

CLIMATE CHANGE - Habitat Universities Thematic Hub

Hosted by: Makerere University, Uganda

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PART A: Description

1. Name of Hub: Climate Change and Disaster Risk Reduction

2. Main UN-Habitat thematic priorities to which this Hub connect:

- *Urban Legislation, Land and Governance*
- *Urban Planning and Design*
- *Urban Economy*
- *Urban Basic Services*
- *Housing and Slum Upgrading*
- *Risk Reduction and Rehabilitation*
- *Research and Capacity Building*

3. Short description of Hub:

What:

There is a close relationship between cities and climate change. On the one hand, cities are contributors to Green House Gas (GHG) emissions while on the other climate variability impacts are increasingly becoming evident in cities. Many cities are experiencing climate variability-induced impacts sometimes coupled with other natural disasters. Vulnerability assessments of cities in several countries have been completed, generating sufficient information for adaptation planning and climate change mitigation. But when it comes to adaptation, solutions-oriented research and knowledge is needed to better equip city governments to address climate change impacts. This HUB focuses on climate change and disaster risk reduction responding to the knowledge and practice gaps in adaptation and mitigation of climate change as well as disaster risk reduction. The Hub will provide a platform for knowledge generation through interactive processes of research-dissemination-uptake. The Hub builds on a multiplicity of methodological and analytical frameworks that enhance co-generation of knowledge among academics working with students, communities and researchers in the various regions. It focuses on knowledge management initiatives that are envisaged to enable transfer of knowledge to practice, tools, frameworks and utilizing multiple strategies for dissemination. Some of the research initiatives such as Climate Change and Urban Vulnerability in Africa (CLUVA) <http://www.cluva.eu/> have generated knowledge that improves our understanding of disasters and vulnerabilities in urban areas but there are other initiatives in Asia, Europe and Americas. The knowledge and tools developed are yet to be fully tested to gain insight into how cities can effectively respond to climate change as well as disaster risk reduction. In today's world, it has become evident that changes occurring in one place will cause an impact elsewhere, and cities have become places where vulnerability has exacerbated, particularly in the developing world and increasingly in Africa, South East Asia and other regions. The Hub will be housed at Makerere University but coordinate sub-hubs, which will have a regional focus. It is envisaged the hub to provide knowledge on practice, strategies and develop capacity on climate change issues affecting cities through enhancing existing training and educational modules but also develop new modules. The modules will be tailored for on-demand training to decision makers and other climate knowledge users.

Why:

The hub rationale is to contribute to the identified knowledge gap in climate change and urban disaster risk reduction. But there are also research-policy and practice gaps needed for current and future response. These gaps will be filled by developing tools, policy briefs, strategies and approaches to respond to the climate change challenge. The hub is to enable urban actors to make a useful contribution to practices and policies that improve the lives of urban dwellers while addressing urban risks and hazards. In addition the capacity development programming is to train future

practitioners with necessary skills and knowledge that addresses climate risks, adaptation and mitigation. Recognizing the existence of various research and capacity development initiatives, the activities of the hub envisaged will provide a knowledge-sharing platform.

Who:

The hub is comprised of members from diverse disciplines and institutions with a broad range of expertise. This is considered an important element and principle of the hub that will enable build a team with multi-disciplinary skills to steer research and co-generation of knowledge on the thematic areas of the hub. Members' disciplines range from Geography, Urban and Regional Planning, Architecture, Environmental Science, Business Management and Social Sciences. The members of the hub are listed in part C of this concept note. The French Research Institute for Development has several research clusters in various countries including Laos and Senegal. These research clusters will be another building block for the consolidation of the hub. In addition Georgia Tech has training and research programs on urban planning and interests in advancing research as well as capacity building for international urban professionals. The School of Urban and Regional Planning of the University of Philippines is envisaged to bring to the hub, research expertise to expand the research drive in South East Asia in view of conducting complementary research between Africa and Asia. The School of Geography, Planning and Environmental Management (University of Queensland, Australia) is carrying out research projects to produce innovative ideas and solutions on how to mitigate the effects of climate change and manage those that are inevitable in developed and developing countries. For a list of proposed partnerships and connected projects, see point 5 below, and point 2 in part C.

