Reporting by group	- strategizing the implementation of policies and programs to address gender issues related to climate change	Facilitator and participants	Template

	5 minutes	Critiquing and Synthesis			
12:50 – 1:00	10 minutes	Synthesis	-		

Mechanics for Workshop 1:

1. Divide the group into 5 subgroups corresponding to the 5 identified groups namely: men, women, children, the elderly and persons with disability
2. The group chooses the chair and the rappporteur from among them
3. They discuss the scenario given to them and fill in the chart.
   Scenario : You are in Catanduanes Province which is the storm / typhoon capital of the Philippines. Some effects of storms / typhoons include heavy rains, strong winds, flash floods, landslides and coastal erosions. List down possible effect of climate change among the identified sectors/ group of people.

Sector (e.g. men)	Effects of climate change
Farmers	
Fishermen	
Businessmen, etc.	

Mechanics for Workshop 2

1. Participants go back to their original grouping and continue the work using the given template
2. Group decides to retain the same chair and rapporteur or choose another set

3. They discuss the template given to them and fill in the chart

Sector (e.g. men)	Expected Assistance from LGU	Policy or program that will address this expectation
Farmers		
Fishermen		
Businessmen, etc.		

Mechanics for Workshop 3

1. Participants go back to their original grouping and continue the job using the given template
2. Group decides to retain the same chair and rapporteur or choose another set
3. They discuss the template given to them and fill in the chart

Sector (e.g. men)	Policy or program that will address this expectation	Possible barrier to implementation	Strategy to meet identified barrier
Farmers			
Fishermen			
Businessmen, etc.			

Session Plan

Name of Training: Mainstreaming Climate Change for Local Transport Management

Name of Session: Local Transport and Climate Change: An Overview

Objectives of Session: To enable local administrators exchange information on local transport measures and options to improve air quality and reduce greenhouse gas emissions

Target Group: Elective officials, city administrator, city planning officers, transport institutes, representatives of public transport groups

Time: 3 hours and 45 minutes

TIME	Minutes per Activity	ACTIVITY (in detailed description if necessary)	Learning Outcomes	WHO	What is Needed
9:00 – 10:15 AM	5 minutes	Introduction to the Session	Levelled learning outcomes from the session	Session coordinator	Powerpoint slides
	20-30 minutes	Case Study Presentation from a Local Government Unit Open Forum	Opportunities and limitations in GHG reductions through local transport management	LGU presentor	Powerpoint presentation and copies of the case study
10:15 – 10:30 AM	15 minutes	Coffee Break			
10:30 – 11:00 AM	30 minutes	Transport and Climate Change: Measuring GHG emissions from transport ▪ Fuel options ▪ Technological retrofits	An understanding of the factors affecting transport emissons	Expert on Transport and Climate Change	Presentation Material

11:30 – 12:00 NN	30 minutes	Group work: discussion on the Co-benefits of the Transport Measures presented 1: Co-benefits on air quality and public health, mobility and cost 2: Co-benefits on greenhouse gas reduction	Identified co-benefits for the transport measure presented and recommended options	Session coordinator	Copies of the Case Study
12:00 – 12:30 NN	30 minutes	Plenary	A list of other options to improve local transport plan	Session Coordinator	Group Outputs
12:30 – 1:00 PM	30 minutes	Plenary and Expert's Response	Understanding of the implications of the measures for climate change adaptation	Expert	Documentation on the plenary discussion

Session Plan

Name of Training: COASTAL ZONE MANAGEMENT

Name of Session: Introduction to Climate Change Impact to Coastal Zone

Objectives of Session:

General Objective:

Orient Participants on the Climate Change Impact to Coastal Zones of the Local Governments (LG)

Specific Objectives:

For this session, the participants would be able to:

a. Discuss the current state of coastal zone of the LG
b. Identify LG strategic actions in addressing the challenges of CC impact to coastal zones

Time	Minutes per Activity	ACTIVITY	Learning Outcome	WHO	What is Needed
9:00 – 9:30	30 min	Session 1: Waking Up -Present current state of coastal zone management and its relationship with CC	➢ Discuss the current state of coastal zone in the country, Asia Pacific Region	3- Resource Person	Video Clip
9:30-10:00	30min	Workshop 1: Presentation of the current situation of the coastal zone	Discuss the current state of coastal zone in the LGUs	Grouping by LGU	Flip Chart, crayons,

		"What is the current state of your coastal zone –Yesterday, Today and Tomorrow?"			pens, magazines, pictures etc.
10:00-10:30	30 min	Plenary Presentation of the Workshop Output	Present the state of coastal zone in the LGU	Groupings by LGU	Workshop Output
10:30-10:45	**15 mins**	**Coffee Break**	➢		
10:45-11:45	60 min	Session 1: Introduction to Climate Change and its impact in coastal zone -Discussion on the legal mandate -The role of local governments in addressing the challenges of coastal zone management -Building Alliances with partners in addressing the impact of CC on coastal zone	➢ Discuss the current and future impact of CC on coastal zone	**Resource Person**	Laptop, LCD, videos, pictures
11:45-12:15	30 min	WORKSHOP 2 – Localized Mitigation and Adaptation Measures for Coastal Zone = Defining your Critical Next Steps	➢ Identification of mitigation and adaptation options of the LGU	Grouping by LGUs	Flip Chart, Pens, Action plan templates
12:15-12:45	30 mins	Plenary presentation of Group Action Plan	LGU Strategic Actions	Grouping by LGU	Workshop Output
12:45-1:00	15 mins	Synthesis and Integration			

Session Plan

Name of Training: Leadership

Name of Session: Local Leaders as Climate Advocates

Objectives of Session: Build the capacity of mayors and councillors to advocate for and undertake action to address the impacts of climate change

Target Group: Local Leaders and Policy Makers (Mayors, Deputy Mayors, Councillors)

Time	Minutes	Activity	Learning Outcomes	Who	Resources
9.00am	5 mins	Introduction: Why cities should plan for climate change (CC)	General understanding of why the topic is being introduced	Facilitator	Projector, laptop, screen
9.05am	10 mins	Key concepts: Mitigation and Adaptation	Understanding of key concepts & CC terminology	Facilitator	Projector, laptop, screen
9.15am	10mins	Video: What are the key impacts & risks to cities from CC	Understanding of key impacts & risks of CC in urban areas	Facilitator	Projector, laptop, screen, video (or video player)
9.25am	20 mins	Key concepts: Vulnerability	Understand concept of vulnerability & identify types of vulnerable places, groups & sectors	Facilitator	Projector, laptop, screen
		Plenary questions: What are the key hot spots in your local area? Who are the most vulnerable in those hot spots in terms of groups of people and/or sectors?		Facilitator, Participants	Flipcharts, pens
9.45am	20mins	Group Work: Climate Mainstreaming	Understand cross-sectoral nature of CC, need for mainstreaming &	Participants	Flipcharts, pens
		Part A: Questions			

Time	Minutes	Activity	Learning Outcomes	Who	Resources
		1. Local governments have responsibility for a range of sectoral plans, many of which would require modification to take the challenges of CC into account. What plans in your local govt would need to be modified? 2. If CC is being mainstreamed into existing plans, is there a need for CC plan? Why? What are the benefits?	of benefits/risks of adopting a Local Climate Plan		
10.05am	10mins	Part B: Feedback		Facilitator, Participants	Bluetack/tape
10.15am		Group Work: Strategic Planning for Climate Change adaptation	Identify key stakeholders that should be involved in local govt CC planning processes.	Participants	Flipcharts, pens
	15mins	Part A: Stakeholder Mapping			
10.30am	40mins	Part B: 1. Identify 3-4 key short & long term priorities relevant for adaptation in your local area 2. Identify 1-2 'win-win' adaptation interventions 3. What capacities and resources are needed & where will funding come from 4. How will progress be measured?			

Time	Minutes	Activity	Learning Outcomes	Who	Resources
		5. What are the key planning & implementation challenges?			
11.10am	15 mins	Part C: Feedback		Facilitator, Participants	Bluetack/tape
	10mins	BREAK			
11.35am	10mins	Plenary: Role of cities & local govts in disaster response	Understand role of local govts in responding to disasters & disaster response actions	Facilitator	
11.45am	30mins	Case Study: Preparing for Disasters Part A: Questions 1. Typhoon/cyclone season is approaching, what is the role of the local govt/Mayor in preparing the local community? 2. What are current community awareness activities? 3. How could these be improved? 4. Identify 3-4 challenges the local govt might encounter in preparing the community?	Understand need for community awareness about disasters & response, communication methods and key challenges	Participants	Flipcharts, pens
12.15pm	15 mins	Part B: Feedback		Facilitator, Participants	Flipcharts, pens
12.30pm	10 mins	Plenary: Climate Footprints	Understand concept of climate footprint, greenhouse gas emissions etc	Facilitator	Projector, laptop, screen
12.40pm	20mins	Group Work: Local Govts as Climate Role Models	Understand how organisations can reduce their own climate	Participants	Flipcharts, pens

Time	Minutes	Activity	Learning Outcomes	Who	Resources
		Part A: Questions 1. Identify 3-4 institutional actions that could help to reduce the climate footprint of your local govt (i.e. encourage staff to walk to work, use energy saving light bulbs, recycle) 2. How would you communicate this to your community? (i.e. 6mth profile etc)	footprint & act as role models for the community		
1.00pm	10 mins	Part B: Feedback		Facilitator, Participants	Bluetack/tape
1.10pm	10 mins	Conclusion/Wrap Up	Additional input from facilitator	Facilitator	Projector, laptop, screen
TOTAL	4.5hrs				

Session Plan

Name of Training: SOLID WASTE MANAGEMENT (SWM)

Name of Session: Climate Change & Sustainable Development

Objectives of Session: Orientation/ Briefing on Solid Waste Management and Climate Change

TIME	Minutes/activity	ACTIVITY (and detailed description if necessary)	Learning Outcomes	WHO is going to do it?	What is Needed?
9:00-10:00	1 hr	Introduction of SWM 3. Definition of SW 4. Definition of SWM 5. Salient Features of RA 9003 6. Classification of SW • Biodegradable Waste • Non-Biodegradable Waste • Hazardous & Toxic Waste	Discuss the concept of solid waste management Discuss the salient features of RA 9003 Discuss the types of solid waste	Resource Person	Projector & its associated facilities, PPT program
10:00-10:15	15 min	Collection of SW 3. In accordance to RA 9003 4. Existing Practice	Discuss the various methods of collecting solid waste	Resource Person	Images, Table listing the disposal methods and where it is practiced as examples
10:15-10:25	10min	Existing SW Disposal Mechanisms a. Open dumpsite b. Controlled dumpsite c. Sanitary Landfill	Identification of existing SW Disposal Methods	Resource Person	Photos of the different SW Disposal Mechanisms
10:25-	15 min	Coffee break			

10:50					
10:50-11:35	45min	Effects of Improper SW Disposal • Ecological Impacts a. water b. land c. air • Health Impacts • Socio-Economic Impacts a. Tourism b. Agriculture c. Fisheries	Identify the adverse effects of improper SW Disposal	Resource Person	Video, Images, PPT
11:35-11:55	20 min	Climate Change and Solid Waste Management • Overview of CC • Relationship of SWM and CC	Discuss the relationship between climate change and solid waste management	Resource person	LCD projector,laptop
11:55-12:45	50 min	Addressing CC issue through proper SWM **3. <u>Adaptation</u>** • Sorting of SW prior to final disposal at HH level • Raising Community Awareness • Environmental Law enforcement • Compliance monitoring • LG to implement SW policies directly targeting industries (particularly those that produce a significant amount of SW)	Identify practical adaptation & mitigation mechanisms to address SWM and its associated effects in exacerbating Climate Change effects	Resource person	Images, examples, PPT, game to role play the role of LG and City Stakeholders in compliance monitoring

		4. <u>Mitigation</u> • Sanitary Landfill Sites with collection of methane gas • Implement 3R concept • Composting in aerobic condition			
12:45-1:00	15 min	Exercise on waste characterization/classification	Application of theories learned re: waste classification	Resource Person	Metacards, board, pens, adhesive tape

Session Plan

Name of Training: **LGU'S RESPONSE TO CLIMATE CHANGE IMPACT TO WATER AND SANITATION**

Target Participants: **LGU (RELATED DEPARTMENT DOH, PLANNING OFFICE, ETC.**

Time: 4 hours sessions

TIME	Minutes/activity	ACTIVITY (and detailed description if necessary)	Learning Outcomes	WHO is going to do it?	What is Needed?
	30 minutes	WATER AND SANITATION Situationer (legal basis, backed with research case studies	Cognitive ; AWARENESS RAISING	Resource Person	PPT
	30 minutes	Presentation of Existing Programs to initiatives • Gaps • Coping mech and best practices	AWARENESS	Resource Person	PPT
	30 minutes	CC Adaptation and mitigating measures for water sanitation (national and international experiences)	AWARENESS	Responsible Person	PPT
		OPEN FORUM			
	45 minutes	WORKSHOP Issue analysis	Application		
		Break			
	1 hour	ACTION PLANNING			
	30 minutes	PLENARY			

Group 3: Mitigation Measures / Audit

Mr. Bernhard Barth facilitated the workshop by giving the participants a question on how the group would like to look at on the different issues identified such as Energy Use, Energy Supply, Water, Waste Water, Transport, Waste, Operations and Buildings in mitigation measures. He gave the participants meta cards to respond to the different issues stated above. Mr. Barth asked the participants to share their response in the plenary, and each participant gave their opinion on each areas and processed it.

In order to make it more realistic, he grouped the participants into two. The first group were assigned to observe whatever they saw inside the room, i,e. air-condition, fan, and other objects/article that can be mitigated. The second group were assigned to observed outside the room and look things which can be mitigated.

Their outputs were shown below:

1. Energy Use

    a. Lighting CFLs
    b. Turn on AC from 10AM and switch off when necessary
    c. Lights off certain hour i.e. 11:00pm (excluding hallway
    d. Fans can be switched off if not needed
    e. Fountain can switched off
    f. Use the blind only when necessary
    g. Reduce of flourescent lamp inside the room
    h. Use of natural air for ventilation
    i. Solar energy could be used to lighten the room

2. Energy Supply

    a. Solar lights (outside)
    b. Energy saver lights (inside)
    c. Charcoal in cooking
    d. Grid (alternative energy)
    e. Solar water heater

3. Water

a. Faucets (automatic)
b. Rain water harvesting to recharge ground water
c. Deep-well (rather than having water pumped)
d. Using raining water in tank by traditional in VN (rural area)
e. Use water efficient plumbing fixtures
f. Water closets
g. shower
h. Reuse water for plants
i. Waste water treatment

4. Waste Water

a. Recycled water to be used for gardening
b. Onsite wastewater treatment using mound system for septic tank effluent to comply with NPCP

5. Transport

a. Non-motorized (encourage walking)
b. Battery operated vehicles
c. Biofuel
d. Apprehension of smoke-belchers on campus

6. Waste

a. MRF
b. Composting
c. Bio-waste shredder
d. Compost organic waste and sell recyclables
e. Dried leaves can be composted to organic manure
f. Bio-disinfectant instead of synthetic one
g. Wilted flowers for biofertilizer

7. Operations

a. Xerox copies (recto-verso)
b. Reuse paper for memo (internal)
c. Manual use of lawn mower
d. Develop/implement green procurement program
e. Install sprinkler system in the building fed by water collected from rainwater tanks (fire safety)

8. Building

    a. Allow natural lights
    b. Building termites control
    c. Explore alternative ways
    d. Feng shui in building
        i. Wind-cooling
        ii. Lighting
        iii. Health
    e. The room is constructed not suitable for AC

Right after the sharing of their responses, the group identified the following priority actions that have to be undertaken immediately:

1. Composting
2. Energy policy
3. Awareness for participants on how to reduce energy
4. Explore with Universities setting up eco campus
5. Develop and implement green procurement program policy
6. WALK THE TALK

Group 4: Emission Profiling

Ms. Mamonong recounted the experience of Sorsogon in implementing their Participatory Climate Change Vulnerability and Adaptation Assessment. She said that there is actually a lot of challenges in finding the tool that could be used by the city to conduct the emission profile.

