

# Cities and Climate Change Initiative in the Asia-Pacific Region

## Expert Group Meeting on Climate Change Assessment, Planning and Management Methodologies

31 October - 2 November 2012



## Executive Summary

- The Expert Group Meeting and Climate Change Training Workshop took place in Hongcheon, South Korea from 31 October to 2 November 2012. The Workshop reflected the reality that while an increasing number of cities in the Asia and Pacific Region have started to address climate change, there is still a need to advance the harmonization usefulness of climate change tools.
- At the workshop, a number of key tools were presented and discussed, suggesting possible improvements to climate change responses. These included vulnerability assessments, city climate change planning and greenhouse gas inventories, as well as specific methodologies used in various cities and regions.
- Ultimately, the workshop resulted in the development of key recommendations and improvements to be made. These included advances in UN-Habitat's Cities and Climate Change Initiative (CCCI) methodology with the aim of enhancing local application, as well as recommendations made to the greenhouse gas assessment methodology used by UN-Habitat.

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## **A. Introduction**

An increasing number of cities in the Asia and Pacific Region have started to address climate change. To a significant extent cities can draw on experiences from other cities that have conducted vulnerability assessments and greenhouse gas inventories and that subsequently developed Climate Change Plans. However, these experiences have not yet been systematically compiled and at this stage the number of tools -reflecting the diversity in approaches - is increasing.

The Expert Group Meeting set out to advance the harmonization and user friendliness of Climate Change Tools. In particular the Expert Group Meeting advanced (a) the Vulnerability Assessment approaches and tools of the Cities and Climate Change Initiative, (b) the methodology for development of stand-alone climate change plans and the mainstreaming of climate change into existing plans and (c) the conduct of Greenhouse Gas audits. The Expert Group Meeting also provided in-depth comments on the advancement of the Planning for Climate Change tool.

The Expert Group Meeting was held in partnership with the International Urban Training Centre, IUTC, of Gangwon Province, Republic of Korea. The meeting brought together 16 experts, 6 of whom were women.

## **B. Objectives and expected outcomes of the Expert Group Meeting**

### **1. Vulnerability Assessments**

Numerous cities in the Asia-Pacific Region have undergone climate change vulnerability assessments, with or without the support of external partners. In the region, approximately 20 city-wide participatory climate change vulnerability assessments have been (or currently are) developed using UN-Habitat's CCCI methodology. Whilst the methodology and template were based on the Sorsogon process, the documents vary significantly. The reasons include: different local priorities, different climatic zones and different anticipated climate change impacts. However more importantly, the lack of detailed and binding guidelines, different capacities (and backgrounds) of the assessment teams, confusing and a multitude of tools and the lack of an annotated list of contents result in a diversity of products where quality and completeness are difficult to assess and where comparability (which would facilitate the learning of lessons) is compromised.

Expected outcomes of the Expert Group Meeting were:

- Refined / consistent terminology additional and improved tools
- Agreed format of Vulnerability Assessment template
- Sharpened tools and vulnerability assessment template as inputs to "Planning for Climate Change" tool

### **2. Planning for Climate Change**

Conducting Vulnerability Assessments is only the first stage of the climate change planning process. From a methodological perspective, developing such plans tends to be easier for cities and their planning departments than conducting climate change vulnerability assessments. Yet, agreeing on priorities and linking them to broader local objectives still presents a challenge. Further, tools for the development of stand-alone climate change action plans and/or the inclusion of

climate change into existing plans (development plans, land use plans, transport plans, shelter plans etc.), are not readily available.

Expected outcomes:

- Additional and improved tools
- Agreed format of stand-alone climate change plan template
- Sharpened tools and template for stand-alone climate change plans as inputs to "Planning for Climate Change" publication.

### **3. Greenhouse Gas Inventories**

The Global Protocol for Community-Scale Greenhouse Gas Emissions (<http://www.ghgprotocol.org/city-accounting>) provides a framework for city-level greenhouse gas assessments. However, tools for local governments to apply this framework are needed. The Expert Group Meeting set out to share experiences and agree on an outline for the Terms of Reference for the development of a locally applicable tool.

