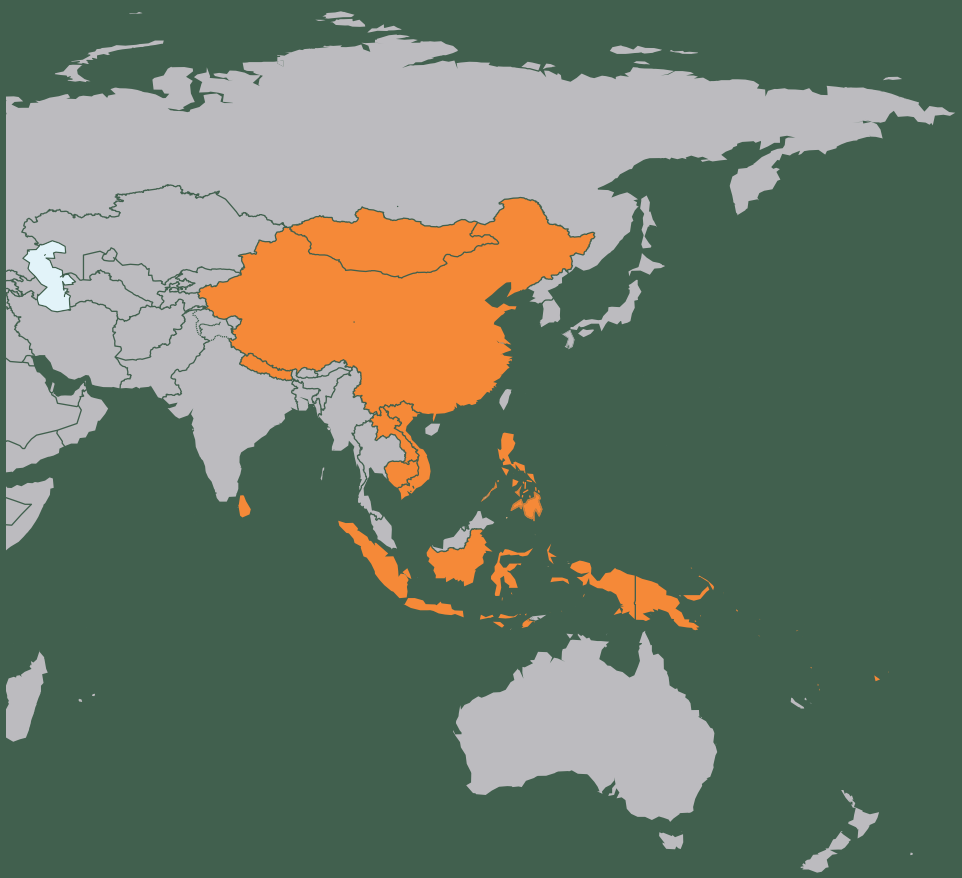
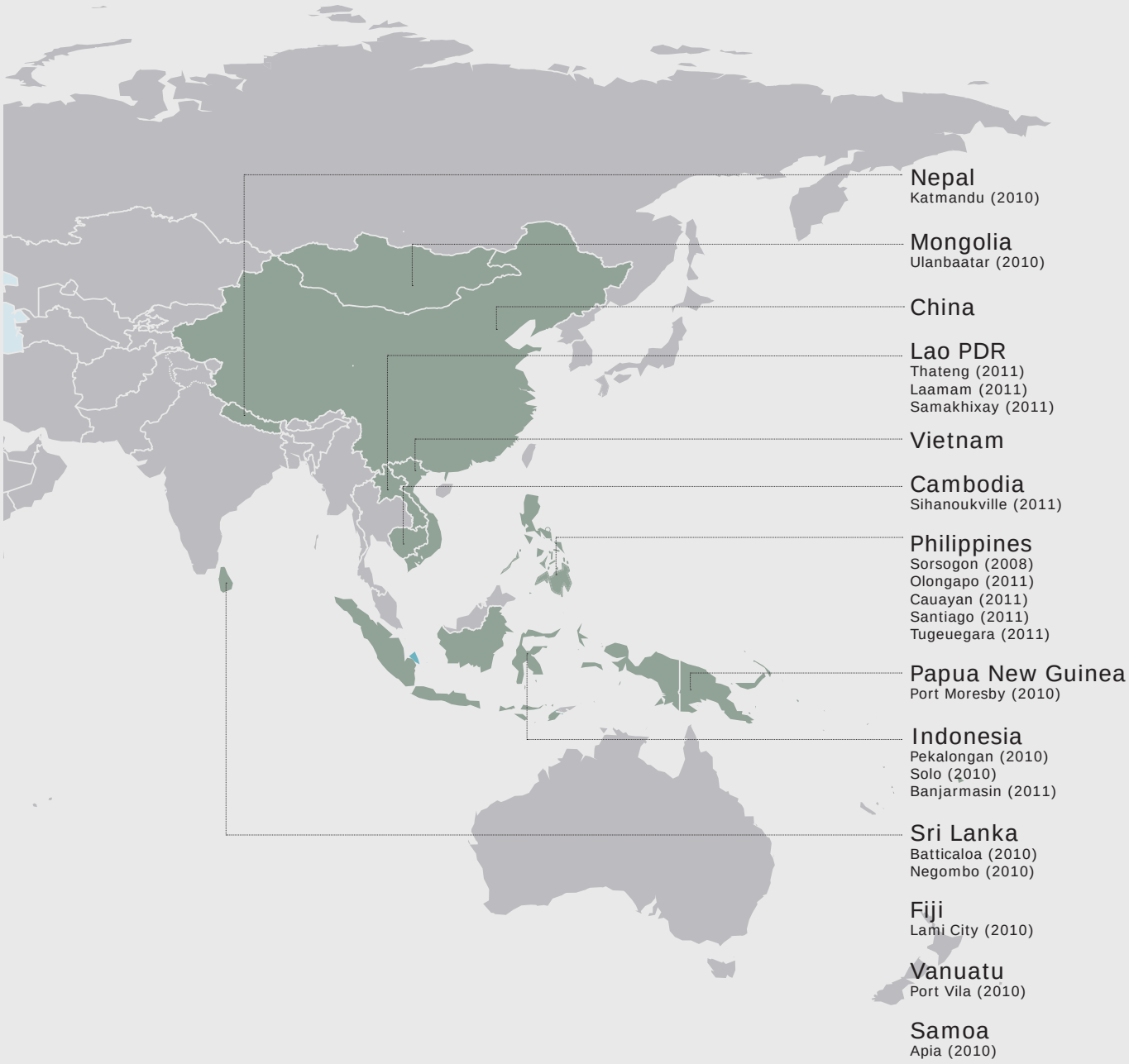
CITIES AND CLIMATE CHANGE INITIATIVE - ASIA-PACIFIC