She then explained why energy and transportation is important in the issue of climate change. These two sectors are intensive users and consumers of fossil based fuel such as coal, oil and natural gas. These fossil fuels contain hydrocarbons. Upon combustion, energy is released and harnessed for our use. However, with the consumption of energy, carbon dioxide is also emitted into the atmosphere. The added release of carbon dioxide due to

human activities intensifies the "warming function" of water vapor and other greenhouse gases in the atmosphere.

She also thoroughly explained the formula on how to compute for carbon dioxide emissions based on raw use and electricity consumption.

The following were the issues/questions that emerged after presentation:

Issues/Questions	Resolutions/Answers
For a big city like ours, do we consider spatial analysis?	If your data allows you to do spatial analysis, that would be good. Big cities can do it because they know where their big concentrations are. There are other areas. We tried to do waste characterizations but we had problems with the information and the city had problems with compliance to the national law on waste management and the city was not comfortable doing analysis of their solid waste management.

After the discussion, the following four (4) questions were posed to the group:

1. Identify the major sectors in the city that should be considered in developing the emission profile of the area. Why?
2. Are the data needed for the sectoral emission profile available? Where do you source it from? Are there perceived constraints?
3. What are the possible actions to take in addressing the constraints?
4. Have you identified a methodology to use in doing the emission profiling? (Share and explain.)

The output of each country is as follows:

Country	Q1	Q2	Q3	Q4
Mongolia	Energy sector, Heating and boilers	Research reports on pollution, World bank also made a report. City reports.	First, design research of profiling for planning mitigation measures. 2nd, survey of existing resources. 3rd, conduct GHG profiling.	Technologies related to the spatial profiling like GIS and poverty models and meteorological and hydrologic data. Satellite info for estimating optical thickness. Absolute measure of as important as knowing where is high and low.
Indonesia and China	Major sectors contributing to GHG in major cities are transportation (private cars) and electricity's consumption (by households and industries). Most of power are generated by coal (or diesel), and all cars are with	Data are available; the state-run power company has a detailed record on the consumption or use of power per category of users (sub-classes of income groups and type of industries). Similarly car registration in available. Constraints	However, we could take a safe assumption on the higher number for the sake a better plan (i.e., better preparation on the worst case scenario) Transport: car ownership where they own more than	We are thinking to use regular national or citywide household census to include the survey on energy consumption by individual household. If this method has been used for general statistical data

	the combustion engine.	mostly come from the "willingness to share" those data, in the assumption about "losses" and the real usage pattern by consumers. Power station and household use	1 car. We cannot assume that they always use all the cars. Do foot printing through regular census.	then why not to utilize this for GHG's consumption. We think we can try this part of a new practice in all local cities.
China	Nuclear power Traditional power		Need for more research on existing emission	
Sri Lanka and Bangladesh	Residents Industries commercial industrial solid waste transport	available	Difficult to get data from the bureaus so we can contact directly the higher officials	Use existing methodology as presented
Fiji and Samoa	Energy (electricity) Transport (fuel) Solid waste (landfill) commercial residential Maintenance and construction	Available but not sure if updated Leach, local government re levy on every towerage FEA re availability and relevance of data LTA, service stations re consumption of fuel/city	Availability and validity of data Consulting with stakeholders Getting approval from cabinet level in order for private services providers to provide/make information	Traffic survey. There is no methodology applicable for the South Pacific and, therefore, have to do more research. Financial support to carry out activities Background study then

			available Technical expertise	survey of different sectors Analysis and review Endorsement by international party or government
India		Lack of data and capacity to collect and analyze data	Awareness workshop	Identify key sectors and establish project committee and working groups per sector
Vanuatu	Energy Transport Waste Industry Commercial	Data available from power company, energy department, customers dept, PWD, statistics dept, municipal council Constraints: Reluctance to share data, no proper records of data, data format not useful for profiling	Surveys Workshops Review of data	IPCC methodology UNHABITAT methodology
Vietnam				
PNG	Energy provider, Ministry of Transport, Industries,	National Statistics Office PNG Power Ministry of Transport	Awareness workshop – invite key sectors/ stakeholders	Methodology: 1. Identify key issues 2. City consultation

	Buildings and Construction	Chamber of Commerce Building Board Research Institutions UNDP Data is available in most sectors. Constraints: Data gaps, lack of data and accessibility Lack of capacity to collect and analyze data as well as interpreting data, lack of resources including finance General reluctance to share data between sectors. Many sectors carry out their own sectoral research but are not willing to share with other sectors/partners. Sometimes different sectors give different data on same issues, so how do we verify the data?	and engage them as important partners in profiling. Getting their commitment is important. It is more of a stakeholder consultation.	to identify key issues and personnel 3. Form a project steering committee with key officials from the sectors, usually the head of the dept. 4. Form a technical working group (TWG) made up of key technical staff from each sector and they should formulate action plans on how to collect data. 5. Form thematic working group under each sector and get additional people (students) to assist in carrying out survey to collect data

Session 8: Developing Climate Change Plans
Dr. David Dodman
Senior Researcher
Human Settlements and Climate Change Group

Developing local climate change plans is a process-based tool that provides local policy makers and key stakeholders with a procedural framework to help with the development of local climate change plans that recognizes priority of adaptation in low and middle-income countries.

The intended outcome of the tool is to make more cities resilient. These cities create, enable and sustain the services and institutions required for basic on going survival and are characterized by their ability to generate new opportunities for their residents. They avoid relying on solutions that depend on anticipating specific hazards and instead take a broader, integrated approach.

The tool outline was discussed to walk-through the participants on the toolkit.
After this, the Sorsogon Case initiative was discussed by enumerating the main activities that transpired during the process of coming up with their Climate Change Plan.

The following issues and questions were emerged after the presentation:

Issues/Questions	Resolutions/Answers
In coming out with the CC Plan, have you included the CC plan in any local government Statutory Plan?	CLUP and CDP statutory plan to integrate the CC plan. For the shelter plan it targets on the enhancement of CDP but for inclusion in the physical component of the CLUP. You don't really provide a new plan, but input these into existing process to improve the statutory plans.
We know that strategic planning entails multi-stakeholdership and consensus building but CC will potentially affect investments where LG cannot interfere, how will the plan hurdle this?	The planners are the ones who have done analysis on VA, through coaching. Ownership is very critical at the local level.
How did you incorporate migration trends in the Climate Change Plan?	On the migration side, it started with the shelter planning, not only in a structural approach but also in future trends of migration, includes natural growth and carrying capacity, since it is also anticipated that disaster happens, it is already embedded in the plan, and this is already integrated in their CLUP. Uncertainty is the most crucial aspect of

	planning for CC. projections on urban growth, it is always wrong. Deal with uncertainty than on specific scenario, focus on flexibility and responsiveness.

Site Visit to International Rice Research Institute (IRRI)

The site visitation of participants in IRRI was very interesting in the way that IRRI presented their programs through a video presentation. The video highlighted the history of IRRI and their different programs related to the research of variety of rice. The scientific research of variety of rice which is suitable to the needs of the farmers in the Philippines is their priority and to other Asian and the Pacific countries. Following the video presentation, an open forum was made.

The following issues and questions were emerged after the presentation:

Issues/Questions	Resolutions/Answers
What variety/type of rice do the Filipinos like?	The Filipinos eat any variety/type of rice as long as it is clean and is good for consumption.
Is Philippines importing rice?	Yes, Philippines is importing rice, but only ten percent (10%). This is due to rapid increase of population in the country. The Philippines has a problem on the insufficient harvest facilities.
In terms of breeding, what kind of rice does the Philippines adopt in planting? Is it long or short stem variety of rice?	As to the climate of our country, we experiencing almost twenty four (24) typhoons annually, Philippines adopted the short stem variety of rice as the long rice stem is not advisable. The IRRI has a new variety of rice that is called "Scuba Rice". This kind of rice can submerge to water for two weeks. This variety is planted if the area is prone to flooding. IRRI has an ongoing rice project called Aerobic Rice.
Is IRRI adopting the climate change program?	IRRI has a program on climate change and it is handled by one of our divisions.

Site Visit to Institute of Plant Breeding (IPB)

Ms. Marlyn Beltran of the Institute of Plant entertained the participants and soothingly facilitated the discussion regarding the programs that the IPB's have. The **Institute of Plant Breeding (IPB)** is a research institute of the University of the Philippines, Los Baños. It is the national biotechnology research center and repository for all crops other than rice, which is handled by the International Rice Research Institute.

It traces its roots to the Plant Breeding Division of the Department of Agronomy, College of Agriculture. In 1975, President Ferdinand Marcos elevated the Division to an Institute and provided additional funds for new facilities and expanded research initiatives.

Core functions

- Develop new and improved varieties of dry land crops
- Conduct studies in plant breeding and allied disciplines related to crop improvement
- Collect, introduce, preserve, and maintain germ plasm of important and potentially useful agricultural and horticultural crops
- Assist other agencies in multiplying quality seeds and vegetative materials of recommended crop varieties
- Promote wide scale use of IPB varieties and ensure that seeds are made available to small farmers

Divisions and laboratories

- Cereal Crops Division
- Feed and Industrial Crops Division
- Fruit and Ornamental Crops Division
- Legume Crops Division
- Vegetables and Special Crops Division
- Plant Pathology Laboratory
- Entomology Laboratory
- Plant Physiology Laboratory
- Extension Division
- Genetics Laboratory
- National Plant Genetic Resources Laboratory
- Biochemistry Laboratory
- Plant Cell and Tissue Culture Laboratory
- National Seed Foundation

She also shared samples of IPB research, which are the following:

- Papaya Ringspot Virus (PSRV)-Resistant
- Fruit and Shoot Borer Resistant Eggplant
- Multiple Virus Resistant Tomato
- Mutation Breeding of Philippine Avocado
- Ornamental plants

Further, she imparted the participants that IPB has a strong linkage to local government units especially on the agricultural provinces, cities and municipalities. They helped directly to the farmers.

The following Issues and questions that emerged after the presentation:

Issues/Questions	Resolutions/Answers
Does IPB adopt climate change programs?	Going to the process of breeding plants, the IPB is working and adopting climate change in all programs. It closely works on the environmental friendly aspect.
Does IPB promote GMOs?	Yes. As discussed on the sample of IPB's research.

Following the site visitation, the group decided to visit the Philippine Arts Center, which is located in the heart of Mount Makiling. In there, participants experienced the fresh air and the overlooking view of the place where they can see the Lake of Laguna and Laguna de Bay among others.

At 4:30PM the participants decided to go back to the Training Center and resume the activity proper.

Group Workshop

After the site visit, the group was divided into three to further work on developing local climate change plans.

LOGOTRI-AP Group

Dr. David Dodman posed the following questions to the members of the group regarding their impression on the complexity of the toolkit:

1. What do we think of the overall tool kit?
2. Which section of the tool kit did we think was too complex?
3. Which section of the tool kit did we think was too simple?

The following are the group's output:

1. **<u>What do we think of the overall tool kit?</u>**
   At first glance, the tool kit appears like a book/essay instead of a tool kit. There are too many words and tables. Perhaps, you could add more visuals such as flowcharts, diagrams, images. And perhaps while explaining or describing a point, give practical examples of existing practices.

   We weren't sure whether any country could use the tool kit. The question we asked was 'Can we use this plan? Why should we use this guideline instead of other existing guidelines? Who in the LG can develop and understand this tool? etc, etc. Perhaps, you could give a brief introduction at the beginning of the kit.

   We reviewed section 2.3 & 2.4 independently of the rest of the document. It should be highlighted at the commencement of every section to read section 1 first for the flow of process and ease of understanding.

   The kit should be made more 'user friendly' for ease of understanding and practicality.

2. **<u>Which section of the tool kit did we think was too complex?</u>**
   The whole kit was a bit too complex. We think that the following should be taken into consideration:
   1. The work load of the LG and their availability to read the kit and think about it, etc, etc
   2. English is not the first language of most South Asian countries, perhaps you could have an executive summary in non-technical language that even the non-specialists can understand.
   3. Predicting Climate Change – you emphasized on the use of computer models as the best model of predicting climate change. If a CC model is not available for our city, are we supposed to do one? This can be a costly and time-consuming exercise. Are there any other simpler yet effective ways of predicting climate change for our city?? Perhaps, you could classify the means and include it as a cheaper, simpler alternative to the use of computer models.

3. **<u>Which section of the tool kit did we think was too simple?</u>**
   Sources of Information – it is very easy to source information, but how does the LG assess that the information is reliable to use in the city and how can we assess its relevance to the city?

You also missed out on Regional Data – in the South Pacific for example, NGO's and other Regional Organisations carry out sea-level monitoring through various means. Are Regional Organisations covered in IPCC or Scientific Publications?? If it is, pls explain.
If Regional Data, internet and the IPCC data is all available, and if they are inconsistent against each other, what do we do next?

We think that you should include as one of the key factors to consider when understanding the CC impacts is the socio-cultural/social - economic environment. You've mentioned human health, but what about the reaction of the community, be it positive or negative to the impacts? In the Pacific, there is a strong cultural link between the land and the people, it is a source of identity for most and is part of our cultural background. Generally, it is a sense of ownership that one has with the land……(not sure if I've made a point).. From our experience, this usually develops into a complex subject as you focus more on human geography, behavior, etc, etc. So perhaps, you could just have a guideline about the positive reaction to the CC and the negative reaction to CC!!

There are no Quality Assurance factors in the guideline. We suggest that guidelines for QA Reliability, Relevance, Validity of the information used and the overall plan, etc, etc be included in the Introduction section of the Tool, just for house-keeping and so that you don't have to mention it again.

LOGOTRI PhilNet Group

Ms. Oppus facilitated the discussion in the LOGOTRI PhilNet Group. They have agreed that the discussion will focus on how to make the LOGOTRI PhilNet active on climate change. They have discussed the following:

1. Tools
2. Session plans
3. E-group
4. Initial channels for CC training and advocacy – LG Officials, Functionaries and LDC member NGOs
5. RA 9729 – increase awareness first of LGUs
6. Programs on CC which can be considered under accreditation
7. Identification of experts in the regions
8. Re-echoing of learning from training among peers
9. Board members already agreed to support RA 9729
10. How to work with DILG and establish partnerships

Agreement has been forged within the LOGOTRI PhilNet Board, concerning the conduct of this program. CC initiatives with regard to RA 9729, among the PhilNet Group can coincide within the Extension Services.

