URBAN FUTURES - Habitat Universities Thematic Hub

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PART A: Description

1. Name of Hub: "Urban Futures Hub"

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

The thematic priority of the "Urban Futures Hub" is to develop new approaches and tools for the design and implementation of integrated urban resource management solutions in emerging cities (particularly in Africa) with the aim of creating livable and healthy cities. In adopting a futures-orientated approach, the Hub will also systematically examine and anticipate future urban trends, conditions, and drivers of change in order to promote more socially equitable, economically viable, and environmentally balanced cities. The Hub will be content-driven and problem-focused in order to facilitate knowledge flow within the area of urban resource management amongst the research community, UN-Habitat and cities. The focus will be on the following key areas of sustainable urban development:

- Better urban planning and integrated urban resource management (waste, energy, water and materials) for the provision of basic urban services in a rapidly urbanizing world,
- Provision of urban services for the poor including slum upgrading, affordable housing, and public space,
- Risk reduction and rehabilitation activities promoting resilient cities through mitigation and adaptation of cities to climate change such as prevention, protection, response, and recovery from natural and human induced disasters, and
- Promotion of urban economy and livelihoods to decouple economic development in cities from resource consumption.

3. Brief description of Hub:

What

The Patel College of Global Sustainability (PCGS) at the University of South Florida (USF) will establish an "Urban Futures Hub" to become a strategic partner with UN-Habitat Partner University Initiative (HPUI). The Hub will become a center of excellence, developing new approaches and tools to foster sustainable urban communities and environments through collaborative research. In adopting a forward-looking view, the Hub will focus not only on current but also emerging trends in urban development, embracing innovative and creative solutions to the problems surrounding urban planning and integrated resource management for cities, particularly in Africa. Resource flows in a city such as water, energy, and mobility will be analyzed and optimized for sustainable urban development. Therefore, broader issues of urbanization that include efficient management of resources and integrated management of infrastructure systems (e.g., water, transportation, energy) will be considered. The integrated approach will allow cities to address the interactions between urbanization, population growth, and other future change pressures including: climate change, deterioration of aging infrastructure systems, changes in public behaviors, and economic changes. Foresight (or futures studies, defined here as the study of postulating possible, probable, and preferable futures and the worldviews, myths, and doctrine that underlie them) is most effectively employed when a series of factors at work within the broader environment have been identified and the interrelationships between them require exploration. This facilitates decision-making by taking into account a wider range of potential developments and possible future events, enabling systems to

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develop mitigation strategies and contingency plans against threats, whilst capitalizing on strategic levers of opportunity, a prerequisite for the sustainability of any system and sustainable development in itself.

The Urban Futures Hub intends to strengthen the cooperation between UN-Habitat, cities and institutions of higher education both in developing and developed countries. The outcomes of the Hub will be freely available to the HPUI network and partners, promoting collaborative learning between universities, local governments and practitioners through the online platform of the HPUI.

Why

Currently cities or towns are home to nearly half of the world's population of 7 billion people (UN, 2011). Urban populations are estimated to nearly double from the current 3.4 billion to 6.4 billion by 2050. Between 2005 and 2010, for example, Africa experienced the highest urban growth rate in the world (3.3% annual average) and the pace is expected to remain the same over the next 15 years. It is predicted that about 90% of the urban expansion in the coming decades will take place in the low-income countries (UN-Habitat, 2008). This growth is expected to increase the number of slum dwellers significantly. It is projected that in the next 30 years, the global number of slum dwellers will increase to about 2 billion, if no firm action is taken (UN-Habitat, 2008).

With the scale and intensity of urban problems across the world suggesting that current planning and policy processes are failing to satisfy what is effectively their primary purpose, the pursuit of sustainable urban development demands a major shift in the way stakeholders think, plan, and act. Indeed, with the modern world characterized by rapid change, growing uncertainty, and increased complexity, driving forces of change permeate all levels of society, reconstituting the interactions between environmental, political, and socio-economic systems. Such conditions necessitate a manner of inquiry that can make sense of future uncertainties and complexities, contributing to the creation of highly informed development strategies that can contribute to and inform better-integrated development strategies, ultimately laying the foundations for cities to pursue flexible planning alternatives for urban development problems.