REGIONAL STRATEGY



UN-HABITAT

DIAGRAMME 1 CCCI ASIA-PACIFIC PARTICITPATING COUNTRIES AND CITIES (FEB 2011)



1. Cities and Climate Change in Asia-Pacific – A call for action

Asia is the largest of all major regions with 30 per cent of the global land mass and 60 per cent of world's population. With an urbanization rate of 42.2 per cent in 2010, Asia ranked as the second least-urbanized major region of the world after Africa's 40.0 per cent. Asian cities are home to 1.7 billion people, nearly half the urban population of the world. This proportion is expected to increase to 47.2 per cent in 2020, when Asian cities will be host to 2.2 billion of the world's 4.2 billion urban population. Between 2010 and 2020, a total 411 million people will be added to Asian cities, or 60 per cent of the growth in the world's urban population. While the world became predominantly urban in 2008, Asia is expected to reach the 50 per cent mark in 2026.[1]

Although cities cover less than two per cent of the earth's surface, they consume 78 per cent of the world's energy and are responsible, directly or indirectly, for a similarly high proportion of greenhouse gas emissions. Rapid urbanization, along with the need for housing, urban infrastructure, increased individual motorised transport and a generally more energy intensive lifestyle will further increase the pollution of our planet.

The Asia-Pacific region is the most disaster prone region in the world. Over the course of the 20th century, Asia accounted for 91 per cent of all deaths and 49 per cent of all damage due to natural disasters.[2] More than half a million lives have been lost as a direct result of major climatic events since the 1970s.[3] Many of these catastrophes have affected the region's cities. This situation points to a clear need to address climate change, especially through adaptation.[4]

Particularly vulnerable are the millions of urban poor in the Asia-Pacific region, huge numbers of whom live in places most prone to disasters. These include steep slopes, riverbanks, garbage dumps or coastal areas. When a cyclone or a hurricane or floods hit, or an earthquake strikes, it is always the women and the children they support who are most vulnerable, along with the infirm and elderly[5] people.