What can the PhilNet Group do eventually is to design programs on CC then consider it for accreditation. However, we must not rush to have a program to be accredited. What they can do now is work within their own spheres, search opportunities with LGUs in partnership programs on climate change.

The PhilNet is a Network of institutes egaged on training and research for local governance, Their task is to establish an expert group on CC within their areas as partners and potential PhilNet Members.

In this way, they don't have to compete with other training institutions such as DILG, they can jointly tap clients so that if ever that they will be creating programs for accreditation, they don't have to compete with the DILG in delivering programs on CC. Representatives from the DILG commented that through the MSAC (Multi-Stakeholder Advisory Council) in the LGRRCs (Local Governance Regional Resource Centers) efforts can be jointly delivered to local governments who need it. The LGA needs to inform the DILG Regional Offices on the participation of LOGOTRI PhilNet members on CC initiatives such as this so that the Regional Offices can acknowledge them as partners of local governments in CC undertakings. This can coincide with the task of the DILG in pooling resources through the LGRC.

They have agreed that they have to start off with a CC customized program, with identified experts in the regions based on the STEWARD framework for the LGUs under the Extension Program with the DILG's (LGRC) to enable local governments to come up with their local climate change action plans.

Developing Climate Change Plans

Mr. Bernhard Barth introduced session 7 by giving the objective of the session. The session's objective is for the participants to understand climate change plans and understand when climate change plans are relevant as well as the importance of mainstreaming of the plan. He then grouped the participants into three (3) groups.

Group 3 composed of the following:

1. Ms. Atik Kumala Dewi – LOGOTRI-Indonesia
2. Ms. Pragya Rajoria – LOGOTRI-India
3. Ms. Georgina Numbasa – Papua New Guinea
4. Dr. Pham Van Bo – Viet Nam
5. Mr. Kemal Taruc - Indonesia
6. Mr. Marlon Era – LOGOTRI-PhilNet
7. Ms. Megan Praeger – Fiji
8. Ms. Julieta Aparecio – LOGOTRI-PhilNet

Group 3 focused on the approaches on Climate Change Planning. Mr. Barth requested the participants to brainstorm on the given tasked (framework) and share it to the plenary. The group reviewed the framework on Approaches on Climate Change Planning and shared their ideas on the enhancement of the framework. Below is the revised Approaches to Climate Change Planning as of March 10, 2010

Approaches to local Climate Change Planning

Approach (not mutually exclusive)	Appropriate Situation (when to use this approach)	Key Needs (Legislative, Technical, Financial, etc)	Potential Strengths	Potential Weaknesses	Examples
Mainstreaming into Existing Plans	○ Existing and regularly updated urban plans (e.g. land use plans, development orders, sector strategies) ○ Existing plans are funded and implemented ○ National legislation requiring integration of Climate Change concerns into existing plans.	○ Political support for process ○ Legal and institutional scope for mainstreaming ○ Legal requirements	○ Strongest potential for resulting in systemic changes that take CC into account	○ Risk of overlooking needs of the most vulnerable groups	○

Local Climate (Action) Plan	○ Can support / drive mainstreaming into existing planning framework ○ Can potentially attract funding and support ○ Can address gaps in existing plans	○ Political support for process ○	○ Easy starting point / doable without external support ○ Flexible	○ Initially not comprehensive ○ Implementation may include mainstreaming and hence implementation may be difficult ○ Short or medium term	○
Local Comprehensive Climate Change Plans (stand alone plan)	○ Political support for this approach ○ Statutory plans non existence, outdated, poorly implemented and/ or not funded ○ Legal requirement for explicit CC plan	○ Political support for process ○ Financial and technical support to develop plan	○ May help to facilitate coordination between stakeholders ○ Possibly a more appealing prospect for attracting funding	○ Difficulty in ensuring that systemic change results	○
Sector-Based Climate Plans	○ Lack of political commitment for city-wide planning	○ Relatively strong utilities (e.g. electricity, water)	○ Focused and specific	○ Inadequate focus on social nature of vulnerability	○ LG provides incentive for privately owned Utility

	○ Driven by national ministry or relevant authority			○ Local government may not have any authority over certain sectors	to develop climate plan
Community-Based Climate Plans	○ Lack of political commitment for city-wide planning ○ Strong localised risks	○ Strong civil society organizations	○ Likely to address needs of the most vulnerable groups	○ Limited capacity to address infrastructural needs	○
Major Interventions as Entry Points	○ Presence of major urban interventions	○ Support from donor / implementing agencies	○ Focused and specific	○ Does not address broader issues of vulnerability	○ slum upgrading ○ water and sanitation ○ drainage systems

Day 4
March 11, 2010

The day started with the presentation to the plenary of the outputs of the workshops on the assessment of the tool kit.

Workshop

The group was then divided into two for another workshop. There were two groups, the CCCI group and the LOGOTRI group. The groups were formed to formulate their Next Steps on Climate Change Initiatives in their respective countries or institutions.

CCCI group

After the presentation, Ms. Angela Pinzon gave the workshop guidelines in drafting the Scoping Study on Cities and Climate Change. Each country should work on the following document and fill up the necessary details on how it applies to their respective countries:

Draft Executive Summary of (name of country) Scoping Study on Cities and Climate Change

1. Introduction
   - What global climate change agreements has (name of country) signed?
   - Summarize likely climate change impacts in (name of country)
   - Status of Urbanization in (name of country)

2. National institutional structure to address Climate Change Impacts and the role of cities in (name of country)

National Institutional structure to address climate change role of cities in that structure

3. National Policy Framework for Climate Chneg Measures in (name of country) Cities
   - Urban Management arrangements, decentralization and urban financing mechanisms in relation to climate change
   - Key national sectoral policies/strategies/plans and programmes that address clmate change impacts
   - Summarize your key Climate Change Response Measures by sector in Cities (emphasis in urban linkages)
4. Summarize key Climate Change related stakeholders and (potential partners) at

the city level in (name of country)

- Identify additional missing key urban sector stakeholders that should be included
- How to strengthen multi-stakeholder support, coordination mechanisms and enhance urban management, governance structures and policies for more effective and sustainable urban climate change responses
- Identify potential additional urban sector partnerships (Univeristies, NGOs) identify their capacity building needs

5. Inventory of tools for addressing climate change in cities and identification of capacity building needs in (name of country)

    - Brief summary of the tools that are available / (being) used for addressing climate change (GHG emissions, vulnerability assessment; identification of futire risks and benfit for adaptation and mitigation measures, CDM, green buildings, building codes, land use guidelines., etc.)

The following were the groups' outputs:

SAMOA

Draft Executive Summary of
SAMOA Scoping Study on Cities and Climate Change

1. Introduction

- What global CC agreements has Samoa signed?
    - ✓ UNFCCC 1992 ratified in 1994
    - ✓ Kyoto Protocol 1998 ratified in 2000

- Summarise likely CC impacts in Samoa
    - ✓ Sea Level Rise (affects watertable, loss of coastal land)
    - ✓ Exposure to frequent cyclones
    - ✓ Vector-bourne diseases (related to poor waste management)
    - ✓ Tourism sector (coastal flooding, degradation of coastal ecosystems)
    - ✓ Infrastructure (drought will reduce hydropower generation)
    - ✓ More frequent floods

- Status of Urbanisation in Samoa

- ✓ Estimated population of 7000 i.e. 40% of population in urban area with the bulk concentrating in Apia area
- ✓ Pressure on aspects of land use development, infrastructure and provision of social services
- ✓ Dominated by freehold land
- ✓ Noticeable is a growing number of non-traditional villages around Apia

2. National Institutional structure to address Climate Change Impacts and the role of cities in Samoa

- ✓ Head of State acts on the advice of Cabinet
- ✓ Cabinet comprises of the Prime Minister and ministerial heads
- ✓ National institutional structure to address CCRole of Cities in that structure

4. National Policy Framework for Climate Change Response Measures in (name the country's) Cities

- Urban Management arrangements, decentralization and urban financing mechanisms in relation to Climate Change.

- Key national sectoral policies/ Strategies/ Plans and Programmes that address Climate Change Impacts.

- Summarise your Key Climate Change Response Measures by sector in Cities (emphasis on urban linkages)

VANUATU

Draft Executive Summary of
Vanuatu Scoping Study on Cities and Climate Change

1. Introduction

- What global CC agreements has Vanuatu signed?: UNFCCC, KP, IRENA, (UNCBD, UNCCD)
- Summarise likely CC impacts in Vanuatu: Coastal Zone (erosion, flooding, sedimentation, coral bleaching, salination of water, relocation of communities/infrastructure) Water (Salination, shortage, contamination) Agriculture (heat stress, water logging, production decline, food shortage)
- Status of Urbanisation in Vanuatu: 2 towns, 5 provincial centers, population of 240'000, 25% of national population living in urban centers, 75% of national population in rural areas, significant rural urban drift.

2. National Institutional structure to address Climate Change Impacts and the role of cities in Vanuatu

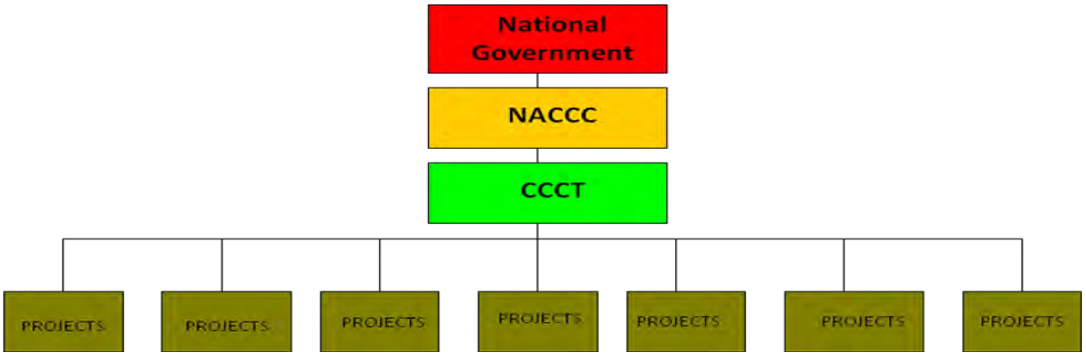
The National Advisory Committee on Climate Change (NACCC) is the Government entity mandated by the Council of Ministers (CoM) by CoM Decision 458 of its 93rd Ordinary Session of June 2000, to oversee the implementation of all climate change activities emanating from the United Nations Framework Convention on Climate Change (UNFCCC) and through any bilateral or multilateral initiatives.

The NACCC is essentially the only body that is formally recognized by the CoM to implement a Multilateral Environmental Agreement (MEA) for the national Government. The Committee is made up of director level representation or technical reps from Government sectors and also includes a Women's rep and an NGO rep.

The committee advises Government on issues relating to climate change and provides overall guidance and direction to all climate change projects under its oversight. The NACCC also plays the crucial role of sourcing climate change funding for the implementation of Vanuatu's adaptation and mitigation priorities.

The NACCC is further strengthened by a multi-sectoral technical arm known as the Climate Change Core Team (CCCT). The CCCT is the implementing arm of the NACCC and conducts on the ground implementation of project activities for the various project initiatives that fall under the oversight of the NACCC.

The NACCC is Chaired by the Director of the Vanuatu Meteorological Services (VMS)/UNFCCC National Focal Point.



3**. National Policy Framework for Climate Change Response Measures in Vanuatu Cities**

Vanuatu has an overarching climate change policy that defines the roles and responsibilities of key sectors including Local Authorities in the national climate change process**.**

- Urban Management arrangements, decentralization and urban financing mechanisms in relation to Climate Change. No mechanisms set up as yet at this level to address cc. CCCI will start this work for Vanuatu

- Key national sectoral policies/ Strategies/ Plans and Programmes that address Climate Change Impacts. Currently, mainstreaming CC into agriculture, forestry and infrastructure policies and plans. Fisheries, water and tourism policies will be next.

- Summarise your Key Climate Change Response Measures by sector in Cities (emphasis on urban linkages) No climate response measures as yet for cities but Vanuatu has identified national adaptation priorities for implementation under the Vanuatu NAPA. CC response for cities will start with CCCI.

VIETNAM

Draft Executive Summary of Vietnam Scoping Study on Cities and Climate Change

Climate Change Impacts in Viet Nam

- Average temperature increased 0.7oC over past 50 years
- Sea levels increased about 20 cm during the last 50 years
- Typhoon become stronger and move southward and its season shifts to later months of the year.
- Heavy rainfall increases causing severe floods which occur more frequently in the Central and Southern VN.
- Drought happen every year in most regions of the country.
- CC already caused severe natural disaster, especially typhoons, floods and droughts.

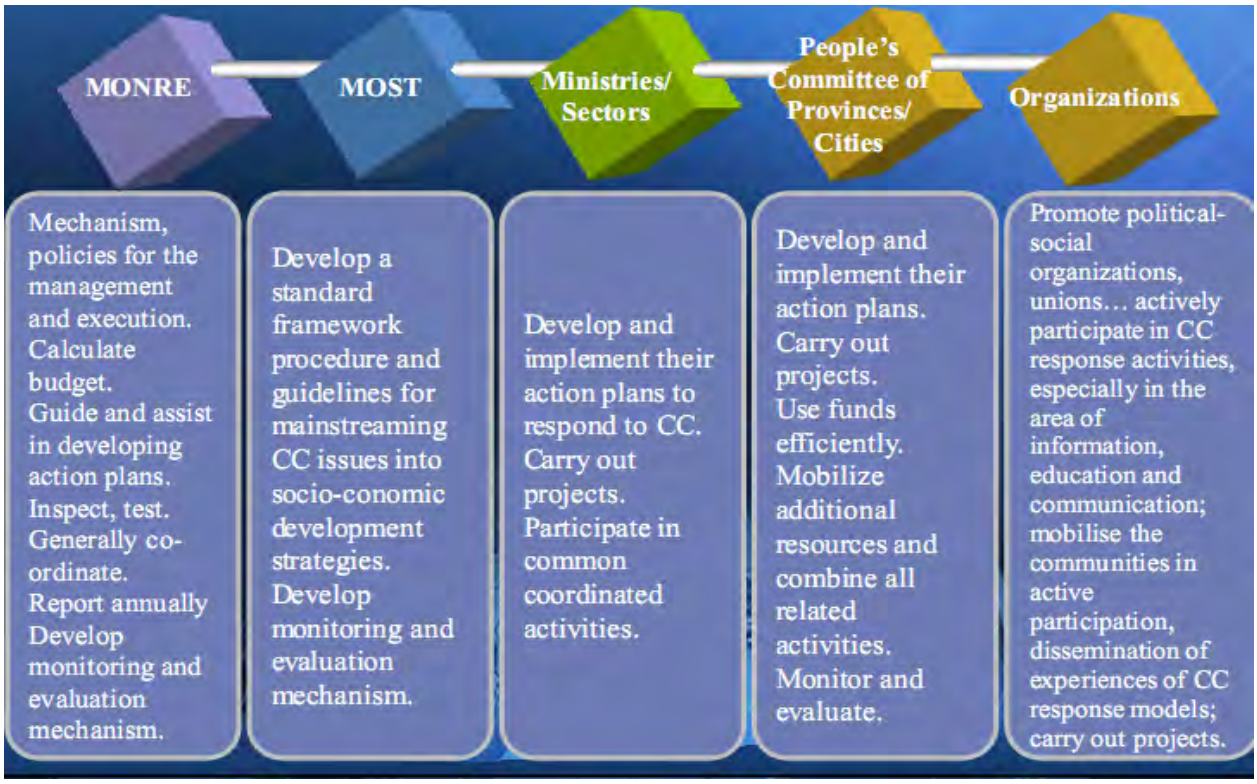
Urbanization and Climate Change

- Current urbanization's level in Viet Nam is 29.6% in 2009 and expected to rise to 40% by in 2020
- CC will create great impacts in urban areas:
  - Irreparable costs because big cities and large infrastructure facilities are distributed along the costal areas
  - High urban densities lead to exposure to major vulnerabilities and natural hazards
  - Urbanization of poverty in the context of increasing rural – urban migration
- Urban growth and industrialization lead to major emission of GGH