## **C. Summary of Proceedings**

### **Day 1, Wednesday, 31 October 2012**

#### ***Opening and Introduction***

After an Icebreaker ("name one area where you are not an expert but would like to be one") an informal introduction of the Experts, a keynote presentation by **Robert Kehew**, Leader, Climate Change Unit, UN-Habitat and an introduction to the Expert Group Meeting by **Bernhard Barth**, Human Settlements Officer and CCCI focal point for tool development and headquarters focal point for CCCI in Asia and the Pacific (Annex 3.1), the official opening ceremony commenced. Vice Governor of Gangwon Province, Hon. **Sang-Pyo KIM** delivered his opening speech and welcomed the participants. He stressed how important a challenge climate change was for the Asia and Pacific Region. Gangwon Province, the host of the Expert Group Meeting had developed its own climate change plan in response. Gangwon Province and the IUTC were happy to host this series of climate change related meetings, he expressed his hope for continued collaboration with the countries represented by the experts and renewed the Province's commitment to the IUTC and the partnership with UN-Habitat (Annex 3.2). On behalf of UN-Habitat, Bernhard Barth officially welcomed the experts and expressed his thanks to Gangwon Province and the IUTC for their continued support.

#### ***Session 1: Strengthening the Vulnerability Assessment Methodology***

To set the scene for the session on the Vulnerability Assessment Methodology, four case studies were presented providing an overview of the current practice and thinking within CCCI.

**Ms. Laidis Mamonong** presented how the "Planning for Climate Change" Methodology was tested and further developed in the Philippines. She proposed a refined vulnerability assessment framework and a number of tools that were based upon the Planning for Climate Change tool. The tools were adapted to the local context and improved based on local responses. (Annex 3.3)

**Ms. Do Minh Huyen** presented a case study from Viet Nam. The city of Hoi An assessed its climate change vulnerability in parallel to the development of an Eco-City plan. The vulnerability assessment was part of the initial scoping which provided the background for an “Eco City Development Strategy”. This integration into the overall planning process ensured that a separate climate change plan was not necessary (Annex 3.4)

**Mr. Bernhard Barth** presented a case study from the Pacific (on behalf of Preeya leli, who was not able to attend the meeting). A cost benefit analysis on ecosystems based adaptation had been conducted in support of the vulnerability assessment of Lami town. It was very challenging to align the two processes and to maintain a participatory process. (Annex 3.5)

**Mr. Padma Sunder Joshi** presented how the draft UN-Habitat gender check list was tested in Kathmandu. The nexus Gender, Cities and Climate Change is conceptually challenging and he suggested that better guidelines as well as a capacity development approach were necessary on the national, municipal and community level. (Annex 3.6)

In an initial round of discussions, Experts commented on the diversity of approaches and the multitude of methodological and substantive challenges.

In the afternoon of the first day, the focus turned from city-level experiences to a comparative analysis. Initially a global comparative study of existing city vulnerability and risk assessments was introduced, then a study comparing 6 UN-Habitat vulnerability assessments were presented and then the discussion was initiated by reflecting on existing methodologies.

**Bernhard Barth** introduced a Study which had been commissioned by the GIZ. For the study 10 assessment methodologies had been reviewed against 12 criteria (Data, methods, users, Originality, universality, thematic orientation, social dimension, Feasibility, value, connectivity). Whilst the study praised UN-Habitat's approach, it would be good to reflect on the methodology in light of the criteria. (Annex 3.7)

**Liam Fee** presented on behalf of **Lina Fedirco** on her comparative assessment of 6 CCCI vulnerability assessments. Her findings highlighted the need to simplify the methodology, better support to the assessment teams, more emphasis on quality control, provision of clearer guidelines and boundaries, and identify a clear audience for the assessment reports. (Annex 3.8)

**Robert Kehew** presented his reflections on Vulnerability and Risk Assessments. He grouped his conclusions in six recommendations: 1. Make reports more succinct, 2. Provide scientific backstopping, 3. Qualify Risk, prioritize systems, prioritize geographic areas, 4. Use *initial* assessment to help scope out *follow-on* assessment, 5 Provide *sourcebook* with additional simple analytic tools, 6. Clarify terminology (Annex 3.9).

Following a discussion on the presentations recommendations were further elaborated in Working Groups (in Annex 4 the outputs of the working groups are presented. key recommendations are summarized at the end of Session 1).

## Day 2, Thursday, 1 November 2012

**John Ingram** introduced the Planning for Climate Change tool. He described the target group, the approach, the principles/themes, and the planning process focusing at this stage on Module 1, "What is Happening?" (Steps 1-3). (Annex 3.10)

**Bernhard Barth** presented the feedback UN-Habitat had collected during field testing (on the city level) and using the tool in training (on the global, regional, national and local level). The tool had been well received. However a significant number of recommendations for improvement had also put forward. In particular the step addressing vulnerability assessments needed to be aligned with current (CCCI) practice, more tools – and in some cases alternative tools – needed to be developed (Annex 3.11).