Traditional approaches to planning have been grounded in theories or doctrines based on future developments, often involving experts and policy makers forecasting a single future or outcome built on the extrapolation or projections of past and present trends. Foresight assumes many futures, through which the mobilizing of interested stakeholders forms a platform for decisions to be made regarding the actions necessary to reach the most desirable future. In encouraging the analysis of long-term trends and outcomes that do not often show up in linear forecasts, foresight promotes creative and innovative responses to complex and challenging problems, whilst, in necessitating the participation and development of a common dialogue between stakeholders, better prepare cities, from them bottom-up, for a complex, uncertain, and rapidly changing world. The complex and intricate nature of urban resource management is where many of the more demanding development challenges and opportunities exist. Whilst in the context of rapidly evolving and uncertain urban futures it is vital to not only unpack the implicit assumptions in current development paradigms, but also to build ownership amongst the community through truly participatory intervention, a central tenant of futures practice. This approach ultimately instigates wider movement towards a shared vision through vested and collaborative action - a prerequisite for successful and sustainable urban development. It is through the understanding of the long-term forces shaping the future, and in sharing a common vision of what that future will be with concerned stakeholders, that we can shape innovative solutions that will have a positive and enduring impact.

One of the pressing problems associated with urbanization and urban resource management is the provision of basic urban services. Almost a billion poor people live in urban areas in the world without adequate shelters and basic services. In Africa, only 36% of the population has even marginal sanitation coverage and 240 million people are undernourished. Access to energy has improved, but supplies are irregular and unpredictable. On the other hand, it is predicted that by 2020 more than 50% of the global middle class population will live in Africa and Asia. Hence, Africa and Asia could account for over 40% of the global middle class consumption (OECD, 2011; World Bank, 2008). The rising living standards will lead to significant increases in demand for urban services and massive increases in the rate of waste generation including the rate of emissions and pollutants. In addition, cities are facing a range of other dynamic regional and global change pressures including climate change, deterioration of infrastructure systems, which will exacerbate these problems while reducing available resources.

Current urbanization trends indicate that the majority of urban population growth will occur in smaller cities and towns particularly in lower and middle-income countries such as in Africa, averaging 2.3% per year, with a doubling time of 30-years (UN-Water, 2009). For every large town there are an estimated ten small towns, which is expected to increase four-fold in the next 30 years (Pilgrim, 2007). Hence understanding how settlements make

the transition from village to town to city is critical for the provision of urban services. These fast-growing small towns do not currently have extensive infrastructure, offering a unique opportunity to combine imaginative urban forms with innovative infrastructure and governance systems that optimize the management of limited and dwindling resources. Unfortunately, the window of opportunity for revolutionizing development in these emerging urban areas is very short, as early infrastructural development will make the necessary step change impossible. Furthermore, changing attitudes, policy emphases and technologies, amongst other things, can mean that what decision-makers implement today for the sake of sustainable development may not necessarily contribute to the development of a sustainable future, particularly concerning unintended outcomes. Indeed, realizing urban sustainability compels decision-makers to actively unravel the complexities of the future and anticipate change, rather than merely responding to problems in the closed context of their current situation.

The urban development challenges facing Africa require that we reimagine urban development and take these challenges as opportunities for innovative technological and social change. For example, creating sustainable urban forms that facilitate closing the urban water and nutrient loop and allow cascading water use can produce fertilizer for urban agriculture, low-emission sustainable energy sources, recycled water for both agricultural and urban growth, as well as improve public health and reduce infant mortality due to water-borne disease. An integrated systems approach that combines regulation with entrepreneurial action can revolutionize urban development in Africa. The Hub will, therefore, develop a suite of tools that will allow designing urban forms and associated infrastructure and governance systems that are technologically and socially adaptable to local conditions and demands.