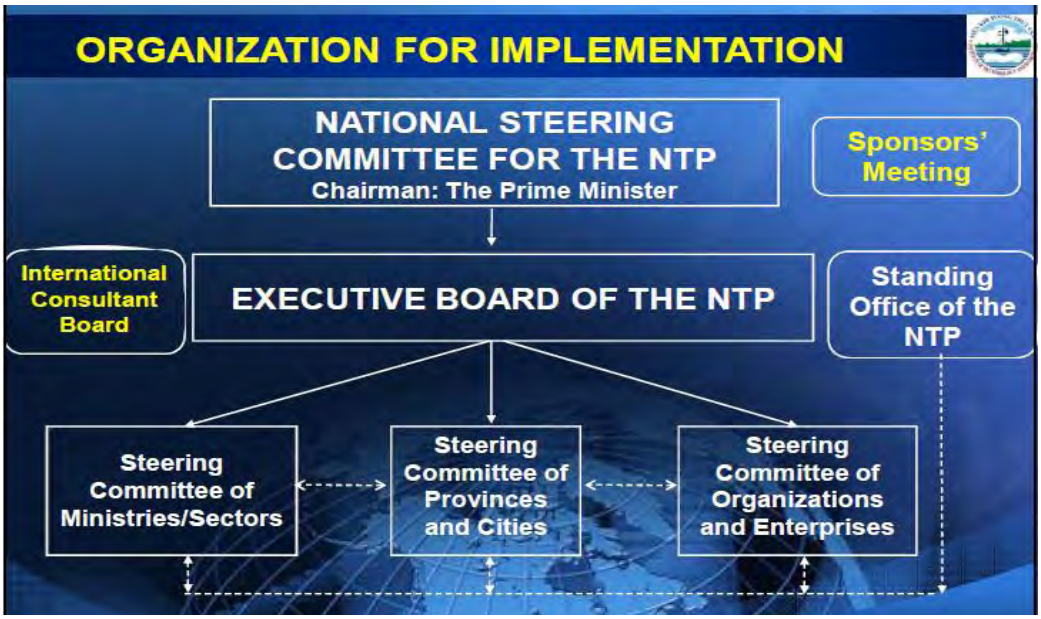
Signed UNFCC in June 1992 and ratified it on Nov. 16, 1994, and ratified Kyoto protocol on Sept. 25, 2002

- Ministry of Natural Resources and Environment is assigned by the government to be the National Focal Point to take part in and implement UNFCC and KP
- National CC Committee
- CDM Designated National Authority
- CC Office
- International Support Group

Sectoral Roles and Responsibilities



Organization for Implementation



Key CC Stakeholders at the City Level

- Leaders and staff of city government office
- Community, Business sectors, Social organizations (Youth Union, Women Unions etc), Army Force
- Training institutes/organizations: ACVN, ACM, NGOs
- Mass media organizations

International Supports

- Danida: assessment of CC impacts
- Worlbank: research, local CC plan for Can Tho and
- ADB: scoping study for HCM city
- Rockefeller: challenges to change, supporting to NGOs for projects at community level
- JIBIC
- Donors – support group including UN agencies, Netherlands, SDC etc
- Others (City Alliance, WWViews etc): advocacy projects

UN-HABITAT Response to CC in Vietnam

National Level

- National Target Program
- Member of the PCGs for Disaster Risk Management and Sustainable Development
- Cooperation with UNDP on Policy Paper on CC and Urban Development

Urban Sector / City Level

- Support to housing policy (MOC/ACVN) formulation with CC focus
- Capacity building and training for urban managers in dealing with CC challenges (AMC/ACVN)
- Mainstreaming CC responses to CDS and CDIA (i.e., Quang Nam PDS, Thanh Hoa CDS)

Project Level

- Replication of People's Process and Sustainable Cities Program approaches
    - Improvement of living conditions for Boat's People in Hue
    - Solid Waste Management: composting at small scale

Tools for CC

- At national level
  - 3 scenarios assessment
- At city level
  - Climate Change local planning (Hanoi, Can Tho) - WB
  - Vulnerability and Adaptation Assessment HCM City – ADB
  - CC adaptation at community level (Rockefeller)

National Scoping Study

- Review urbanization process, trends and governmental related policies re CC
- Analyze different urban patterns and issues such as land use, housing, infrastructure and the institutional system related to climate change impacts and vulnerability
- Provide recommendations on climate resilient urban development policies

Methodology

- Secondary data collection
- Desk review, assessment
- Stakeholder analysis/mapping
- Key informants interview
- Synthesis and proposal

Challenges

- Lack of information related to urban sector
- Vertical and horizontal coordination among sectors are insufficient
- Weaknesses and contraints on the government committment for capacity building activities
- Gaps from planing to implementation
- Poor CC awareness among decision makers, officials in sectors and localities and vulnerable communities
- CC not well integrated into sectoral and regional development policies, plans and programmes
- Lack of tools and methodologies to instruct and advise decision makers
- Uncertainty about the future impacts of climate change

PAPUA NEW GUINEA

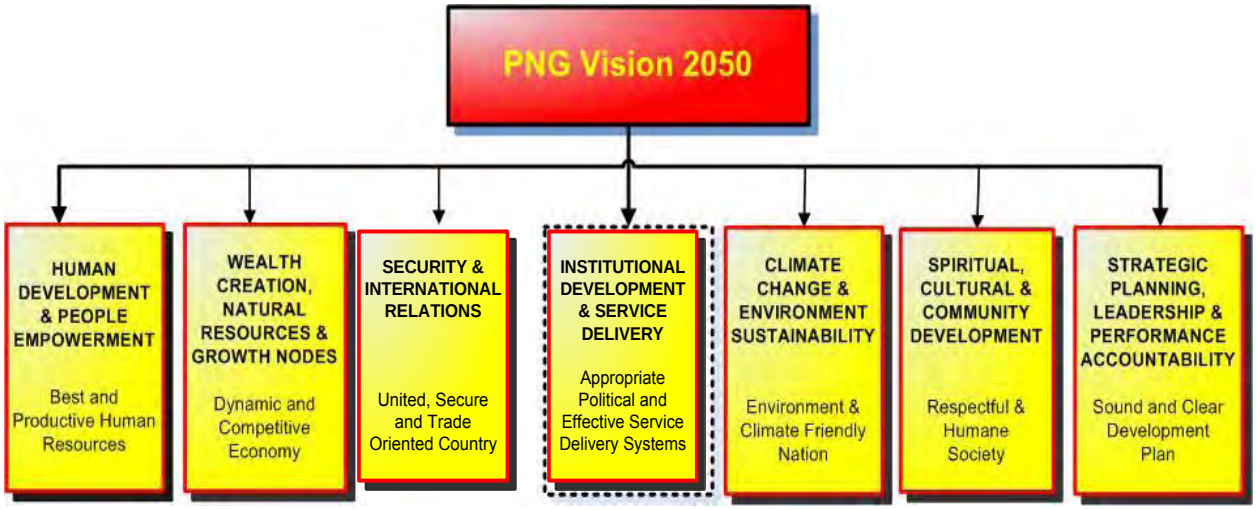
Brief Background

- Country of more than 800 languages & more than 600 islands and atolls
- Population of 5.2 million
- 97% of land is under customary ownership & 3% is alienated land

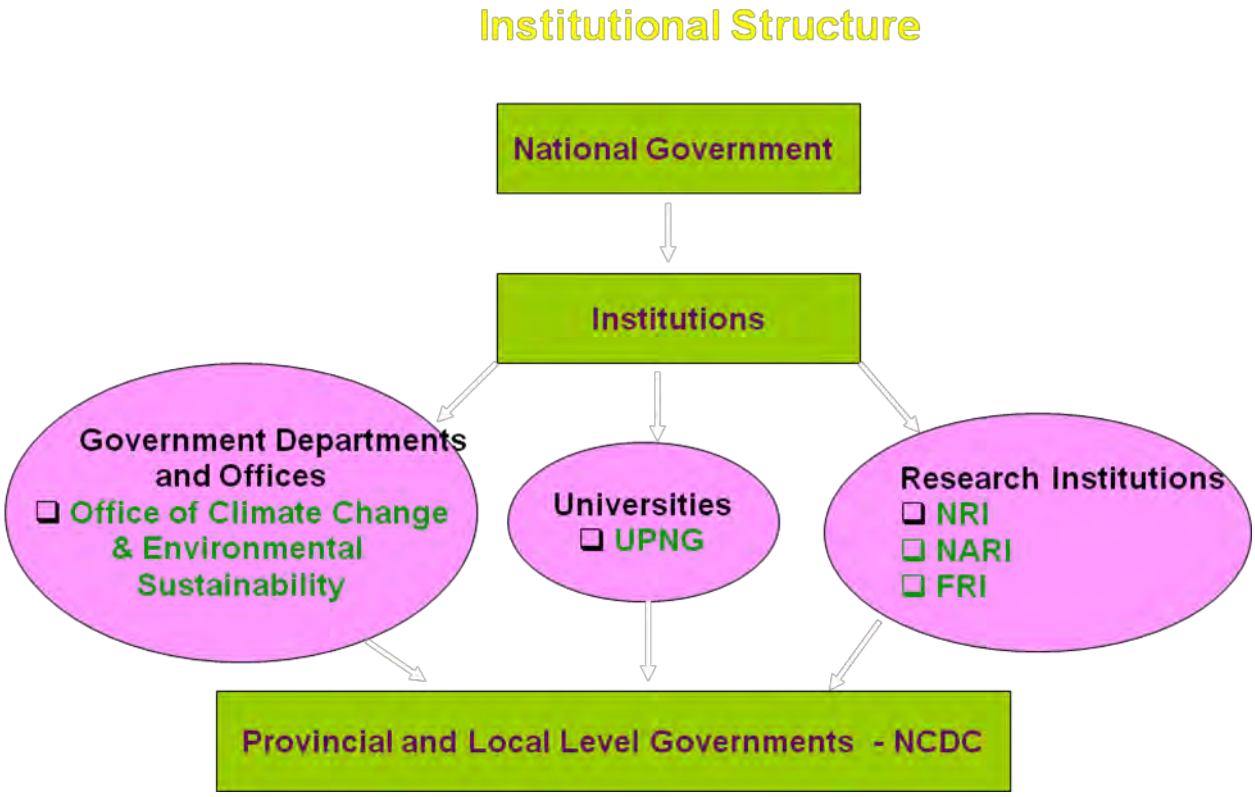
Global Strategies to Reduce Enhanced Greenhouse

- International responses
  - Toronto Convention 1988
  - United Nations Framework Convention on Climate Change (UNFCCC – Rio 1992)
  - Kyoto Protocol 1997
  - Intergovernmental Panel on Climate Change (IPCC) 1988 – 2005 …
- ……PNG signed/ committed to all

The National Government Commitment to Climate Change



Institutional Structure



PNG Vision 20/50 Pillar No. 5 is the National Government's commitment to addressing Climate Change Issues and Environmental Sustainability

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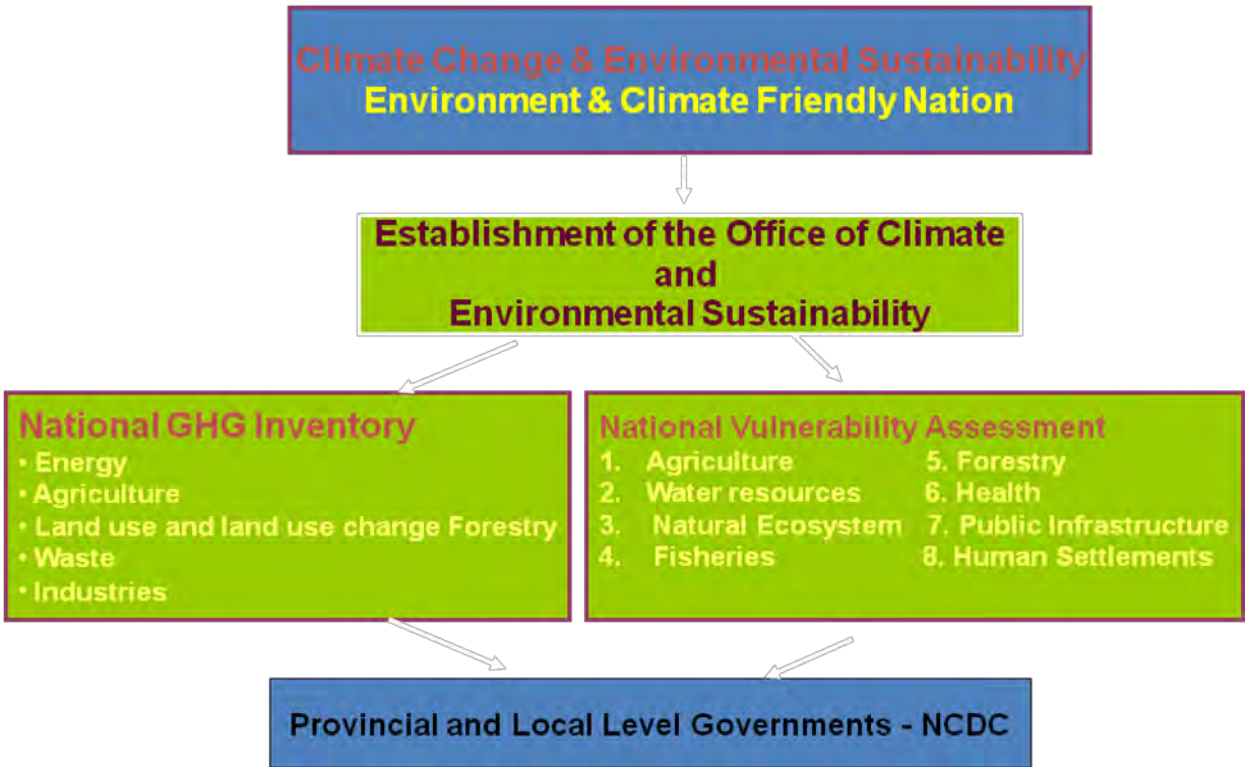


PNG National Vulnerability Assessment Objectives

The objectives of this survey are;

- To collect baseline data on the vulnerability levels of the eight priority sectors in all the 20 provinces of PNG for adaptation planning and necessary actions.
- To establish dialogue and linkages with Provincial Administration and relevant stakeholders in the provinces for collaborative actions on climate change issues.

