

# UN HABITAT

## CITIES AND CLIMATE CHANGE INITIATIVE

### NEWSLETTER

June 2014

## Integrating urban and peri-urban agriculture into city-level climate change strategies

Urban agriculture, when planned and managed properly, can contribute to climate change mitigation efforts by lowering the ecological footprint associated with food production. At the same time, urban agriculture can enhance climate change adaptation efforts by increasing vegetation cover and reducing surface water run-off, while at the same time conserving biodiversity.

With support from the Government of Norway, UN-Habitat's Cities and Climate Change Initiative collaborated with the Resource Centers on Urban Agriculture and Food Security (RUAFF) Foundation on a pilot project to integrate urban and peri-urban agriculture in the city climate change and urban development strategies of three cities: Bobo Dioulasso, Burkina Faso; Kathmandu, Nepal; and Kesbewa, Sri Lanka.

The activity aimed to build the resilience of these cities by enhancing the supply of locally produced food and thus reduce their dependency on food imports, improving urban food security and generating income and job creation. At the same time it sought to enhance the collaboration between local governments and stakeholders involved in horticulture, livestock, agro-forestry and aquaculture. The activity's co-benefits include the greening of urban spaces.

In **Bobo Dioulasso**, the



*A rooftop garden in Kathmandu, Nepal ©Marielle Dubbeling*

municipal council developed three regulations to ensure sustainable and productive management of greenways in the city. One of these regulations has been approved. The potential for carbon dioxide sequestration by planting mango and cashew trees on the greenway's is projected to be 1,835 tonnes of carbon dioxide

per hectare over the next one hundred years. This corresponds to 58,555 tonnes of carbon dioxide sequestered during that period if all municipal greenways were to be cultivated. Meanwhile, the households participating in the project are saving, on average, the equivalent of 6 percent of their monthly food expenditures.

## Integrating urban and peri-urban agriculture into city-level climate change strategies (continued)

In **Kathmandu**, the city authorities have drafted a rooftop gardening policy that is awaiting approval. More than 250 households have been trained in rooftop gardening, and 30,000 United States dollars has been allocated by the city to develop a rooftop garden program in 2014. The project is producing, utilizing and widely disseminating awareness raising and educational materials that include training materials, rooftop

garden case studies and regular updates on a local radio station.

In **Kesbewa** 43 acres of paddy field located in flood risk zones have been put into cultivation. This was as called for in a national policy for the rehabilitation of abandoned paddy fields to whose implementing guidelines CCCI and RUAFA provided input. Increasing local food production in home gardens

and abandoned paddy lands is reducing food imports from rural areas, contributing to reduced emissions and fossil fuel use in the transportation of food. The households practicing intensive home gardening are able to sell 53% more produce than they were before training. The success of home gardening in flood zones has attracted interest from the media, farmers, government officials and school children.

## Side event at United Nations Economic and Social Council (ECOSOC) focuses on cities and climate change



Participants at the ECOSOC side event in New York City © Xunjing Wu

UN-Habitat's CCCI working with colleagues based in the UN-Habitat New York office recently organized a well-attended side-event on the theme "Sustainable Urbanization and Climate Change" at the UN Headquarters in New York City on 27 May 2014. Held on the sidelines of a UN ECOSOC meeting, the event focused on the topic of cities and climate change and its increasing importance in the sustainable urbanization debate. Several panelists consisting of eminent scholars and practitioners in the field deliberated on the state of the scientific discussion on climate change while emphasizing the potential role of cities in tackling complex mitigation and adaptation challenges.

Dr. Joan Clos, the Executive Director of UN-Habitat, delivered an opening statement highlighting the crucial role that urban planning and design can play in the reduction of greenhouse gas (GHG) emissions. He informed participants that a slowdown in growth of emissions, followed by a levelling out and finally reductions, are needed to keep temperature rise at less than 2 degrees Celsius above pre-industrial levels. Dr. Clos called for economic incentives to promote the commercial viability of low carbon emission development models. He pointed to the opportunity to design the cities of the future that is presented by unprecedented urban growth in developing countries, particularly in China.

Rohit Aggarwala, a special advisor to the UN Secretary General's Special Envoy for Cities and Climate Change, former Mayor of New York Michael Bloomberg, highlighted the importance of big cities in the management of carbon emissions. He noted that, in many developed countries, a handful of cities contributed the bulk of the total national GHG emissions. Furthermore in many cities in the Global North, in particular the United States, inhabitants have a lower per capita carbon emission than non-city dwellers. For such reasons a concerted effort in a few cities can make a significant difference in national mitigation action. Dr. Aggarwala further noted that various levers for reducing carbon emissions exist at the local level, including in the management and regulation of buildings, waste, water, mass transit and in some cases energy supply.

Mr. Pankaj Bhatia, the World Resources Institute's director in charge of the Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC), delivered a presentation on the GPC tool that provides a comprehensive GHG accounting and reporting framework for cities. Mr. Bhatia called for improving the capacity in developing countries for implementing mitigation policies and monitoring their outcome. He noted that cities increasingly will establish comprehensive

## Side event at ECOSOC focuses on cities and climate change (continued)

frameworks to measure their emissions, set targets and monitor performance as the cities transition to low-carbon development plans.