Who

In the spirit of HPUI, this Hub will attempt to respond to the challenges of today's rapid urbanization by being a center of excellence on urban resource management that will involve PCGS expertise in the areas of urban sustainability and through strategic collaboration with partners. Led by PCGS, it is anticipated that the Hub will bring together partners such as the Norwegian University of Science and Technology (NTNU), Norway, University of Nottingham, UK, Gotheburg University, Sweden University of Pennsylvania (UPenn), USA, University of Madras, India, CEPT University, India, University of Auckland, New Zealand, Makerere University, Uganda, Bahir Dar University, Ethiopia, University of Dar es Salaam, Tanzania, International Institute for Water and Environmental Engineering (2ie) Burkina Faso and University of Biskra, Algeria. The Hub will work closely with UN-Habitat's Research and Capacity Development Branch to promote and coordinate research, policy advice and education in the field of sustainable urban development. Indeed, the Hub will engage with experts working in sustainable urban development on different scales and in different regions through teaching, research and improving the accessibility of knowledge to and from the wider community. For a list of proposed partnerships and connected projects, see point 5 below and point 2 in part C.

How

The Hub will involve expertise from different universities in several areas of sustainable urban planning and integrated urban resource management to address the aforementioned objectives. The Hub will facilitate and coordinate discussions on the opportunities and challenges for universities in advancing sustainable urban development through teaching, research and fieldwork, and bridging research, policy and implementation gaps.

For example, the Hub is planning to organize an UN-Habitat Summer Research School in 2014 on the topic of 'Urban Futures' hosted by one of the African partner institutions. The participating students from all partner institutions will work on joint student research projects in the area of integrated urban resource management. Furthermore, the Hub partners work on establishing a repository of graduate online courses which could be studied by students from all participating institutions. Possible courses to include in the repository are: GIS (Georgia Tech), economic evaluation techniques (University of Nottingham), energy efficient buildings (University of Nottingham), building design for hot climate (University of Biskra), systems thinking (PCGS), financing sustainability (PCGS), communicating the value of sustainability (PCGS) etc. In addition best practice case studies on integrated urban resource management will be collected in an open access project repository. Another planned activity is a short course on Integrated Urban Water Management which will be developed by the Hub in partnership with the Global Water Partnership GWP, the Water Research Commission South Africa, ICLEI and the World Bank Institute. PCGS will also develop an 'Africa Water Atlas' representing the potential for Integrated Urban Water Management in African cities. These activities are complemented by a series of short technical and policy briefs that quickly inform the reader (in particular UN-Habitat branches) about key issues relating to integrated urban resource management. Building on the position papers the Hub is planning to develop some UN-

Habitat guidelines which will help cities around the world with a transition to a new sustainable resource management paradigm.

The Hub recognizes the importance of mutual collaborations, and focuses on harnessing the strengths of partner universities and promoting cooperation towards progressive university-city collaborations. The Hub will work closely with UN-Habitat's Urban Futures Initiative in creating a Center that encourages not only the response to current urban development challenges (formulating innovative, creative and participatory responses to such), but also anticipates challenges of the future, putting in place systems, processes and structures that will lead to best possible outcomes given the ever increasing complexity and uncertainty that today's rapid urbanization brings. In this partnership, both the Urban Futures Hub and the UN-Habitat Urban Futures Initiative will work to shift the urban development paradigm away from ad hoc problem solving and towards the anticipation and steering of such.

The Hub will be designed as an output driven project and will be managed based on outlined deliverables that can be assessed based on the HPUI monitoring & evaluation system: bi-annual reporting, progressive engagement and uploads on the online HPUI platform as well as presentations on official HPUI events. As described above the Hub is anticipated to develop several deliverables for sustainable urban development including Repository of Graduate Courses; Training Toolkit; Short Technical & Policy Briefs Series; UN-Habitat Research School. Details regarding the deliverables responsible partners, budget and timeline are listed in "Part B Outputs" of this document. All outcomes from the work will be housed in the online platform of the HPUI so that they are available for the research community, the respective units of UN-Habitat and practitioners from cities.

USF is planning to create a secretariat for the Hub and will likely resource it with a part-time Project Manager and Administrator. Each partner institution will be asked to contribute PhD students for implementing the Hub projects outlined below (education, research, professional development, policy advice, etc.)

USF, along with its partners, will also seek internal and external resources to support the programs and exchanges (in particular to cover costs of the African partners), which may be developed as a result of this agreement. USF, for example, has already begun seeking funds and has submitted a letter of intent for UN-Habitat projects that are within the scope of the Hub that will complement the Hub activities.