Challenges

- Lack of information and accessibility
- Data gaps
- Reluctance to share data
- Lack of capacity to collect and analyze data

- Methodological issues

Immediate Steps to Take

- Report of this workshop to gage support of top management (March)
- Organize a training workshop for concerned stakeholders (April)
- From this workshop form a Technical Working Group (April)
- This group (TWG) will work to collect data (April-May)
- TWG to report back (End May)

Resource Mobilization

- National Budgets through the Office of Climate Change and Environmental Sustainability
- International Support through UNDP-GEF, World Bank, UN Habitat
- Local Government Budgets as part of their work plan
- Universities as part of capacity building in teaching and research

INDONESIA

Introduction (1): **CC agreements has signed**

- **United Nations Framework Convention on Climate Change (UNFCCC or FCCC) held in Rio de Janeiro, 1992**
  - to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system
- **United Nations Climate Change Conference held in Bali, Indonesia, 2007**
  - Agreement on a timeline and structured negotiation on the post 2012 framework (Kyoto Protocol)
- **United Nations Climate Change Conference held in Copenhagen, Denmark, 2009**
  - establish an ambitious global climate agreement for the period from 2012 when the first commitment period under the Kyoto Protocol expires

Introduction (2): **CC impact on cities in Indonesia**

Observation of temperature increase in many cities in Indonesia

- Jakarta → temperature increase : 1,04^{0}C/100 years (Januari)
- Medan → temperature increase : 1,55^{0}C/100 years
- Level Sea Rise (LSR) change in many cities in Indonesia

Introduction (3): **Status of urbanization**

- Urban growth rate 3,3%/years
- 114 million people live in urban areas (approximatelly 50% of total population in Indonesia)
- Urban economy sector : industry, service, trading

National Institutional Structure (1): Gov't of Indonesia

Some initiatives started by the GOI to integrate mitigation and adaptation climate change principles into national development planning agenda, include:

- Long Term National Development Planning (*Rencana Jangka Panjang Nasional*/RPJPN 2005-2025 – Law No. 17/2005).
- National Mid-term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional*/RPJMN 2004-2009).

  - Climate change is described in Chapter 19 on agriculture, fishery and forestry revitalization, Chapter 28 on Improvement of People's Access to Quality Health Services, Chapter 32 on Improvement of Natural Resources and Environmental Management, and Chapter 33 on Acceleration of Infrastructure Development.
- Annual Government Work Plan 2008 (RKP). In RKP, climate change is addressed through Disaster Risk Reduction Program (which includes meteorological disasters), one of the eight programs.
  - As a consequence, the budget allocation for the Meteorological Early Warning System (MEWS) program in the BMG (Meteorological and Geophysical Agency) has been augmented to improve the national early warning system on the variability of climate in Indonesia.
  - Other government institutions involved ini assessing risks are the Disaster Management Coordinating Agency (Bakornas PB), the Ministry of Research and Technology (RISTEK) and the Indonesian Institute of Sciences (LIPI).
- Annual Government Work Plan (RKP 2009).
  - Bappenas introduced climate change as a new focus of development in the 2009 Government Work Plan Budget. Bappenas planned to allocate US$ 189 million in 2009 national budget plan for activities related to climate change mitigation and adaptation.

National Institutional Structure (1): Ministries

- **Ministry of Public Works :**
  - This ministry has several directorates that responsible for spatial planning, human settlements, roads, and water resource.
  - The ministry has short and long term climate change adaptation action plan. The short term action plan among others are adaptation to water resources risks, agricultural risks and food security, human health risks, coastal and marine ecosystem risks. The long term action plan is similar with the short term one but added with terrain ecosystem risks adaptation.
- **Ministry of Forestry :**
  - This ministry is responsible with forestry and plantation matters in Indonesia. The ministry carries out efforts to reducing the impact of climate change and global warming. One of the efforts is planting as many trees as possible in order to reduce green house effects and preservation of existing valuable forests.
  - The ministry also has been working hard to decelate deforestation and forest as well as land degradation (critical soil), illegal logging, forest and peatland fires; and reducing the number of hotspots.

- **Ministry of Health** :
  - The Ministry of Health has prepared a roadmap in anticipating the impact of climate change. The roadmap is to be included in the next National Medium Term Development Plan (RPJMN 2010 – 2015).
  - This roadmap is expected to be implemented by decision makers starting from head of the country, governors, bupatis and mayors. Other sectors aside from health sector such as National Meteorology and Geophysical Agency, forestry, transportation, industrial, environmental affairs and others are to be actively involved because health problems resulting from climate change is intersect with others.

- **Ministry of Agriculture :**
  - The Ministry of Agriculture is held responsible for agricultural and livestock animal husbandry.
  - The ministry emphasizes on improvement of food security by introducing seed resistance to flood, salt-tolerance and drought-resistant, improving agricultural ecosystem security.

- **Ministry of Marine and Fishery :**
  - The ministry has initiated a declaration containing a global discussion agreement on climate change which put ocean dimension as the mainstream (Manado Ocean Declaration).
  - It will also strengthen global partnership for development. It highlights the need for national strategies for sustainable management of coastal and marine ecosystems. It also declares on furthering marine scientific research and sustained integrated ocean observation systems; promote education and public awareness; as well as information exchange on climate change.

- **Ministry of Energy and Mineral Resources :**
  - The tasks of this ministry are mining and energy issues. The ministry has employed Demand Side Management (DSM) to depress emission discharge and energy efficiency. The government is currently developing alternative energey such as bio energy, hydro, geothermal and gas. The efforts are among GOI's commitment to reduce global warming and to lesser demand on fossil energy.

- **The National Development Planning Agency (Bappenas) :**
  Through Bappenas, GOI responds to climate change by actions in developing climate change adaptation roadmap within five and twenty-five years. The main activities, Bappenas curently undertaken are:
  1. Development of climate change roadmap

  The roadmap was developed initially in order to mainstreaming climate change into RPJM for each sector and per region. The other follow up actions of the roadmap are NAMAs (Nationally Appropriate Mitigation Actions) dan NAPAs (National Adaptation Programme of Action).
  1. ICCTF (Indonesian Climate Change Trust Fund)

  ICCTF responsible to coordinate funding and to catalyze investment for adaptation and mitigation activities across the country

- **The State Ministry of Environmental Affairs :**
  - The State Ministry of Environmental Affairs is a government body that is responsible to handle environmental affairs.
  - The State Ministry collects all policies and program on climate change from all sectors for publication purposes. It also functions to report the activities of the Second National Communication to UNFCCC.

National Institutional Structure (1): National Agency

- **DNPI (The National Council on Climate Change) :**
  DNPI is a council which is established to handle all matters in terms of external negotiation (with international communities) as well as government sectors and to implement pogram to the community level. DNPI and the State Ministry of Environment Affairs both are handling climate change issues, however they have different roles particularly on the policies implementation.

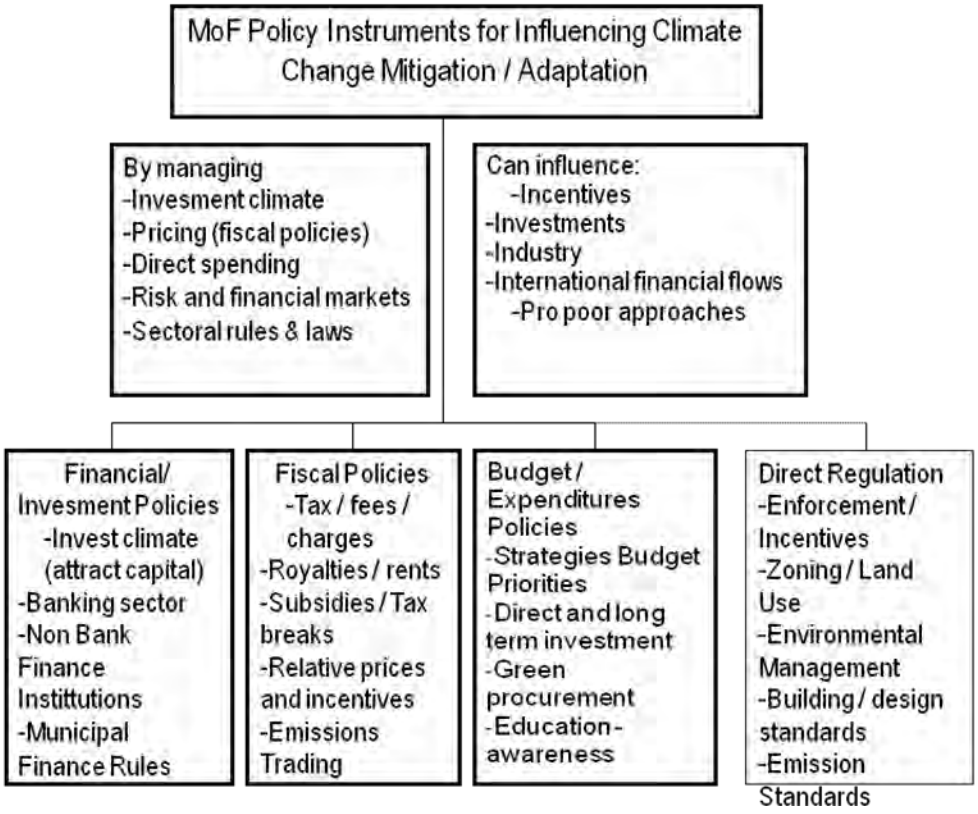
- **BNPB (The National Board of Disaster Mitigation) :**
  BPNB is a government agency which has tasks to coordinate planning and implementation of an integrated disaster mitigation and emergency as well as implementation pre, during and post disaster; which includes prevention, preparedness, emergency action, and recovery. In terms of climate change, BNPB separates disaster mitigation between non-climate change and climate change disaster.

- **BMG (National Meteorology and Geophysical Agency) :**
  BMG or BMKG prepares data on temperature and precipitation from each monitor station. BMG as a sector provides information to the State Ministry of Environment regarding climate change as to assist and support the development of policies and programs.

- **BPPT (The Agency For the Assessment and Application of Technology)**
  BPPT is a Research and Development agency, in relation with climate change issues, BPPT is planning to invent technologies required in mitigating, reducing global warming, and climate change mitigation and adaptation. BPPT will work together with related agencies to apply those technologies.

- **LIPI (The Indonesian Institute of Sciences) :**
  LIPI is the leading research institute in Indonesia, one of its task is to coordinate scientific reseach in Indonesia. LIPI has commitment to conduct research on mitigation and adaption in related with climate change, among other is sustainable biodiversity development. During 2005-2009, researches have been focused on environmental quality, food and health security and energy consumption.

Fiscal Policy Instrument for Mitigation and Adaptation by Ministry of Finance



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Climate change situation in Indonesia (5): Tools for addressing CC & identification capacity building

1. Coastal Vulnerability Index : Department of Oceanography, Institute of Technology Bandung
2. Coastal Vulnerability Index & Aquatic Carbon Index : Ministry of Ocean & Fisheries (BRKP)

International Support

Agency	Program	Sector
USAID	• Clean Energy Technology	urban infrastructure
	• Sustainable Forest and Biodiversity Management	regional
	• Reducing Energy Emissions	urban infrastructure
GTZ	• A further Development of National Climate Change Strategy	urban governance
	• Climate Change Strategy in Cities	urban governance
	• Emission Reduction in Industries	urban infrastructure
AFD	Reformation of Mitigating and adapting policy to climate change	urban governance
Mercy - corps	Bio-energy from waste; Asian Cities Climate Change Resilience Network	urban infrastructure
WB	REDD	Urban spatial
UNDP	Advocacy, Policy Support, and Financial Mechanism on Climate Change (Building local capacity for climate adaptation, Ozone layer protection, ICCTF (Trust Fund), REDD)	urban governance
	Sustainable Energy (switch to biogas, rural renewable energy, energy eficiency standar, reducing CO2 emission by micro-turbine),	Urban infrastructure
	Sustainable Natural Resources Management (strenghtening community-based forest, reducing C02 through local management, marine resources management)	Urban spatial

AUSAID	REDD and Sustainable Water Management	Urban Spatial
WWF-Indo	REDD and Strengthening Community	Urban Spatial

UN-HABITAT's CCCI in Indonesia

- **December 2009** : UN-HABITAT Indonesia calls for Expressions of Interest from eligible Organizations or Individual Experts to support CCCI in Indonesia with an activity or research initiative relevant to the cities of Banjarmasin, Pekalongan and/or Solo and/or to the national policy agenda on cities and climate change.

- 36 proposer submitted ; but only 5 shortlisted proposer selected, i.e.:
  a. Mustika Anggraini (UNIBRAW, Malang)
  b. Mohammad Muktiali (P5 - UNDIP, Semarang)
  c. Rukuh Setiadi (P5 - UNDIP, Semarang)
  d. Noviantara Rollin (KPBB, Jakarta)
  e. Bambang Hudayana (IRE, Yogyakarta)

- February 28 workshop

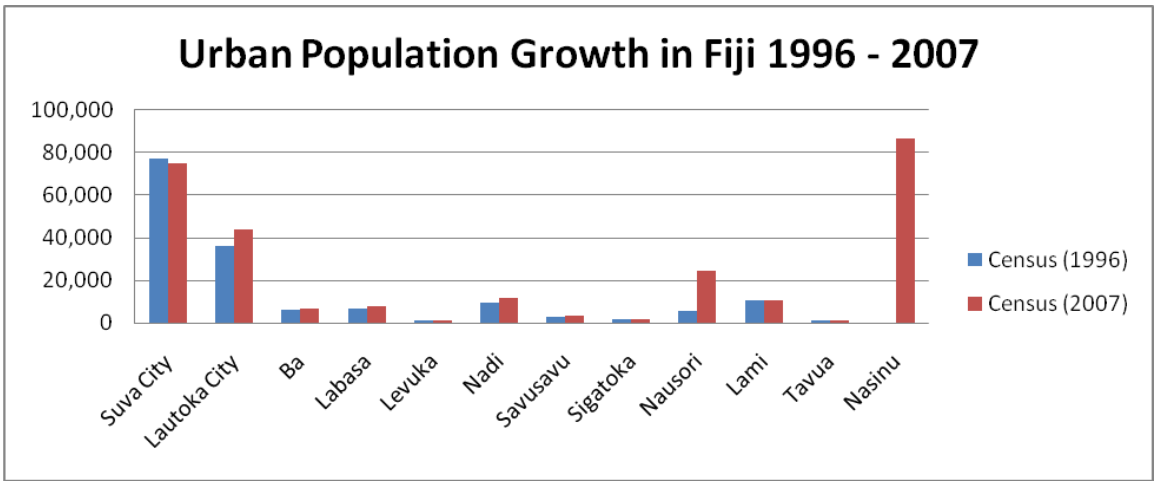
1. **Mrs Mustika of UNIBRAW** presented a case study related to Banjarmasin and sea level rise, proposing to undertake a rapid assessment and a planning impact study.
2. **Mr Muktiali of UNDIP** proposed to study in detail the issue of social capital impacting neighbourhood upgrading in a seashore neighbourhood in Pekalongan.
3. **Mr Rukuh of UNDIP** postulated that forced migration would be one of the adaptive choices to residents in areas affected by sea level rise in Pekalongan and Banjarmasin and wanted to do a comprehensive planning study to outline policy options for the local governments.
4. **Mr Noviantara of KPBB** proposed to repeat the methodology of the 'Jakarta Initiative to fight Climate Change' (2008-2010), which studied policy options to take concrete mitigation measures, developed policy advice (soon to be enacted) and engaged with various training and education initiatives to advocate the proposed measures.
5. **Mr Bambang of IRE** called for a 'green kampung' campaign with best, good and bad practices of making neighbourhood environmentally sustainable,

based on research in the three cities and leading to a book and policy formulation, as well as outreach engagements.