Working groups developed recommendations on how to improve the tool with a particular emphasis on the step addressing vulnerability assessments.

### Key recommendations – Vulnerability Assessments

#### Box 1. Recommendations – Vulnerability Assessments.

1. UN-Habitat's CCCI methodology has advanced; it is critical to codify this methodology (Planning for Climate Change tool), whilst providing enough space for local application.
  - a. Vulnerability Assessments are aligned with national guidelines, however risk assessments may in some instances be more relevant (depending on the target group).
  - b. Even when vulnerability assessment approach is chosen, it is critical to closely collaborate with Disaster preparedness community.
  - c. The city-wide methodology is fairly advanced, however, integrating a vulnerability assessment into existing planning processes (in particular sectoral processes) remains challenging.
  - d. **Exposure** – should entail a description of current hazards and projected hazards and the climate related change it brings in a locality.
  - e. **Sensitivity**–The sensitivity analysis needs to bring out what the climate related change (e.g. drought) means for people, places and institutions. A sectoral representation prepares for possible (sectoral) adaptation options.
  - f. **Adaptive Capacity** – it is critical to present autonomous, community based and institutional adaptive capacity. It may be useful to develop an adaptive capacity index (or a traffic light system to highlight areas of concern if an index is not favoured by the city). It is critical to identify areas for potential action.
  - g. An annotated outline of a vulnerability assessment should be made available to all CCCI consultants and teams. This should also be made available in the "Planning for Climate Change" tool (see Annex 5)
2. Principles
  - a. Strategic, participatory, gender-sensitive and pro-poor, values-based, integrative (cross sectoral) – whilst primarily important for the planning

- steps, it is important to lay the foundation during the assessment phase.
- b. Mainstreaming into existing plans (already important during assessment phase).
3. Capacity Development
    - a. Whilst a clear methodology is necessary, roll-out is not possible without a capacity development strategy.
  4. Tools
    - a. All tools should be consistently introduced (how to use them) and clarified with an example (ideally real example from CCCI), i.e. each tool should be presented in a populated state.
  5. Planning Cycle
    - a. Step 1, needs to be linked to local governments and policies
    - b. Step 2, linkages to other steps need to be brought out
    - c. Step 3, Vulnerability assessments (see above)
    - d. After steps 5, 6, 7, it may be necessary to come back to the vulnerability assessment (to highlight vulnerabilities of specific sectors or communities)
  6. Accessibility
    - a. The move towards the 20-pagers is seen as a good response to the identified need of having more succinct reports which can be digested by decision makers.
    - b. Critical to have the short reports in local languages

## **Session 2: Strengthening the Climate Change Planning Methodology**

In the afternoon of day 2 of the Expert Group meeting, attention shifted towards the planning methodology.

**John Ingram** introduced Modules 2-4 (steps 4-9) of the Planning for Climate Change tool, focusing in particular on step 4 (Values and Objectives), highlighting that the overall planning process was values-based and not alternatives focused, step 5 (renamed:) Option Identification and step 6 (renamed:) "Option Evaluation". (Annex 3.12)

**Laida Mamonong** introduced Climate Change Plans - process and outcomes, case study from Sorsogon City. She highlighted the multi-step participatory approach. She further explained why the four sectoral approaches (environmental management, disaster risk reduction, livelihoods and shelter) were chosen, which priority actions were chosen and how they were implemented. (Annex 3.13)

**Stelios Grafakos** presented the IHS Climate Prioritization Tool and how it linked to the "Planning Wheel" and most importantly how it could support the planning process. He then guided through the process. (Annex 3.14)

In working groups Module B (Step 4) and Module C (Steps 5-7) of the Planning for Climate Change cycle were analyzed and recommendations developed (see recommendations at the end of Session 2)



### **Day 3, Friday, 2 November 2012**

In plenary the group reviewed Module D (Steps 8 and 9) of the Planning for Climate Change tool. The group highlighted that this step was critical and that the foundation for monitoring (i.e. setting up a monitoring framework early enough in the process was critical). Further the group felt that in particular the impact monitoring was critical.

**Gi Jeung Um**, presented on the development of an index and indicators to evaluate local government climate change efforts. He described how indicators were selected (selection criteria) and the indicators for mitigation and adaptation. In order to measure progress, primarily existing indicators were chosen – the ones chosen were sometimes not ideal but availability was considered important. For resource poor contexts a scaled down approach was necessary. He further introduced the index as well as a case study from Gangwon-do. (Annex 3.15)

In plenary the group discussed the advantages and disadvantages of Stand-alone Climate Change Plans vs mainstreaming climate change into existing plans. (Annex 3.16)

In groups a template for a stand-alone City-Wide Climate Change Plan was developed and options for mainstreaming climate change into sectoral plans were explored.