How:

The hub is planned and envisaged to develop leveraging existing initiatives of knowledge generation and management. Some activities have been undertaken at various institutions and a couple planned in the next year before WUF 6. A phased development approach is proposed as a means to guide the development of the hub. **Phase 1:** A Local Urban Knowledge Arena (LUKA) has been established at the coordinating in-depth research on specific topics drawn from the thematic areas of the hub. This will initiate knowledge exchange between members connecting with users who are the policy makers, building on existing linkages with policy makers at various levels. This phase is planned to continue through 2013-2014 as a catalytic activity of the hub. Efforts will be made to link the hub to existing regionally focused research initiatives such as CLUVA and African Center for Cities, the later soon launching the State of African Cities research program. **Phase 2:** This phase will overlap with phase one to produce research outputs namely, published papers, policy briefs, application tools and research conferences/workshops geared towards dissemination of emerging knowledge. Some research outputs have been produced and thus the phase is planned through to March 2014. **Phase 3:** For continuity and sustainability of the hub, training modules, curricula and training events will be organized including workshops, writing workshops and faculty exchanges. Training of future urban professionals at MSc, PhD, continuous professional development and on-demand training and or refresher courses will be conducted leveraging the co-generated knowledge from earlier phases. Researchers, practitioners and policy makers affiliated to the hub will also at this stage foster professional collaboration of academic institutions with UN-Habitat or other partner institutions on relevant projects. In September to November 2013, Makerere University will collaborate with NTNU to run an NTNU Urban Ecological Planning semester on 'reality studio' in Kampala. Between September 16th to 30th, Makerere with ITC will also conduct a refresher course on community-based risk assessment and strategy development with utilization of materials from a recent integrated flood risk assessment of Kampala city.

4. Linkages to HPUI Pillars

Education:

The hub will serve as a platform to share co-generated knowledge and lessons from good practices as well as developed education tools for climate change and disaster risk reduction. Continuous

student engagement on thematic focused research will be a key element of training future urban managers and planners who are grounded in climate change and disaster issues. In addition to students working on research topics, the hub members will contribute to the Cities and Climate Change Academy (CCCA) by validating modules as well as contributing to the modules of CCCA. There is an opportunity of validating some of the CCCA modules as part of the NTNU reality studio in September 2103. Two studies on climate change governance and vulnerability assessment by students supervised by the hub coordinator have also conducted for PhD and MSc. Graduate studies and professional development courses will strengthen the hub's links to the education pillar of HPUI with continued collaboration among the institutions listed in part C. Education seminars and conferences as well as workshops will be organized.

Research:

Research is central to the hub and members of the hub will generate this at regional level. Various research and knowledge production is underway by members of the hub in different regions. The research approaches are varied including bottom-up and top-down approach, co-generation of knowledge with participation of multiple stakeholders including academics, policy makers, students, private sector, government agencies and civil society organizations. For example specific research is already underway focused on scalable adaptation strategies to climate induced flooding in Kampala. Research in Senegal is focused on socioecological and territorial resource management and planning while studies on urbanity at Georgia Tech and University of Philippines are some of the building blocks.

Professional Development:

The strategic outline of the hub is to design professional courses for use by members and any other institutions to guide professional development and practice. The training will be tailored to the needs of the different users. The outputs of co-designed and co-generated research will be shared with relevant stakeholders and interested parties through case studies of training programs, information dissemination seminars, the e-portal and other communication channels. The CCCA modules that have been developed will be the entry points for test runs.

Policy Advice:

In Phase 1, the cross-actor engagement and applied participatory research is envisaged to anchor policy advice from initial stages of knowledge production. The phase will largely focus on packaging of information and knowledge in formats utilizing appropriate channels for uptake by policy. The policy makers and other stakeholders will be engaged through various fora like LUKA events to debate and discuss the options coming from research. This LUKA model will be promoted in other regions as a knowledge-sharing platform. The continuous formulation of professional development training programs and tailored programs is intended to develop capacity not only for technical people but policy makers as well. Thus during the phase of hub establishment, training for policy makers is envisaged as one mechanism for awareness raising, sharing practical solutions and elaborated strategies for implementation of good practices.