1 UN-HABITAT. 2010. The State of Asian Cities 2010/11. Fukuoka: UN-HABITAT.
2 UNCCD. 2009. Climate Change Impacts in the Asia/Pacific Region. United Nations Convention to Combat Desertification.
3 DFID. 2004. 'Climate Change in Asia' Key Sheets, http://webarchive.nationalarchives.gov.uk/+/http://www.dfid.gov.uk/documents/publications/climatechange/6disasterproof.pdf (accessed 14 July 2010)
4 UN-HABITAT. 2010. The State of Asian Cities 2010/11. Fukuoka: UN-HABITAT.
5 UNFPA. 2009. The State of World Population 2009 – Facing a changing world: women, population and climate, New York: UNFPA.

Some important facts:

- In 2009, the greatest damage in the Asia-Pacific region was caused by storms and earthquakes. During January-September, the region experienced 42 disasters, of which 16 were floods that followed tropical storms. By November 2009, these disasters had affected more than 6.8 million people, left 155,850 homeless, and caused more than US $227 million in economic damage. The death toll was, however, much smaller than the previous year, when two major disasters, the Sichuan earthquake and cyclone Nargis, had struck the region killing 232,255 people.[6]

- Flooding and landslides between 2000 and 2005 were particularly serious in the Asia-Pacific region. During this period, the region suffered from 192 floods a year, but in 2006 the number rose to 226[7]. In Pakistan, 16 million people were displaced[8] and nearly 2,000 people died due to floods, which covered one-fifth of the land after torrential rains pelted the northwest, swelling the Indus and its tributaries from July to August in 2010[9].

- Extreme temperature variations strain urban energy systems as demands for heating and air conditioning increase. Heat waves further put a strain on urban infrastructure. They bring higher mortality rates, usually among older people, force increased irrigation needs and threaten urban food and water security. Parched lands eroded by drought are already displacing millions in China and Mongolia. In January 2009, train tracks buckled under record heat that affected South Australia.[10]

- The Intergovernmental Panel on Climate Change expects sea level rise of 18 to 59 cm by the year 2100. However, more recent studies, taking into account accelerated ice loss, predict sea level rise of 75 to 190 cm for the period 1990–2100[11]. An estimated 18 per cent of Asia's urban population lives in low-lying coastal zones (i.e., less than 10 metres above sea level)[12], which accounted for 304 million people in 2010. In the Asia-

6 ESCAP. 2010. Statistical Yearbook for Asia and the Pacific 2009. Bangkok: UN Economic and Social Commission for Asia and the Pacific, p.219
7 DFID 2004. Report on Climate change in Asia
8 OCHA, Monsoon Floods Situation Report, 14th September 2010
9 See: http://www.irinnews.org/Report.aspx?ReportID=91720
10 Australian Broadcasting Corporation. 2009. Train tracks buckle under record heat, see: http://www.abc.net.au/7.30/content/2008/s2477773.htm#
11 Vermeer, Martin and Rahmstorf, Stefan, 2009. "Global sea level linked to global temperature" Proceedings of the National Academy of Sciences of the United States of America. Early Edition. PNAS 2009 106 (51) 21527-21532; published ahead of print December 7, 2009, doi:10.1073/pnas.0907765106. www.pnas.org_cgi_doi_10.1073_pnas.0907765106
12 McGranahan, Gordon, Deborah Balk, & Bridget Anderson. 2007. "The rising tide: assessing the risks of climate change and human settlements in low elevation coastal zones" Environment & Urbanization 19-1, p.7-37

Pacific region, more than 70 per cent of urban population in Small Island Developing State's (SIDS) located along coastlines and rivers vulnerable to flooding and sea-level rise.[13]

- Water quality and shortages arising from sea-level intrusion and salt-water contamination will further strain water resource management[14], the most vulnerable urban populations being those located in the already water-stressed basins of southern Asia and northern China, particularly those in megacities using ground water and in the SIDS[15]. Severely water stressed populations of southeast Asia are likely to increase to 120 million and 1.2 billion by the 2020s and 2050s respectively.[16] Glacial melt in the Himalayas is expected to cause unpredictable excesses (floods) and shortages (drought) of water.