#### **Key recommendations – Planning Methodology**

Box 2. Recommendations – Planning Methodology.

1. Themes and Principles
  - a. Strategic, participatory, values-based (including gender-sensitive and pro-poor), integrative (cross sectoral)
2. Mainstreaming vs. standalone plans
  - a. A Climate Change Action Plan that can be mainstreamed/implemented through existing policy instruments and plans
  - b. Practitioners need to be provided with a template for a stand-alone action plan. (Annex 6)
3. Financing
  - a. A pre-feasibility plan that can be used to support action financing (ADB, etc.)
  - b. How to finance actions with emphasis on local funding avenues/budgets (i.e., linking to existing budgets and tools)
  - c. Applications for funding/financing of larger, capital intensive projects could be supported by Climate Change Action Plan
4. Review of steps
  - a. Step 3: New Step 3 to match refined CCCI Vulnerability Assessment approach. New tools to be developed. Some materials from original guide maintained (see above).
  - b. Step 4: Ensure objectives are checked against existing City/local government plan visions – should be a “stress test”, also could be added as task to ensure that objectives are relevant to climate change and relevant to planning vision/direction, Highlight the

connection between objectives and vulnerable (pro-poor and gender sensitive).

- c. Step 5: New Tool: Organizing Actions – organizing actions/options by sector, Revise Action Screening Tool to include Multiple Objectives column and include blank columns that can be filled in with community context specific screens (e.g., culturally acceptable)
- d. Step 6: This step will require significant reworking: New tools – Objective Indicators (i.e., crafting measures); Technical Evaluation (the consequence table); Objective Weighting; Value Assessment, Highlight importance of second screening Tool – reviewing the top ranked actions for such things as financial feasibility, mainstreaming potential, etc., Text box highlighting CLIMACT PrioLite and regular tool
- e. Step 7: Include sample table of contents for Climate Change Action Plan, Re-emphasize output: a Climate Change Action Plan that can be mainstreamed/implemented through existing policy instruments and plans, include financing discussion (see above)
- f. Step 8: Bring in indicators from Step 4, Clarify Tools
- g. Step 9: Expand to one or two pages

### **Session 3: Strengthening the Greenhouse Gas Assessment Methodology**

**Prof. Mahanama** introduced the GHG audit that had been undertaken in Batticaloa as part of the CCCI process in Sri Lanka. He highlighted the challenges but it became also clear that small cities can conduct such assessments if they identify the right (university) partner. (Annex 17)

**Robert Kehew:** Making the Global Protocol for Community Scale GHG emissions accessible. The partnerships, the process and the existing tool(s) as well as the plans of the partners were presented. As cities find it difficult to implement the tool, the question at stake was: "what can UN-Habitat do" to support the process (Annex 18)

In groups recommendations for the way forward (UN-Habitat's role in supporting cities in conducting GHG audits) were developed.

### **Key recommendations – Greenhouse Gas Assessment Methodology**

#### Box 3. Recommendations – Greenhouse Gas Assessment Methodology.

1. With regard to the needs for the wider CCCI community the following was recommended.
  - a. A detailed guideline in support of the GHG inventory tool is not needed (i.e. a separate document repeating the existing guideline)
  - b. An advocacy document (see below would be useful)
  - c. A planning for climate change tool for climate change mitigation may be useful
  - d. A training curriculum for the use of the GHG inventory would be useful
  - e. An Excel-based tool would also be useful
2. Suggested Terms of Reference for advocacy material for Local Elected Officials and Stakeholders on GHG Profiling:
  - a. **Rationale:** To facilitate improved understanding of local leaders and stakeholders on the merits of having an GHG emission profile detailing the purpose, benefits, of having an inventory as well as the resources required for the conduct of the inventory process. The material shall facilitate mobilisation of other stakeholders to cooperate and support the local authorities in developing a GHG inventory
  - b. **Content/Outline:** i. Why Local Government should do it? Looking at the applicability of the material in big and emerging cities, ii. Benefits/Incentives, iii. How? - Global and International Good Practices,
  - c. **Selection Criteria:** i. Background in Communications and Advocacy, ii. Background in working with cities/local authorities, iii. Good information link (knowledge) on climate change and existing guidelines for GHG inventory.

### **Way forward**

## **Annexes**

*Available upon request*