FIJI

General Overview of Fiji Population

- Current Population – 837,271
- Urban Popn. – 424,846 [50.7%]
- Rural Popn. – 412,425 [49.2%]
- Number of Declared Towns and Cities– 12 (Lami, Nasinu, Nausori, Nadi, Ba, Sigatoka, Labasa, Savusavu, Levuka, Tavua), (Suva & Lautoka)
- Rural Town Planning Areas – 7 (Rakiraki, Vatukoula, Navua, Korovou, Deuba, Nabouwalu, Seaqaqa)



National Commitments to Address Climate Change

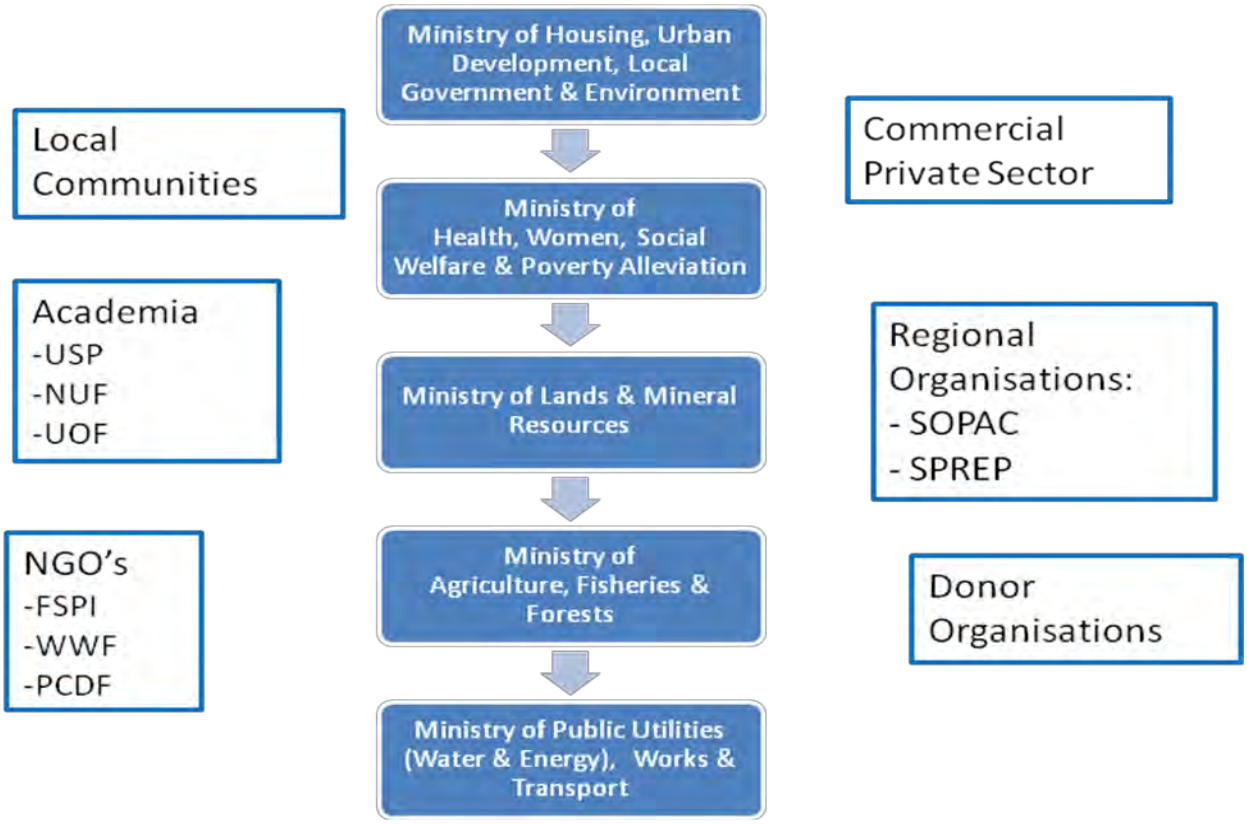
- Signatory to the United Nations Framework Convention on Climate Change (1993)
- Focal Point for UNFCCC - Fiji Department of Environment (DoE)
- Draft National Climate Change Policy Framework (2010), Climate Change Division (DoE), ODS Act, EMA (2005), NCSA, NBSAP
- In the process of developing a Clean Development Mechanism (CDM) Policy
- Director of DoE – Designated National Authority CDM
- DoE began its first consultation on the Second National Communication Project (SNC)
- Fiji has signed the Copenhagen Accord (COP15)
- DTCP – Responsible for preparing strategic land use planning, consider land and development applications within urban centers.
- Local Government – Administration of Municipal Councils.

- CBH – Appointed a Natural Disasters Management Officer, Environmental Health Division which addresses pollution control and waste management
- Partner organisations include SPREP, SOPAC, WHO, IUCN, WWF, Live & Learn, SPC, Donor Agencies such as EU, UNEP, UNDP, JICA, PACE, etc – project basis

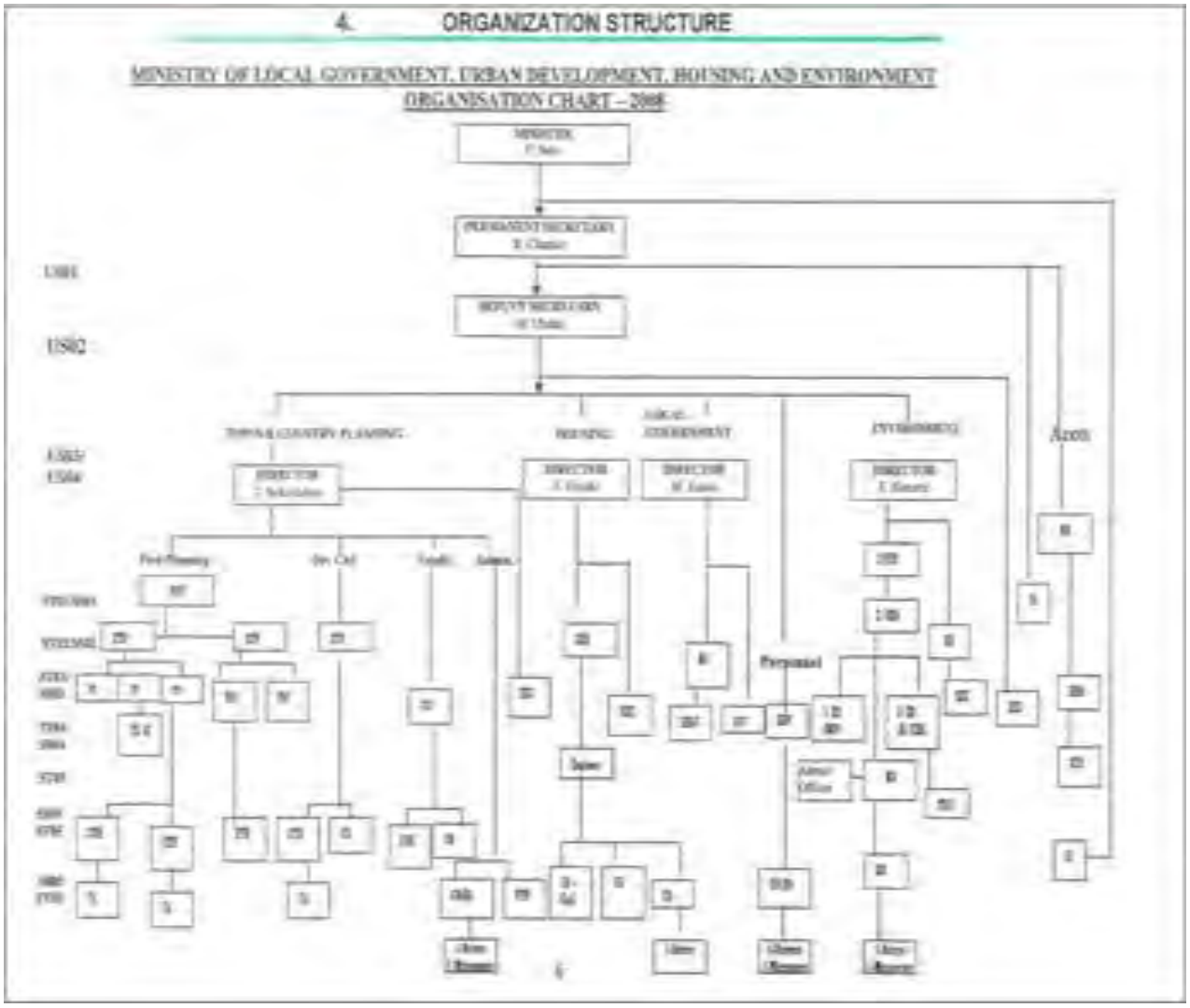
Fiji Climate Change Priority Areas

- Awareness on Climate Change Impacts/Issues
- Second National Communication will identify the priorities of Climate Change Activities in Fiji – ongoing process
- Core Areas:
    1. National Circumstances
    2. GHG Inventory
    3. Vulnerability & Adaptation Assessments
    4. Mitigation Measures

Climate Change - Key Stakeholders



Organizational Structure



What is the role of Local Governments/Cities in the National Commitment to Address Climate Change?

- Work in collaboration with Department of Environment, Department of Town and Country Planning and the forty seven [47] stakeholders in the Second National Communication Committee
- Identify the priorities of the National Commitments and how they fit or not to Local Governments role
- LG's can identify priorities at their own level and work with DoE to facilitate its implementation
    1. Education & Awareness
    2. Climate Change Project Development (Vulnerability & Adaptive Assessments)
    3. Research
    4. Capacity Building
    5. Evaluation & Monitoring
    6. Etc….

How are the climate change activities being undertaken presently by regional partners, DoE, NGO's, etc?

- Monitoring Sea level - SOPAC
- Monitoring rainfall volume - FMS
- Community based awareness by NGO's, DoE, Local Government
- Community based initiatives – through NGO's, local government & DoE
- Education Awareness – Ministry of Education, NGO's, Local Government
- EIA's, EMP's – DoE and Reputable Environmental Consultants
- Waste Disposal Permits and Management – DoE , Central Board of Health, Waste Care
- Carbon footprint reduction initiatives by Corporate Organisations
- ICWM initiatives

International Support Agencies Activities

- JICA – Watershed Management
    - Nadi – Improvement of Drainage to reduce flooding
- JICA – Solid Waste Management (SWM)
    - Nadi & Lautoka
- ADB – Renewable Projects
- EU – SWM

- Naboro Landfill
- Rehabilitation & Decommissioning of Old Dump

Fiji CC Activities (National & LG Level)

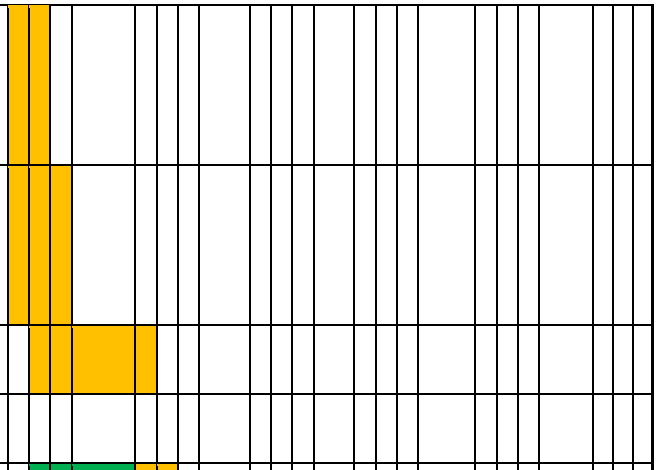
- Awareness Training
- Environmental Management Act
- Ozone Depleting Substance Act
- National Climate Change Policy Framework
- CCI identified in the Ministries Annual Corporate Plan 2010
- Waste Disposal & Recycling Regulations (2007)
- EIA Process Regulations (2007)
- City/Town Rates – coastal rehabilitation, foreshore reclamation, mangrove replanting, realignment of foreshore, etc

Anticipated Methodologies

- Briefing and gathering support of the Government – Ministry of Local Government, Urban Development, Housing and Environment
- Selecting and Evaluation of Town as Pilot Project Criteria- Coastal Location, Medium Size Population, Established Town and Closer to Other Major Urban Centre Chosen: LAMI TOWN
- Establishing Technical and Logistical Support for the Pilot Project: SCOPE Pacific, DoE, LG and DTCP
- Vulnerability & Adaptation Assessment – SCOPE Pacific, DOE, DTCP, LG using UNFCC V&A Tool Kit & Sorsogon VA Project as Guideline
- National Scoping Study – SCOPE Pacific, DTCP, LG, DoE , partner organisations using UN-Habitat ROAP Scoping Study Guidelines
- GHG audit – SCOPE Pacific, DTCP, DOE, partner orgs. Will use a relevant Guideline applicable to the South Pacific

TENTATIVE WORK PLAN

		Apr				May				Jun				Jul				Aug				Sep			
Activities	**Details**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
National Scoping Study	National Institution Structure to address CC impacts & roles of cities																								

	National Policy Framework for CC response measures in cities	
	Review of CC related key stakeholders & potential partners at the city level	
	Reporting	
City Level GHG Audits	Identify Key Sectors for Lami	
	Collect Relevant Data	
	Data Analysis	
	Reporting	
City Level VA Assessment	Pre-Assessment Stage (1-5)	
	Assessment Stage (6-9)	
	Initial Strategy identification Stage (10-11)	
	Reporting	

Gaps/Possible Challenges – National Level

- Clear & Defined National Priorities to address CC
- Linkages between National and Local Government level – there are no synergies
- No defined responsibilities of the LG/Cities in National CC Policy
- Lack of Human Resources at DoE (18), only 1 staff dealing with CC
- Lack of Technical Skilled Personnel at National Level
- Science & Technology
- Negotiation Skills between Key Govt Stakeholders & International Countries
- Lack of Funds and the ability of funds to mobilize to priority areas
- Limited ability of LG to provide input to National Policy development
- Data Availability for the purposes of the V&A & GHG Audits in Chosen Pilot Area
- Current Political Situation – Abolition of Elected Councils, Exclusion from Commonwealth & Community of the South Pacific (NZ & Australia)

Practical Solutions for Fiji

- Develop a Climate Change Committee within the Ministry that incorporates representatives from all the Ministries/LG
- Regular CC workshops that involve multi-stakeholders
- Integration of Govt Initiatives – To allow synergies between key members
- Finalize & Implement CDM Policy
- Finalize & Implement National Climate Change Policy Framework
- Mainstream climate change into Local Governments Strategic Plans and Town Planning Schemes
- Develop city-based CC adaptation plans
- Develop community based adaptation plans
- Encourage participatory monitoring and evaluation
- National Awareness of the Community at large

Next Immediate Steps

- Report back on the CCCI training for Ministries information, approval & support
- Push for a Multi-Stakeholder Workshop on CC & the Importance of the role of LG in addressing CC
- Work on Pre-Assessment Stage for V&A
- Gather required, relevant and available information for National Scoping Study, GHG Audit & V&A Assessment

Opportunities for Resource Mobilization

- Government Budget is prepared in September and delivered in November for the following years operational activities which is based on Annual Corporate Plans
- No allocated budget for Specific CC Activities at LG level - 2010
- Tap into available International Funding and Technical Assistance - UN-Habitat!
- Capacity Building & Research at Regional Universities