- Water-related diseases like malaria and dengue fever are rising because of flooding, along with cholera, respiratory and nutritional disorders placing a strain on health care systems, mainly among the urban poor[17]. High population densities, inadequate coverage of clean water, sanitation and waste disposal services raise vulnerability to climate-sensitive infectious diseases such as diarrhoea and dengue.[18]

- City management capacities to respond to climate change are lacking. Without National Adaptation Plans of Action (NAPAs) for climate change response, many countries are ill-equipped to face the threats of climate disruption. Cities need to develop assessments of their vulnerability and greenhouse gas emissions, and ensure that climate responses are integrated into their planning and budgetary processes. All of this is needed at a time when governance structures are having trouble coping with speed and magnitude of urbanization – the process whereby city populations grow bigger and bigger.

13 UNEP 2003. Global Environment Outlook 3. Nairobi: UNEP.
14 IPCC, 2008. Technical paper VI: Climate Change and Water, (WGII 3.4.2).
15 IPCC, 2008. Technical paper VI: Climate Change and Water, (WGII 3.3.3,3.5.1).
16 Arnell, 2004. Climate change and global water resources: SRES emissions and socio economic scenarios.
17 Epstein Y, Sohar E and Shapiro Y.1995. Exceptional heatstroke: a preventable condition. Journal of Medical Science, Israel (reference to be completed).
18 WHO. 2009. Protecting Health from Climate Change: Connecting Science, Policy and People. Geneva: WHO, p.14.

2. UN-HABITAT's Response

2.1 Incorporating environmental concerns into urban decision making in the Asia-Pacific region

Recognising that cities significantly contribute to greenhouse gas emissions and are greatly affected by climate change impacts, the Sustainable Cities Programme – Asia-Pacific (see Box 1) Regional Partners Meeting (August 2008) resolved to apply its 20 years of hard-won local experience, city and national partner networks, and regional support infrastructure to raise awareness of city leaders to the likely impacts of climate change and start building capacities of cities to prepare and implement city adaptation and mitigation action plans.

Following the UN-HABITAT Governing Council resolution on Cities and Climate Change during its 22nd session and establishment of the global "Cities and Climate Change Initiative" (CCCI), the Sustainable Cities Programme – Asia-Pacific transitioned to the Cities and Climate Change Initiative – Asia-Pacific (CCCI-AP), aiming to support cities and national governments in the region to climate-proof urban infrastructure, shelter, transport and public utilities; and make low-carbon urban planning solutions for buildings the norm whilst paying particular attention to building the climate resilience of urban poor communities.

Box 1: Sustainable Cities Programme support to cities and national governments: 1990-2008

In preparation for the 1992 Rio Conference, UN-HABITAT advocated that sustainable cities were the engines of sustainable growth, and whilst environmental degradation jeopardises the development contribution of cities, such degradation was not inevitable, but resulted from limited urban management capacities. In response, UN-HABITAT and UNEP launched the global Sustainable Cities Programme to mainstream Agenda21 environmental planning and management (EPM) principles and practices into urban development decision making, providing three phases of support:

Phase 1 (1990-1995) pioneered the methodology through four demonstration cities: Chennai in India (for Asia), Dar-es-Salaam in Tanzania (for Africa), Concepcion in Chile (for Latin America) and Katowice in Poland (for transition economies in Eastern Europe).

Phase 2 (1996-2001) consolidated lessons learned and responded to regional city demands, when the Sustainable Cities Programme support was expanded in Asia-Pacific from Chennai to 15 cities in China, India, the Philippines and Sri Lanka.

Phase 3 (2002-2008) built a regional institutional support structure in order to sustain programme support in the Asia-Pacific region.

By 2008, the Sustainable Cities Programme in the Asia-Pacific region had successfully:

- Strengthened local Agenda21 capacities in over 60 cities, routinely implementing priority environmentally sustainable action plans to address (inter alia): solid and liquid waste management, river and lake pollution, water resource depletion, coastal zone degradation, air quality and transportation;
- Built partner networks nationally in nine countries to provide local expertise, document experiences, and mainstream lessons into policy guidelines which would replicate City Agenda21 processes to other cities;
- Developed a regional institutional support structure to sustain programmatic support through sub-regional knowledge management and capacity-development support nodes, providing specialist inputs and issue-specific knowledge platforms anchored on UN-HABITAT's community of practice (K-CAP) and expert group meetings to strengthen regional advocacy dialogues;
- Shared the lessons learned through global conferences, integrating them into Environmental Planning and Management toolkits which had been applied and customised to local conditions in China, India, Philippines, Sri Lanka and Thailand in support of national up-scaling.