Knowledge Management:

The process of knowledge management at this regional hub is one of the core threads that ties all phases and activities together. From applied research to participatory discussion and engagement of actors on climate change and disaster risk reduction, knowledge management will be capped with the Local Urban Knowledge Arena (LUKA). The LUKA will have an e-portal but also face-to-face discussions by and with stakeholders at which dissemination of research findings, discussion of options and prioritization of research issues will be accomplished. The information will be uploaded on the e-portal linked to the urban gateway to enable access of information. The hub will also link to CLUVA, a research partnership that has generated knowledge on urban disaster risk reduction and climate change vulnerabilities. This link will consolidate the regional focus of the hub and strengthen the knowledge sharing component of the hub. CLUVA will bring in institutions including Addis Ababa University, Ardhi University and other universities in Europe as well as African countries.

5. Possible linkages to related projects: UN-Habitat and other universities/institutions/ organizations

This hub is already linked to the ongoing and planned UN-Habitat projects and initiatives. The hub is building on the LUKA, which is the UN-Habitat's Cities and Climate Change Initiative. The hub is also linked to the Cities and Climate Change Academy a vital link with the hub in addition to regionally focused initiatives such as CLUVA. The ongoing Integrated Flood Management Strategy for Kampala, The GHG inventory and project development of the city adaptation plan are some of the other initiatives that are linked to the hub.

The table below lists possible linkages to the related projects of UN-Habitat and/or other universities/institutions or organizations.

UN-Habitat Branch	Unit	Contacts	Current Projects
Urban Legislation, Land and Governance		Diana Lopez	
Urban Planning and Design		Robert Kehew	Cities in Climate Change Initiative
Urban Economy		Douglas Ragan	Urban Youth Research Network
		Eric Luguya	Urban Youth Fund
		Mutinta Munyati	One Stop Youth Resource Centers
Urban Basic Services		Daniel Adom	Water and Sanitation
		Debashish Bhattacharjee	Mobility
		Vincent Kitio	Energy
Housing and Slum Upgrading		Mohamed El-Sioufi	Global Housing Strategy (overarching project for the below)
		Kerstin Sommer	Slum Upgrading (PSUP etc)
		Katja Dietrich	Housing Strategy and Policy
		Roberto Carrion	Housing Finance
		Emma-Liisa Hannula	Sustainable and Green Housing
		Jagoda Walorek	Housing Rights
		Christophe Lalande	Housing Culture and Diversity
Jan Turkstra	Community Development		
Risk Reduction and Rehabilitation		Dan Lewis	
Research and Capacity Building	Capacity Development Unit	Claudio Acioly	Habitat Universities
		Fernando Cabrera	Cities in Climate Change Academy
		Asa Isacson	Online tools
Global Initiatives, Regional Offices etc.	Advocacy, Outreach and Communications	Christine Auclair	World Urban Campaign

UNIVERSITY/ INSTITUTION	DEPARTMENT/FACULTY	PROJECT	CONTACT
Makerere University	Geography, Geoinformatics and Climatic Sciences	Integrated Flood Assessment and Management Strategy (institutional-policy component)	Shuaib Lwasa
... University of Twente	ITC, Faculty of Geoinformation and Earth Observation	Integrated Flood Assessment and Management Strategy	Richard Sliuzas
Makerere University	Geography, Geoinformatics and Climatic Sciences	GHG Inventory with Global Community-Scale Protocol	Shuaib Lwasa
Makerere University	Geography, Geoinformatics and Climatic Sciences	Climate governance and adaptation in Kampala; the	Shuaib Lwasa, Peter Kasaija

		role of multiple actors (CCCA-Habitat seed grant)	
NTNU	Urban Design and Planning	Vulnerability assessment and coping strategies in informal settlements of Kampala (CCCA-Habitat seed grant)	Shuaib Lwasa Musa Timbitwire
Makerere University	Geography, Geoinformatics and Climatic Sciences	Participatory vulnerability assessment in low-income countries and informal settlements	Frank Mugagga Shuaib Lwasa

PART B: Output

1. Description and frequency of outputs:

- a. Research Reports
- b. Published Papers
- c. Policy Briefs
- d. Application Tools
- e. Research Conferences/Workshops
- f. Training Modules
- g. Curricula
- h. Training Events: Workshops, Writeshops, Faculty Exchanges

The hub was launched at the start of the activity of LUKA. With the institutional support garnered, this launch was a face-to-face meeting involving some of hub member institutions around the recent CCCI study in Kampala and other research activities in the region.