MONGOLIA

Ulaanbaatar: Mongolia pilot city for CCCI

National Scoping Study on Cities and Climate Change

Brief Description

- Territory: 1.5 Mkm^2
- Population: 2.7M
- Economic regions: 4
- Provinces : 22
- Counties: 355

Observed climate change during 1940 - 2007

- Temperature increase by 2.1°C
- Hot days increase by 0.4 d/year
- Cold days decrease by 13 days on average
- Precipitation decrease by 7%
- Increase of heavy rainfalls
- Increase of evaporation
  - by 3-10 percent in the steppe, gobi and desert zones, and
  - by 10-15 percent in the high mountainous and forestry areas

1.1 Introduction: Background

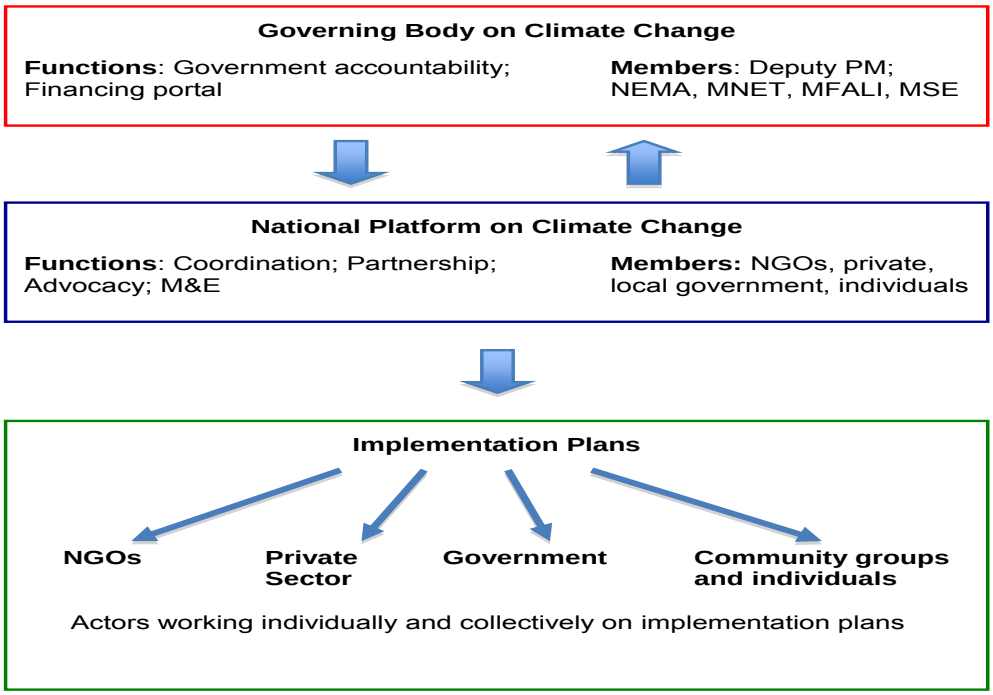
- Ulaanbaatar, the capital city of Mongolia
- Over 1.2 million population – 50% of the country's population.
- The climate warming in Ulaanbaatar over the last 65 years has been 2.4^{o}C, which is 30% higher than national average
- Faster the climate change, greater the risk of disasters.
  - Annually from 3 to 76 **hazards** have been registered since 2000.
  - **Drought** in 2002 alone caused 72 cases of **forest fires**.
  - **Forest area** around the city decreased significantly since early 1990s, due to forest fires and particularly due to the consumption of "free of charge" natural resources (including aggressive woodcutting for housing, furniture and firewood).
  - **Ground water levels** increased while permafrost thickness decreased by 20-30 cm in the last decade.
  - Heavily **degraded soil** leads to increase in **floods** and related damages. There is an increasing tendency of runoff coefficient that

indicates increased degradation of vegetation cover in the river basins of the city.

Purpose of the NSS

- TOR:
  - National level
  - City level
- Baseline studies:
  - Observed climate change, its impacts
  - Projected climate change, potential impacts
- Risk assessment
  - Hazard
  - Vulnerability
- Measures (issues and solutions):
  - Adaptation
  - Mitigation
- Prioritize actions
- Propose project outlines

1.2 National Institutional Structure to address CC



1.3 National Policy Framework on Climate Change

- National Level:
  2001: National Program to Protect Livestock from Drought and Dzud
  2002: National Action Plan on Climate Change
  2003: Law on Disaster Protection
  2004, 2009: National Climate Change Communication Reports
  2007-2008: MDG based National Development Program
  2009: National Strategy for Climate Change Risk Management

- City Level: Ulaanbaatar
  Reduction of Air Pollution:
  2006-2007, Parliament resolution, program, Master plan
  Improvement of Waste Management:
  New regulatory documents: Laws, programs, plans, mechanism
  Reduction of Flood risk:
  2004-2005: Risk assessment at city level, project proposal
  2009: Risk assessment at community level, recommendation for action

National Strategy

- Strategy is developed basing on:
  - research findings,
  - climate risk and its impact assessments,
  - key issue formulation, and
  - solutions piloted in the most vulnerable areas.
- Objective
  - To create a sustainable framework for climate risk management, that fosters a common responsibility for risk reduction across all stakeholders, and significantly reduces the losses associated with climate and disaster risk, through effective early warning and disaster preparedness, as well as cost effective adaptation measures that help to build climate resilience.

1.4 Review of key stakeholders and partners

- Ministry of Nature, Environment and Tourism
- National Emergency Management Authority
- International organizations and donors
- Community, CBOs, NGOs, volunteer groups

Stakeholders' Activities

- Ministry of Nature, Environment and Tourism:
  - CC Institutional development:
    Climate Change Focal Point
    Establishment of Climate Change Coordinating Unit
  - Improvement of weather and climate monitoring system: Meteo. Agency:
    Early warning services
    CC models, computing capacity:
    Short and seasonal weather prediction models, methods
  - Improvement of environmental management:
    Environmental Impact Assessment
    Collaboration and partnership with NGOs
    Implementation of community based approach
- Climate change, impacts and projections
- National CC action plan and communication reports
- Climate change impacts, V&A assessments for pastoral animal husbandry, 2002-2004
- National Emergency Management Authority:
  - Implementation and improvement of policy and regulation
  - Organizational restructuring and capacity building
  - Strengthening of disaster management system
    - Improvement of relief
    - Efforts for mitigation and preparedness with community participation
    - Multi-stakeholders Collaboration and Partnership development
- Lessons learnt case studies on Disaster & Management: Dzud 2000, windstorm 2002, Management information system;
- National climate risk management strategy and action plan

Ministry of Finance and Economy

- National policy:
  - Economic growth for poverty reduction
- Implementation structure:
  - Poverty reduction unit
  - Climate change impact on livelihoods of herders households

- International organizations and donors:
  - Capacity building
  - Policy development
  - Infrastructure development
  - Community based development
- Community, CBOs, NGOs, volunteer groups:
  - Participation in studies, assessments, developments
  - Initiatives and efforts to contribute for finding solutions
    Mongolia climate risk assessment
    Ulaanbaatar Flood risk assessment
    Ulaanbaatar Air Quality Master plan
    Community Led Infrastructure development
    Risk studies and Information system development

Partners' expectation and contribution

Stakeholders	Expectation from the Project	Contribution
1. Ministry of Foreign Affairs	• Improved international collaboration in flood control and early warning • Step towards sustainable development • Transfer of technology, know-how, best practices in disaster risk reduction	• Government commitment • Professional advice • Support in foreign relationship, international networking, • Coordination with related projects and initiatives
2. NEMA and Disaster Protection Research and Training Institute	• Improved disaster management and early warning system in the city • Transfer of technology, know-how and best practices in disaster risk reduction • Improved methodology for disaster studies and assessments • Increased awareness of decision-makers and increased budget for risk studies • Capacity building for managers, researchers and trainers	• Government commitment • Needs assessment • Professional advice • Coordination with related projects and initiatives • Disaster database and network • Information and training centre resources

3. Mayor's office of Ulaanbaatar city, Division of Engineering Affairs	• Improved governance of flood control with particular concern of sustainable budgeting mechanism including tax, insurance, etc. • Transfer of advanced technology and know-how in management, planning and construction of flood control facilities • New criteria and standards and comprehensive Master plan for flood control • Improved flood control drainage system, early warning system and public awareness • Strengthen organisation and capacity building	• City government commitment • Direct communication with Mayor and its office and city institutions • Coordination with related projects and initiatives • Needs assessments and terms of reference • Approval of programme and plans
4. Emergency Management Department of city	• Improved flood emergency management system, technology, capacity and relief facilities • Established district rescue units • Increased awareness of decision-makers and increased budget particularly for risk reduction measures • Provision of computer hardware, software, database, network and Internet connection • Capacity building for personnel, particularly relief officers and rescue staff • Increased public awareness, and community-based disaster management at khoroo-level	• Communication with National Agency for Disaster management and city government • Disaster records • Professional advice in emergency and relief • Needs assessment
5. Hydrological Engineering Department of city	• New criteria and standards, and comprehensive Master plan • Transfer of advanced technology and know-how in rehabilitation and maintenance of flood control facilities • Provision of computer hardware, software, database, network and Internet connection • Improved awareness of decision-makers and increased budget particularly for rehabilitation of facilities • Organizational strengthen and	• Communication with city government and institutions • Data and information on flood control drainage condition • Needs assessment • Conducting inventory, monitoring and evaluation of flood control facilities • Maintenance and rehabilitation of facilities

	capacity building	• Professional advice
6. NAMHEM: IMH, NRSC, Radar station, Environmental laboratory	• Expanding meteorological network in the city • Improved flood prediction and warning system • Rehabilitation of warning sirens • Improved information dissemination systems and databases • Improved partnership and networking • Participation in climate change and flood research, and in early warning network • Capacity building	• Meteorological, hydrological data, flood records • Climate change models • Weather forecasting and flood prediction • Professional advice • NOAA satellite data, images, nationwide DEM, thematic maps • Remote sensing and GIS tools
7. Urban Planning, Research and Design Institute	• Transfer of technology and know-how for proper solution of flood control system • New criteria and standards, and comprehensive Master plan • Improved information processing, sharing network and database • Participation in research and Master plan development, and in flood control monitoring network and in early warning network	• UB city integrated database • DEM and thematic maps • Master plan for development of city for 2020, and detailed plans for districts • GIS tools • Professional advice
8. Risk Study Working Group,	• Improved methodology for assessments, mapping and cost-benefit calculations • Improved information processing system and database • Improved partnership, networking and community participation • Improved and expanded early warning system, integration with development processes and	• DEM and integrated database • Image processing, GIS tools • Methodology for risk assessment, cost-benefit calculation and mapping • Localized thematic maps • Consultancy service

	public policies • Participation in R&D and in early warning network	• Partnership and networking with NGOs, community and private sector

1.5 National inventory of tools for addressing CC in cities and identification of capacity building needs

- Tools:
  - Approaches, methods,
  - Guidelines, manuals, forms
  - Information system
- Capacity building needs:
  - System analysis and design tools (actors, data, process, interface, management)
  - Modeling tools: UML
  - New concepts towards society as optimal as Universe: Learning from Nature, base on reality, object/subject oriented, integrated, harmonized and efficient as organism, open, modular, …

International support agency activities

- Facilitation and networking
- Resources:
  - Knowledge and Expertise
  - Tools
  - Good practices
  - Funding
- Monitoring & Evaluation

CCCI institutional structure & project support team

- Practices:
  - National strategy implementation structure
  - Ulaanbaatar flood early warning partnership

- CCCI institutional structure:
  - Mayor's office of Ulaanbaatar city, Policy and planning department, Division of Engineering Affairs
  - Land information centre
  - Emergency management department
  - Health department
  - Industry, city service departments (districts)
- Project support team:
  - UN Habitat
    - Project staffs
    - 2 short-term experts
    - 1 Translator
  - Risk study working group -> **A.N.D Consortium**

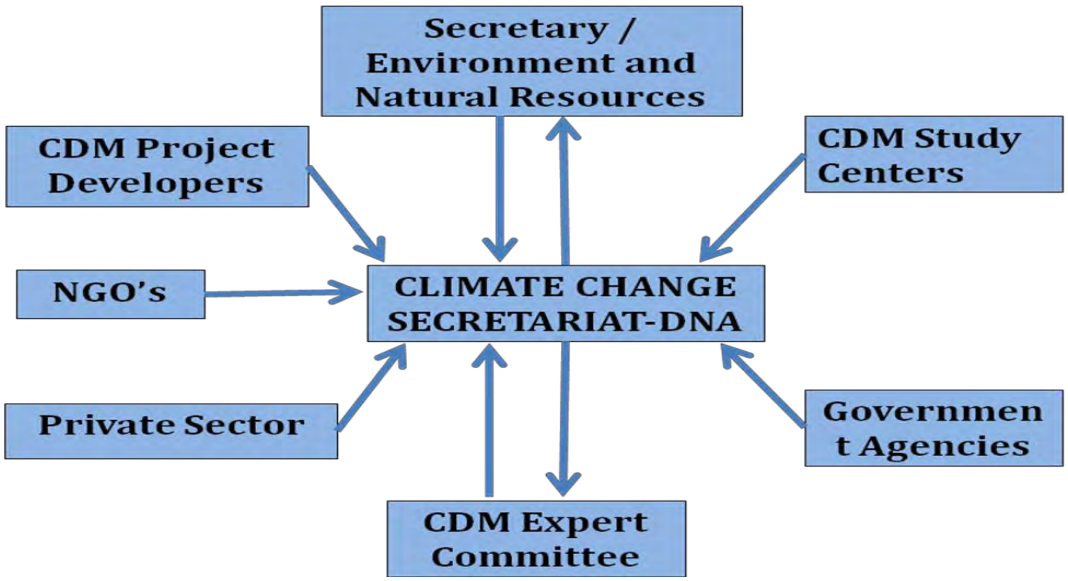
SRI LANKA

Sri Lanka
Size : 65,610 sq km
Climate
Tropical monsoonal
Rainfall
800 mm to over 5000 mm
Temperature
On average 27 C at lowland (reduction at 5-6 C km)
On average 15 C at central mountain region

Climate Change – Sri Lanaka

- **Slow & Continuous rise of ambient temperature**
- **Increased frequency of extreme weather conditions**
  - High variability of rainfall
  - More floods
  - More droughts
  - Cyclones
  - Sea level rise
  - Epidemic (Dengue)

Structure of the Designated National Authority



National Policy on Clean Development Mechanism

- **Policy Objective**
- To contribute to sustainable development through developing and establishing the institutional, financial, human resources and legislative framework necessary to participate in Clean Development Mechanism (CDM) activities under the Kyoto Protocol while developing a mechanism for trading "Certified Emissions Reductions" (CER) and "Removal Units" (RMU) earned through CDM activities.