2.2 Cities and Climate Change Initiative – Asia-Pacific (CCCI-AP)

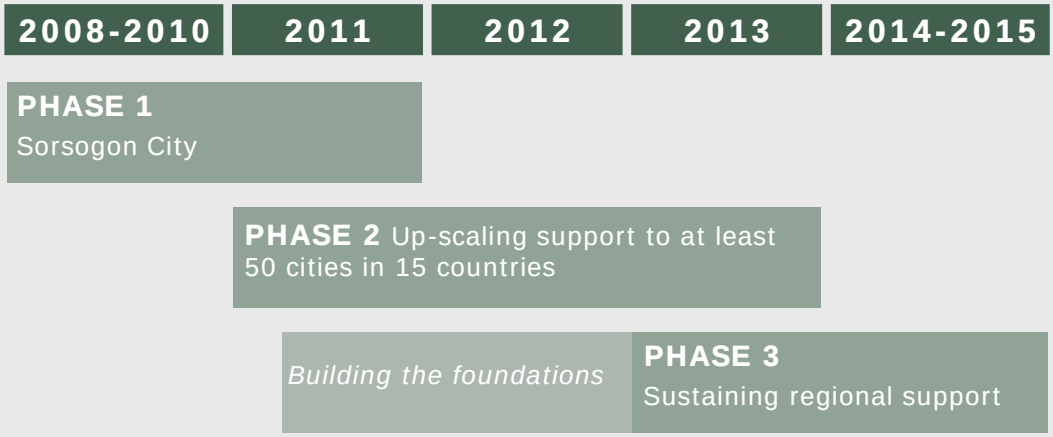
Phase 1 – 2008-2010: Demonstration, tool development and early replication

Whilst CCCI-AP Phase 1 activities focussed on one pilot city (Sorsogon), initial lessons learned were quickly replicated in the Philippines and across the Asia-Pacific region through the established partner network. Achievements to date include:

At the Sorsogon local-level:

- Climate change awareness raised through citywide and community-specific Vulnerability and Adaptation Assessments and a citywide greenhouse gas audit.
- Key issues and communities at risk prioritised for further support in a broad-based City Consultation.
- Cross-sectoral and issue-specific working groups established to manage pilot interventions to build community resilience and reduce city vulnerability, including (i)

DIAGRAMME 2. CCCI ASIA-PACIFIC IMPLEMENTATION PHASES



Phase 1: Demonstration and tool development

- Sorsogon City, pilot project and global tool development

Phase 2: Disseminating lessons learned and building national replication capacity

- Sharing lessons learned with cities in Asia and the Pacific. Support 50 cities in 15 countries: Philippines – programme roll-out in in additional cities in collaboration with national partners. Programme activities in: Cambodia, China, Fiji, Indonesia, Lao PDR, Mongolia, Nepal, Papua New Guinea, Samoa, Sri Lanka, Vanuatu, Viet Nam and 2 additional countries (tbc).

Phase 3: Sustaining support through regional networking and policy dialogue

- Strengthening partnerships with national, regional and global partners to sustain interventions at city and national levels; respond to additional requests from national and local governments in the region.

a community resilience and livelihoods action plan, (ii) discussions on urban poor micro-insurance support, (iii) a green building strategy and strengthened cyclone resistant buildings, and (iv) support to energy-efficiency projects focussing on municipal energy (in particular lighting) and electrification of tricycles, all being integrated into city planning and budgetary processes.

At the Philippines national-level:

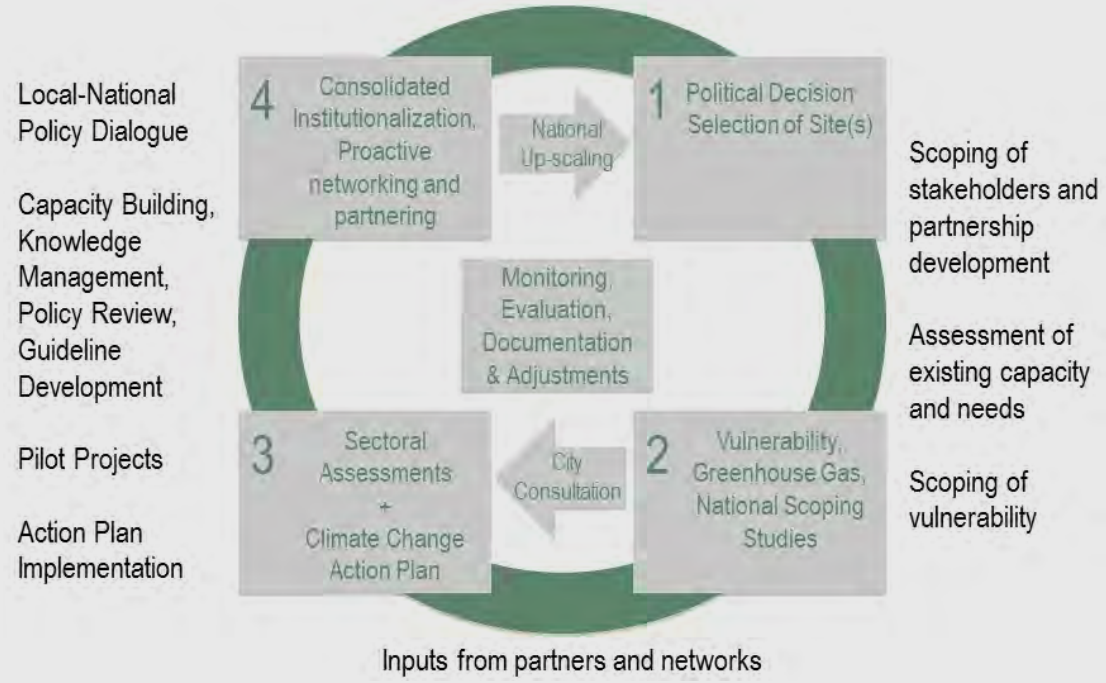
- Documented Sorsogon experiences[19] underpin replication to Caeauan, Olongapo, Santiago, and Tugegarao cities with parallel integration of city climate responses into national planning frameworks through a consortium of national partners (Department of Interior and Local Government, Housing and Urban Development Coordinating Council, and League of Cities of the Philippines).
- A "National Scoping Study" stimulated national policy dialogues, helping to integrate the "urban" agenda into the preparations for the country's Second National Communiqué (to UNFCCC), and making local governments the lead implementers of the Climate Change Act of 2009.

At the Asia-Pacific regional-level:

- A general 'process model' for city and country level replication was developed. The Vulnerability Assessment approach was developed into a toolkit, now being applied in 20 demonstration cities in 12 other countries in the Asia-Pacific region. National Scoping Studies, based on a template, developed for the region, are being conducted in most of the participating countries.
- Partnerships built with UNEP, WHO and UN-HABITAT's Water for Asian Cities Programme to develop water and sanitation, ecosystems-based adaptation, and health related urban climate responses and working with UN-HABITAT's gender and youth programmes for effective mainstreaming.
- Training of Trainers workshops on cities and climate change conducted in support of local government training in the region (with the Local Government Academy of the Philippines and the regional training network LOGOTRI, March 2010).

19 For further information visit: www.unhabitat.org.ph/climate-change/

DIAGRAM 3 CCCI SUPPORT PROCESS



- Linking Climate Change to on-going project activities in the Asia-Pacific region, such as slum upgrading, and water and sanitation work.
- Regional university workshop held to strengthen climate change aspects in urban and regional planning education (March 2010).
- A network of regional programme partners (ADB, CDIA, GTZ (now GIZ), Rockefeller Foundation, UNEP, UNESCAP, UN-HABITAT) committed to jointly support 300 cities address climate change impacts by 2015 during the Cities and Climate Change – Asia-Pacific Regional Partner Meeting, held in Changwon City, Republic of Korea (see Annex 1 for the Changwon Declaration).

At the Global level:

- Global awareness raising materials developed and being rolled-out in all CCCI-AP focus countries.
- Supporting toolkits developed and being tested in selected CCCI-AP replication cities. These toolkits include: (i) Local Leadership for Climate Action, (ii) International Standard for determining GHG for cities, (iii) Making Carbon Markets work for your city, (iv) Developing Local Climate Change Plans, and (v) Planning for Climate Change – A Strategic, Values-Based Approach for Urban Planners.
- Network of global partners advocating the importance of cities and climate change and sharing demonstration experiences.
- CCCI supported city and national experiences disseminated at the "Urban Sustainability and Integrated Urban Regeneration" High-level Conference, Madrid (April 2010), ICLEI's Resilient Cities Conference, Bonn (May 2010), and COP 16, Cancún (December 2010).

2.3 Cities and Climate Change in the Asia-Pacific Region: Regional Partners Strategy 2011-2015[20]

Cities and Climate Change – Asia-Pacific Regional Partners Goal: To develop a regional advocacy, capacity-building, and knowledge networking support platform to enhance climate change resilience and reduce greenhouse gas emissions of 300 cities in the Asia-Pacific region by 2015.