Mr. Daniel Zarrilli from the City of New York presented on the work of the City's Panel on Climate Change, and the City's comprehensive long-term planning on resiliency and sustainability. Stating that coastal storms are one of the highest climate risks facing the city, Mr. Zerilli presented some of the lessons learned from the recent Hurricane Sandy. He proposed measures that can help protect buildings and other key infrastructure in the future.

The Rockefeller Foundation's

Samuel Carter presented the 'Resilience by Design' Initiative, noting that the expansion and densification of urban areas is an opportunity to increase resilience when communities are engaged in that change process. Mr. Carter introduced the City Resilience Framework, a tool for articulating urban resilience in a measurable, evidence-based and accessible way that in turn assists decision-makers in informing urban planning, practice, and investment patterns.

The presentations were followed by wide-ranging discussions focusing on mitigation and adaptation, including the role of the private sector, co-operation across different sectors and education for increased

resilience. Gender issues were highlighted by several speakers who stressed that women in developing countries are particularly affected by climate change and natural disasters and require support through targeted policies.

The event was moderated by Professor Eugenie Birch, the Co-Director of the Penn Institute for Urban Research, Professor and Chair of the Department of City and Regional Planning at the University of Pennsylvania and Chair of the World Urban Campaign.

## Silay City in the Philippines prepares for climate change



A technical working group member locates at-risk areas using the city's zoning map. @Priscella Mejillano

A technical working group formed by Silay City recently completed a vulnerability and adaptation assessment that was technically supported by UN-Habitat.

The assessment will support the mainstreaming of climate change into the city's shelter plan for more effective and efficient comprehensive land administration.

Using the city's current land use plan, the technical working group was able to visually identify which land use zones will likely bear the greatest brunt of future climate change impacts, and so will require future analysis. The team also identified which basic services and facilities need further re-adjustments for the city to become more adaptive to climate change.

## Short films on climate change in Southeast Asia released

UN-Habitat's Regional Office for Asia and the Pacific recently released three short films on climate change that capture the views of stakeholders in the private and public sectors.

A film on Cambodia's coastal city of Preah Sihanouk showcases how UN-Habitat's climate change planning approach is effectively helping cities to build up resilience.

The next film on Pakse in

Laos features the vulnerability assessment conducted by UN-Habitat and efforts to improve awareness and understanding about climate change impacts.

Finally, a film on Hoi An in Vietnam highlights UN-Habitat's work with the local government and other stakeholders to assess the climate change vulnerabilities and develop an eco-city strategic plan.

To view the films visit UN-Habitat's



A screen grab of the short film on Hoi An, Vietnam @UN-Habitat

Youtube channel at: [www.youtube.com/user/unhabitatglobal/videos](http://www.youtube.com/user/unhabitatglobal/videos)

## Cities Day at UN Climate Conference

For several years now, UN-Habitat has actively participated in the United Nations Framework Convention on Climate Change (UNFCCC) climate negotiation processes. Together with partners, the Agency has sought to promote a more visible and formal role for the local authorities in these processes. An inaugural “Cities Day” was held at the UNFCCC Conference of Parties (COP-

19) in Warsaw, Poland last year. UN-Habitat’s Deputy Executive Director (DED), Dr. Aisa Kirabo Kacyira, represented UN-Habitat at this milestone event.

Following this successful engagement, the DED was formally invited to chair this year’s “Cities Day” at the UNFCCC climate negotiations in Bonn in June. At this event, UN Member

States, sub-national governments, city leaders and experts came together to discuss experiences and best practices in relation to climate change adaptation and mitigation. The meeting participants expressed the need to continue the dialogue on this cities and climate change topic, and called for an enhanced structure in the engagement of cities in the UNFCCC process.

## Regional training on pro-poor urban climate resilience



Participants work on “Good Practices” posters @Priscella Mejillano

Twenty-three professionals representing six Asian countries completed the Training of Trainers on Pro-poor Urban Climate Resilience in Asia and the Pacific, held from 17 to 23 March 2014 in Manila, Philippines. The aim of the training was to deepen the participants’ understanding of climate change issues, and strengthen their ability to develop

and implement practical solutions to local climate change impacts.

The training introduced a simulation game on land use plan preparation, as well as a set of advocacy and training tools on pro-poor urban climate resilience, which is intended for planners, trainers, and policy makers.

## ABOUT US

Headquartered at UN-Habitat in Nairobi, the Cities and Climate Change Initiative (CCCI) involves the participation of more than 40 cities worldwide. It targets medium-sized cities in developing and least-developed countries, and emphasizes good governance and practical initiatives for the municipalities and their citizens. The CCCI team has adapted participatory

processes developed previously by UN-Habitat so as to specifically address climate change issues within the city. A complementary set of tools is being developed to support cities in raising awareness on the impact of climate change and support mitigation and adaptation activities. Since 2008, CCCI has been generously supported by the Governments of Norway, Germany

and Sweden, the United Nations Development Account, the Cities Alliance and other sources of global, regional, national and local funding.

Newsletters of the Cities and Climate Change Initiative are periodically published electronically. For more information, or to be added to our mailing list, contact [ccci@unhabitat.org](mailto:ccci@unhabitat.org) or visit [www.unhabitat.org/ccci](http://www.unhabitat.org/ccci).

### CCCI Cities and Countries