Partners of the National Expert Committee on CDM

- Ministry of Environment and Natural Resources
- Ministry of Power and Energy
- Ministry of Agriculture
- Ministry of Science and Technology
- Ministry of Industries
- Forest Department
- Meteorology Department
- Universities
- Ministry of Transport and Highways
- Private Sector
- Non Governmental Organization
- Colombo Municipal Council

Sectors for the implementation of CDM projects

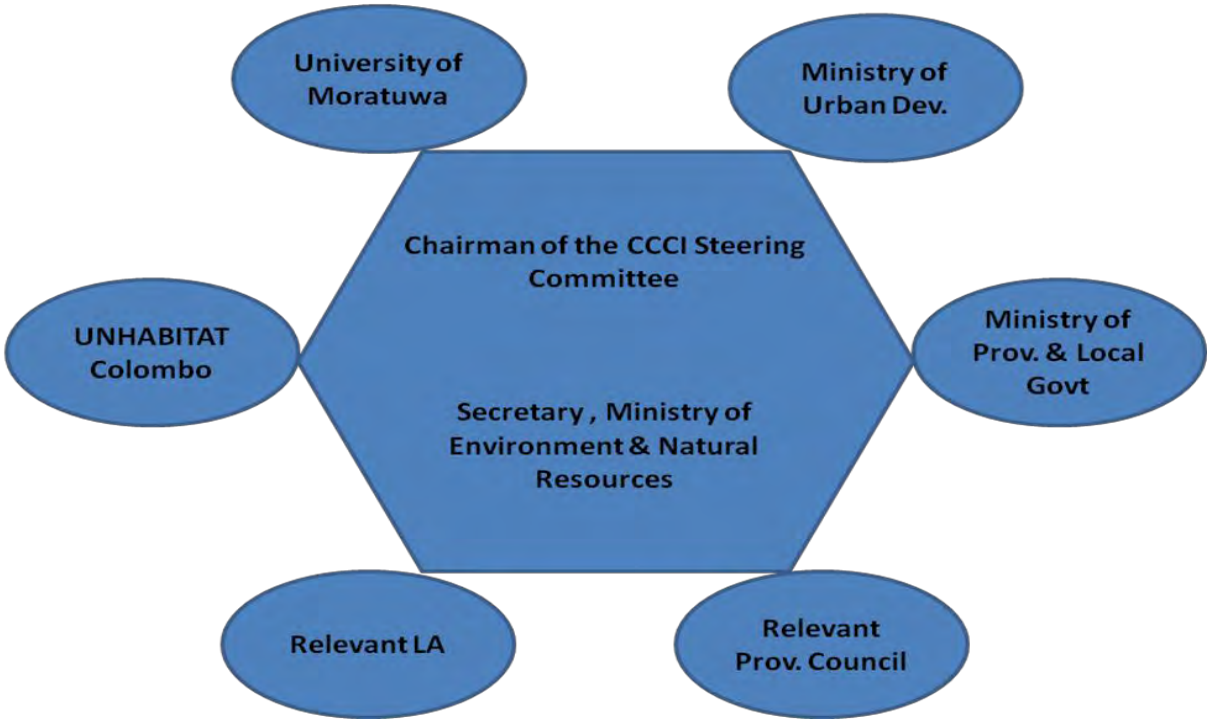
- Energy
- Industry
- Transport
- Waste Management
- Agriculture
- Forestry Management
- Plantations

Current issues

- Climate change initiatives and actions are implemented at national and sectoral level by the Ministry of Environment & natural Resources – implementation of CDM, SWM, Greening Sri Lanka .
- More consideration on Mitigation
- No horizontal and sectroral integration

- Actions at project level
- No Provincial Council Involvement
- Ad hoc project implementation
- No climate change initiative or actions at city level – UNHABITAT's National scoping is in progress

CCCI Institutional Structure



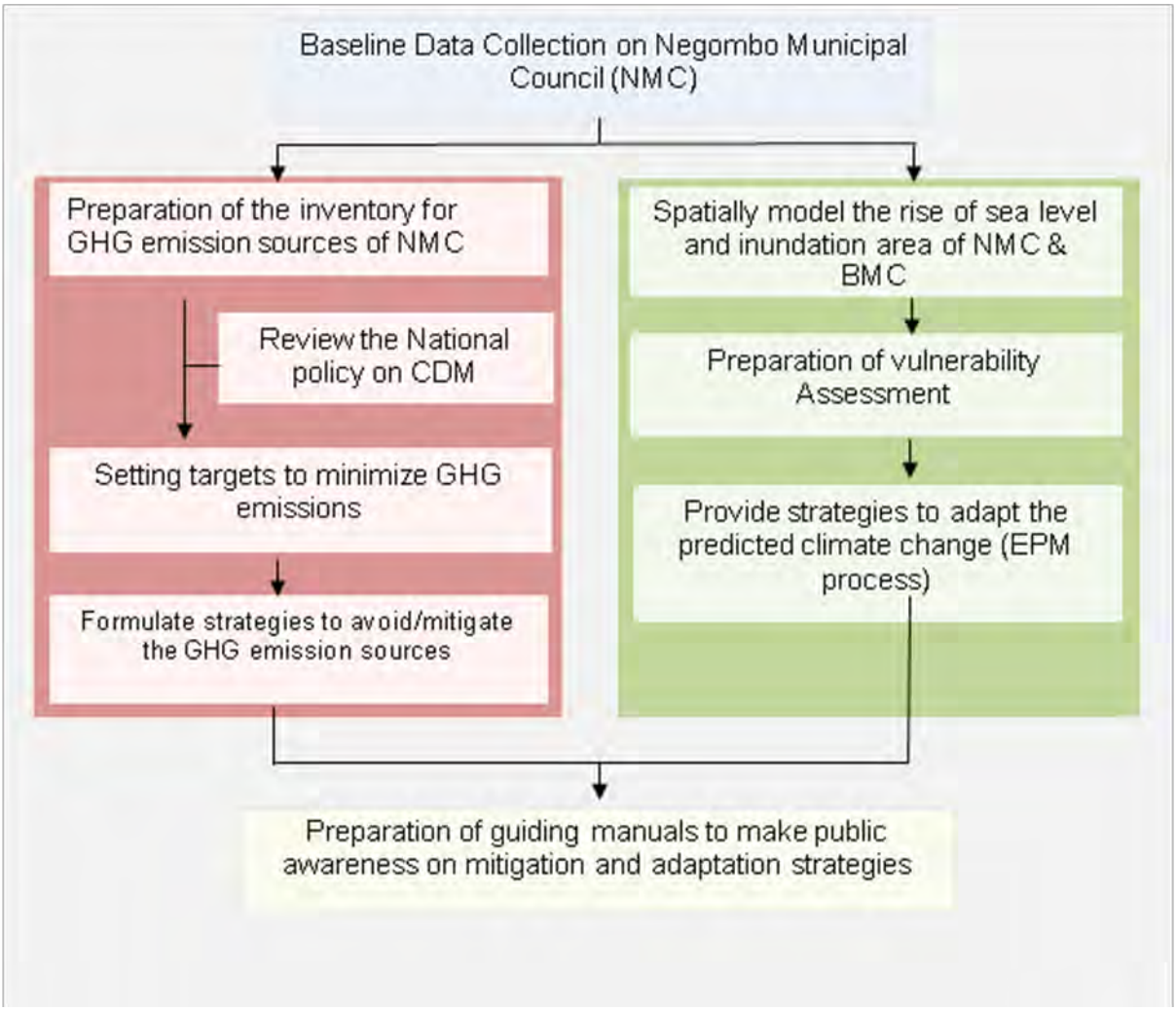
Formulation of a City Development Strategy for Sri Lankan Cities to Response Climate Change: Case Study - Negombo MC

Objectives of the study

- To assess the level of vulnerability of impacts on climate change
- To Prepare a Climate change adaptive plan for a selected local area to initiate mitigation measures to counter adverse impacts of climate change.
- To formulate strategies that would mitigate emissions of GHG and practice CDM at local level to prepare a database of the GHG emissions of a local area.
- To prepare guide books this makes public awareness about the climate change and its impact.

- To build partnership among stakeholder to initiate actions in planning and implementing mitigation and adaptation measures for climate change.

Methodology



Data Available

- City Profiles are already available – Need to be updated
- MDG profile (Localised) available – Need to be updated
- GHG inventory - National (sectoral) level available.
- Maps and satellite (1m resolution) images are available

Data To be Collected

- GHG inventory city level (spatially) – to be collected
- Vulnerability assessment city level – to be carried out

CHINA

China's Scientific & Technological Actions on Climate Change
- ***Jointly Issued by 14 Org. 2007***

- Ministry of S&T
- National Development and Reform Commission
- Ministry of Foreign Affairs
- Ministry of Education
- Ministry of Finance
- Ministry of Water Resources
- Ministry of Agriculture
- Ministry of Environmental Protection
- State Forestry Administration
- Chinese Academy of Sciences
- China Meteorology Administration
- National Natural Science Foundation
- State Oceanic Administration
- Chinese Association for S & T

LOGOTRI Group

The LOGOTRI Asia Pacific formulated their Regional and Country Action Plans with regards to Climate Change Adaptation.

Participants:

1. Dr. Mohammad Nurul Islam (Nazem) (Centre for Urban Studies, Bangladesh)
2. Mr. Kolinio Bola (Ministry Urban Development Local Government Housing and Environment, Fii)
3. Dr. Pham Van Bo (Academy of Managers for Construction and Cities, Vietnam)
4. Ms. Atik Kumala Dewi (Urban and Regional Development Institute, Indonesia)
5. Mr. Karma Jamtsho (Gross National Happiness Commission, Bhutan)
6. Ms. Pragya Rajoria (Society for Development Studies, India)
7. Ms. Marivel C. Sacendoncillo (Local Government Academy, Philippines)
8. Mr. Patrick Megia (LOGOTRI Asia Pacific Secretariat)

The following were the groups outputs:

KEY ACTIONS

1. Documentation of Country Experiences on Climate Change Adaptation (CCA) - APRIL
2. Training of LOGOTRI Members on Climate Change Adaptation for Local Governments in a host country
3. LOGOTRI Resource Finder for Technical Assistance (TA) and Training
4. Strengthen Links with CityNet, UN Agencies
5. LOGOTRI provides TA for country level initiatives

1. Documentation of Country Experiences on Climate Change Adaptation (CCA)

- Prepare a Proposal for UN ESCAP consideration with regards to funding the documentation of Country Experiences on APRIL 2010
- Mobilize members for actual documentation APRIL-MAY 2010
- Compilation and Publication of Experiences on CCA by JUNE-JULY 2010
- Publication (electronically) AUGUST
- Database of Modules on Climate Change

2. Training of LOGOTRI Members on <u>Climate Change Adaptation for Local Governments</u> in a host country SEPTEMBER

- Communicate to Member countries through the E-Bulletin on the need for training on CCA
- Determine the host country for the Training
- Identification of Trainers from various institutions
- Actual Conduct SEPTEMBER

3. LOGOTRI Resource Finder for Technical Assistance (TA) and Training

- Inventory of Funding Institutions in the Asia Pacific Region APRIL-JULY
- Publication AUGUST

4.Strengthen Links with CityNet, UN Agencies

- Updates on CityNet-LOGOTRI Partnership APRIL
- Strengthen partnership with UN ESCAP and other UN Agencies (UN HABITAT, UN EP, Global Development Network) MAY- Onwards
- Publication of partnerships in the quarterly e-Bulletin

5. LOGOTRI provides TA for country level initiatives

- Inventory of Country Level Initiatives among Members – ONGOING
- Prioritization of Training Agenda by Members
- Scheduling of Training Programs for the Network

Member Country Plan

BANGLADESH
(Centre for Urban Studies)

- Meet Local Authorities
- Localize National Adaptation Plan
- Strategic Plan for Dhaka and 37 Cities (UNDP)
- Community Action Plan
- Hazard Mapping
- Sustainable Land Management (2 PILOT LOW-LYING AREAS)

INDONESIA
(Urban and Regional Development Institute)

- Working with Cities to Develop Local Plans with CLIMATE CHANGE MAINSTREAMING
- Create Documentation on Best Practices on Climate Change and Share it with the LOGOTRI Network
- Then conduct Training Program on Climate Change Issue in terms of Strategic Plan for Local Authorities

INDIA
(Society for Development Studies)

- Documentation of Best Practices on Adaptation and Mitigation Strategies for LOGOTRI Network
- Customization of Training Module
- Training Program for Government Officials of Delhi on Implementation of Action Plan
- Technical Assistance to the State Government on Drafting the Action Plan
- Extension of Pilot Projects

BHUTAN
(Gross National Happiness Commission)

- Develop EC (Environment and Climate Change Guidelines
- ECP (Environment, Climate Change and Poverty) Mainstreaming in Local Planning Manual
- CC Adaptation Plans
- Conduct Capacity Development Needs Assessment
- Develop Curriculum
- Conduct training program

VIETNAM

- To apply for Membership of the Network
- Organize Training for City Executives

FIJI

- Meet with new Local Administrators appointed by new Military Government
- Join the Network

LGA, DILG and LOGOTRI-PhilNet Group
The LGA, DILG and LOGOTRI PhilNet formulated their Action Plans. *Please see attached Workshop Outputs)*

Closing Program
For the closing program, two participants shared their impression on their learning, experiences and the training as a whole.

Impressions

Mr. Brian Philips from Vanuatu

He gained expertise, availability of people who can be tapped as resource persons who readily made available all their knowledge and pertinent information concerning climate change mitigation. For countries like Vanuatu who have not done any mainstreaming, this activity will be of great help in our country's climate change mitigation strategies. He thanked all the people who have made this training possible for them.

Ms. Pragya from LOGOTRI India

All the learning will be useful for our countries. Is design is effective for us to mainstream climate change. Most are in the initiative stage of developing modules on CC; this program is timely for all of us. Acknowledged LGA for making them comfortable and having their stay wonderful

Mr. Luzon Salvador of LOGOTRI Philippines Network

This is an opportunity to integrate what we have in our own institutions on climate change. At the end of the day, we ended up with better tools and technologies, creating local agenda for CC for the Philippines we would want to incorporate the CC in local agenda. The learning on DRR, VA, and Risk Assessment enriched our knowledge and level of competence and better participants, stewards who will be helping our local governments who are suffering of climate change problems. RPs gave us abundant tools. They delivered fast and we hardly swallowed all the knowledge them. After this training, we will be stewards, we will be facilitators, expand the base. The jobs in the field are plenty that is why we need to expand, and propagate these learning. Through the Climate Change Act in the Philippines, localization of Climate Change Agenda is imperative. This is a big step where we can help our local governments.

After the sharing of impressions of the participants, the Certificates of Completion were awarded to the participants.

In closing, partner institutions gave the following closing messages.

Message from Mr. Chris Radford

He expressed his gratitude to all the participants, the city country groups who made the preparatory work before going to this training. He expressed that he learned a lot from the LOGOTRI Group, the willingness to initiate climate change learning to their institutions. For LOGOTRI Asia Pacific, it is a timely initiative since they are looking forward to convening the CCCI again in September.

Message from Mr. Bernard Barth

Capacity building and training serve to be significant in initiatives relative to climate change. This is the first of the regional event and that they have received so much input on the tools and concepts, since they don't want to have a traditional approach in workshops. In this way, they can improve their other regional initiatives in Africa and America.

Message from Dir. Marivel C. Sacendoncillo

She thanked the participants for being responsive and cooperative. She said that it was a pleasure to put together people who can ignite initiatives later on. She also mentioned that the Academy's work is like that of a farmer, planting seeds like this initiative in climate change and later on reap what was sown. In conclusion, she said that there is an increasing need to have a collective action on Climate Change.