Cities and Climate Change – Asia-Pacific Regional Partners 2015 Vision: Cities in the Asia Pacific Region responding in a comprehensive, participatory and multi-sectoral manner to climate change based on vulnerability, adaptation and emission assessments; integrating climate resilient adaptation and co-benefit mitigation responses into their city development budgets that reduce consumption and maximise recycling of resources; and supported by strong national policies and regional capacity-building and knowledge management networks.

UN-HABITAT's Targeted Contributions under Cities and Climate Change Initiative in Asia-Pacific by 2015:

- Climate Resilient adaptation and mitigation measures mainstreamed in participatory environmental planning processes and budgeting frameworks in at least 50 cities.
- Good city climate responses and urban development practices mainstreamed into national policies, strategies and legislative reforms in at least 15 countries.
- An advocacy, knowledge management and capacity-building network operational to support regional up-scaling.

3. UN-HABITAT CCCI-AP: Funding Proposal for Phase 2

Phase 2 – 2011-2013: Enhancing Asian-Pacific City Capacities through Climate Change Adaptation and Low Carbon Strategies and Actions

SUMMARY: Cities and Climate Change Initiative in Asia-Pacific (CCCI-AP), 2011-2013: Support at least 50 cities in developing and implementing climate change adaptation and mitigation strategies and action plans in at least 15 countries by the end of 2013. This will be achieved through technical support by CCCI-AP, delivered by "national urban sector coalitions for climate change[21]"; development, adaptation to local needs and dissemination of CCCI toolkits; and policy guidelines and good practices to between one and five cities per country, depending on the local context[22]

20 Agreed under the Changwon Declaration; see Annex 1.

21 With representatives typically from National Government Departments, Local Government Associations, leading Universities, Local Government Training/Research Institutions and NGOs

22 Note that there are limited replication opportunities in the smaller Pacific Island Countries (Samoa, Vanuatu)

Project Description

OBJECTIVE 1:

To build the capacities of at least 50 cities in at least 15 countries in preparing and implementing comprehensive Climate Change Strategies and Action Plans

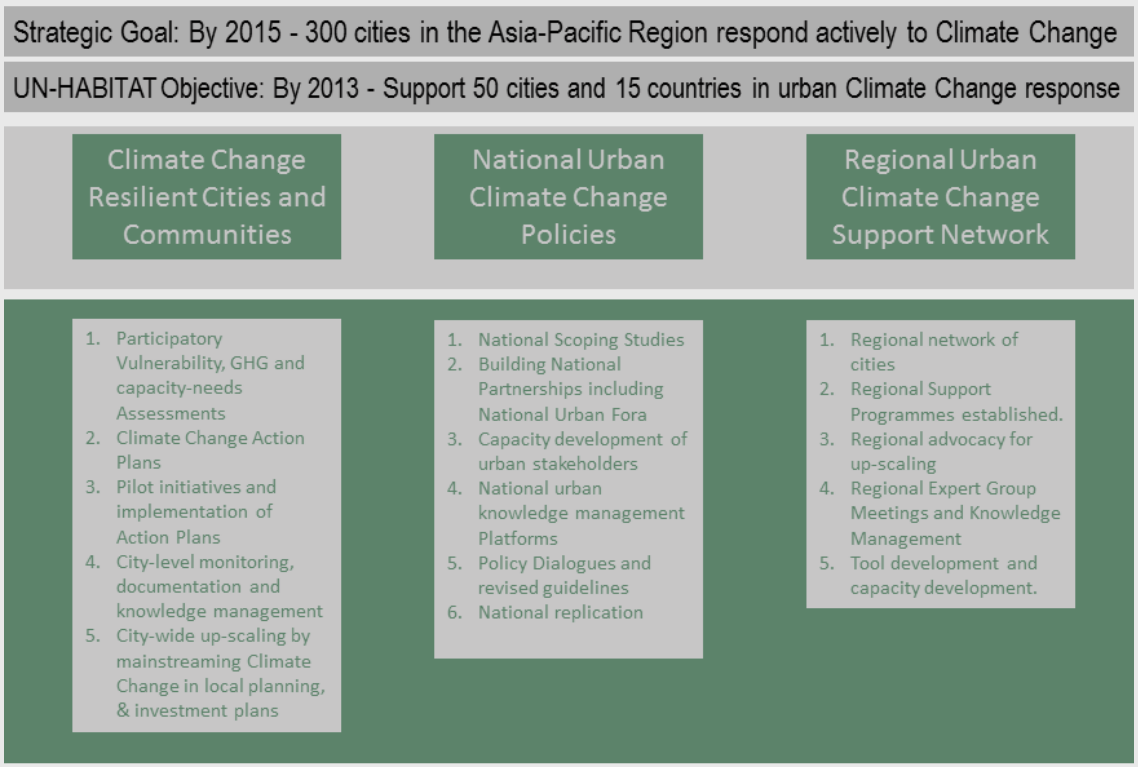
- Support the finalization of Vulnerability and Greenhouse Gas Assessments as appropriate, and summarise the key issues into "City Climate Change Statements": 35 additional Vulnerability Assessments and 41 additional Greenhouse Gas Audits.
- Disseminate the findings in City Consultations to prioritise the issues, the most threatened communities and sectors to be addressed, mobilise political support, and build civic society and private sector partnerships to respond: 40 additional City Consultations.
- Conduct in-depth sectoral assessment as appropriate in support of the development of climate change action plans (for example in the area of Water and Sanitation, Urban Health, Shelter, Eco-system-based adaptation, etc.)
- Establish issue-specific cross-sectoral multi-institutional Working Groups to prepare pro-poor and gender sensitive City Adaptation and Mitigation Strategies and Action Plans with emphasis on mainstreaming climate change into existing plans: 50 City Resilient Adaptation and Mitigation Strategies and Action Plans prepared with documented reports of achievements and lessons learned.
- Implement Action Plans through demonstrations with seed funding linked to the annual city planning and budgeting process: City demonstration project fund operational to integrate pilot initiatives in city budgets.
- Document experiences and develop city-level guidelines to institutionalise "City Resilient Low-Carbon Green Growth": 50 City-level guidelines to support the mainstreaming of "City Resilient Low-Carbon Green Growth".