The outputs will be shared on the HPUI online platform, at PSC 2013, at WUF7 and other HPUI events.

TIMELINE		2013												2014												...
OUTPUT		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	...
1	Research Reports																									
2	Published papers																									
3	Policy Briefs																									
4	Application Tools																									
5	Research Conferences/Workshops																									
6	Training Modules																									
7	Curricula																									
8	Training Events: Workshops, writing workshops, Faculty Exchanges																									

1. Expected accomplishments at end of term (seventh forum in 2014/Habitat III 2016):

Phase 1: Research products

During Phase 1 the primary output will be research reports. The reports and published papers, policy briefs, application tools and research conferences/workshops geared towards dissemination of emerging knowledge.

Phases 2 and 3: Leaders and Professionals in foci areas

- Training modules, curricula and training events that include workshops, writing workshops and faculty exchanges are the targeted outputs of the hub in these phases. Future urban professionals trained at MSc, PhD, continuous professional development and on-demand trainings and or refresher courses will also be another target output. The idea is to train Researchers, practitioners and policy makers in the foci areas.
- A key element of outputs and envisaged activity is the participation of the hub members in WUF7 in 2014. The member institutions will present the research work and related materials to showcase the activities of the hub. A parallel session for the hub or several hubs will be organized and synchronized with the WUF7 theme for showcasing, dissemination, sharing and feedback

PART C: Governance

1. Interim Hub Coordinator(s):

- › Shuaib Lwasa, Makerere University
- › Alain Retiere, Institut des Sciences de l'Environnement

2. Hub Committee, and others involved individual members

REGION	COUNTRY/STATE	INSTITUTION/ORGANIZATION	NAME
Africa	Uganda Tanzania Ethiopia Ghana	Makerere University Nairobi University ARDHI University University of Cape Town Addis Ababa University CLUVA Kwame Nkurumah University of Science and Technology	Shuaib Lwasa Frank Mugagga Daniel K.B. Inkoom
Asia-Pacific	Philippines Australia Sri Lanka	University of the Philippines University of Moratuwa University of Queensland	Mario Delo Reyes P.K.S Mahanama Sonia Roitman
Caribbean	Trinidad and Tobago	University of West Indies	Michelle Mycoo
United States		Georgia Institute of Technology	Bruce Stiffel
Canada		To be filled by Global meeting 2013	
Europe		NTNU: Hans Narve Skotte French research institute for development www.ird.fr TASK cooperate of: University of Geneva (Institut des Sciences de l'Environnement)p University of Quebec in Rimouski and Université Pierre et Marie Curie Paris La Sorbonne University of Twente	Alain Reitre Richard Sliuzas Jeroen Verplanke

Other Signed up members:

- › Marion McGowan, Middlesex University UK
- › Associate Professor Brian Stone, <http://www.planning.gatech.edu/people/brian-stone-jr>
- › Associate Professor Perry Pei-ju Yang, <http://www.planning.gatech.edu/people/perry-yang>
- › Associate Professor William Drummond, <http://www.planning.gatech.edu/people/william-drummond>
- › McKinney Family Professor Steven P. French, <http://www.arch.gatech.edu/people/steven-p-french-faicp>
- › Professor Subhrajit Guhathakurta, modeling: <http://www.planning.gatech.edu/people/subhro-guhathakurta>
- › Professor Marilyn Brown of the School of Public Policy, <http://www.spp.gatech.edu/aboutus/faculty/MarilynBrown>
- › Professor Reginald DeRoches of the School of Civil and Environmental Engineering: <http://www.ce.gatech.edu/node/5973>
- › Professor Judith Curry of the School of Earth and Atmospheric Sciences: http://www.eas.gatech.edu/people/Judith_A_Curry
- › Michelle Mycoo, University of West Indies
- › Sonia Roitman, The University of Queensland
- › Richard Sliuzas, ITC, University of Twente
- › Vincent Kakembo, Nelson Mandela Metropolitan University
- › Alphonse Kyessi, ARDHI University

For more information and to engage in the Hub, kindly contact the Hub Coordinator:

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