OBJECTIVE 2:

To integrate good climate responsive urban development practices into national policies, strategies and legislative reforms:

- Develop 'national scoping studies' (based on the experience of the Philippines and other countries in Asia-Pacific), document and share the lessons learned with replicating countries regionally: 15 National Scoping Studies.

DIAGRAM 4 CORE COMPONENTS THE UN-HABITAT'S CCCI ASIA-PACIFIC METHODOLOGY:



- Present 'national scoping studies' and findings from demonstration cities to national fora and support the development of "National Statements on Climate Resilient Cities". Support "national urban sector coalitions for climate change"23 and establish National Urban Forums (NUFs) for policy dialogue to address Climate Change Impacts on human settlements: 15 National Urban Fora (NUF) established, supported by urban sector coalitions and policy dialogues reported supported by national knowledge management hubs.
- Identify lead 'national replication partners' to develop and implement "replication strategies" based on good practices, customised/translated CCCI tools, training curricular and documented lessons learned: 15 National replication strategies (including customised toolkits) under implementation by national replication partners in at least 50 cities.
- Support the development of national policies addressing cities and climate change with a particular emphasis on the revision of city development plans and land use plans.

OBJECTIVE 3:

To establish the CCCI Regional Partners' advocacy, knowledge management, capacity-building and networking "platform":

- Establish a Regional Advisory Group to ensure follow-up to the Changwon Declaration (see Annex 1) and develop a regional support mechanism and knowledge management platform in partnership with regional support programmes with a particular emphasis on building national and local-level capacity to access global and regional Climate Change adaptation and mitigation funding.
- In collaboration with regional partners advance knowledge on cities and climate change in Asia and the pacific through (i) expert group meetings (ii) documentation, (iii) harmonization and (iv) dissemination in the following areas: vulnerability assessments, greenhouse gas audits, national assessments, in-depths sectoral assessments, local and national policy, climate change adaptation and mitigation measures.
- Develop training of trainers (TOT) programmes to introduce the regional generic toolkit at the city and national level, conduct a TOT workshop, and finalise the TOT materials from the lessons learned during its implementation: Three Training of Trainers meetings conducted and documented.
- Revise the generic regional toolkit ("Cities Adapting to Climate Change") using documented regional partner good practices in order to illustrate urban climate change adaptation in development practice: Cities Adapting to Climate Change Toolkit developed.
- Support City-to-City exchanges to strengthen good practice sharing and mutual learning: 15 City-to-City exchanges conducted and reported.
- Organize CCCI-AP's Annual Regional Partner Meetings.

23 With representatives typically from National Government Departments, Local Government Associations, leading Universities, Local Government Training/Research Institutions and NGOs

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