4. Linkages to HPUI Pillars

Education:

The Hub is anticipated to develop university courses and curricula and provide its partners with the opportunities for internships, fellowships, mentorships, events and exposure. It will support UN-Habitat experts and guide them in their work towards sustainable urban development education. USF will provide support in developing a modular training/education program on sustainable urban development, for example to be applied at the University of Nairobi and at Kenyatta University. Education activities such as development of research atlas and UN-Habitat summer school will be run through the Hub. USF will coordinate the development of innovative trainings and modular courses, particularly on sustainable urban water management. In addition, the partnership will support the development of "Habitat 101" by creating a lecture series on specific urban resource management issues that can be offered both online and face-to-face.

Research:

Research activities within the Hub will focus on building and connecting an international network of researchers with a common focus on integrated urban resource management in Africa. USF will provide overall coordination of the research activities, and link it to the researchers engaged in the other HPUI Hubs. The thematic areas of the research activities will be based around the expertise of the partners and potential roles. The outcomes of the research activities will also be closely connected to the other pillars (educations, professional development etc.), greatly influencing the main work of the Hub and promoting the capacities of its members and stakeholders.

Professional Development:

The Hub plans to support capacity development and to disseminate new knowledge generated to the partner institutions, experts and practitioners at UN-Habitat and cities. The Hub aims to support partners in providing training on locally relevant issues, focusing primarily on local governments and selected non-governmental urban stakeholders. Capacity development approaches will be tailored to the needs of the target groups. As part of the

capacity development, the Hub will develop supporting materials such as UN-Habitat guidelines, technical and policy briefs, courses and a project repository.

Policy Advice:

The Hub will work to close the gap between theory and practice in sustainable urban development. Evidencebased policy advice is provided to local and national governments as well as international entities through Local Urban Knowledge Arenas, through technical and policy briefs and through the support of HPUI pillar of 'Policy advice'. The Hub will build on collaboration with UN-habitat's Research and Capacity Development Branch and Urban Basic Services Branch and would offer events at the World Urban Forum.

Knowledge Management:

A strong component of the Hub will be the crosscutting pillar of Knowledge Management. This ensures visibility, awareness and the dissemination of knowledge developed within the Hub. The Hub, through its various research and education activities, plans to develop and operate a knowledge base for the development and dissemination of information on urban development and integrated urban resource management in African cities. The knowledge and understanding generated in the Hub will be made accessible to policy makers, practitioners and communities through proactive outreach services.

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

USF, as the lead of the Hub, will establish a close relationship with both the UN-Habitat Basic Services Branch and Research and Capacity Development Branch. USF has already submitted two letters of intent for projects to the 'Basic Services Branch' that are within the scope of the work of the Hub. For example, the project for the development of the facility for the rapid assessment of street space is beneficial for both the 'Basic Services Branch' and the Hub. The facility for the rapid assessment of street space will develop strategies for the design and implementation of integrated urban resource management solutions and the proposed facility can contribute to the development of solutions for livable cities. In addition, USF submitted a proposal to develop a strategy for the implementation of bus rapid transit systems in Nairobi. This project also contributes to sustainable urban development. In addition USF plans to actively participate and engage in establishing all possible local, national and international linkages between the Hub and other UN-Habitat activities.

The Hub will also collaborate with the UN Habitat Urban Futures Initiative in advancing urban futures research, particularly on drivers of change at the global, national, and local levels so as to help determine strategic policy options at national and city levels, whilst also working to integrate foresight in to urban policy and planning priorities so as to harness future opportunities and minimize risk, whilst encourage local foresight capacity in urban planning and governance processes. Furthermore, the Hub will work with the Initiative in developing partnerships to promote global dialogue and consolidate knowledge on urban foresight innovation and best practices.

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

Note that this is a proposed list by UN-Habitat, intended to facilitate communication from the Hub Coordinator to the listed contacts. The HPUI Office has introduced the contacts to the focus and aim of the Hub, and these have indicated their interest in discussing collaborations.

Kindly cc the HPUI Office at <u>HPUI@unhabitat.org</u> for the initial communications regarding collaborations on the below.

UN-Habitat Branch	Unit	Contacts	Current Projects					
Urban Legislation, Land and Governance		Diana Lopez						
Urban Planning and		Laura Petrella	Scenario Planning					
Design		Elkin Velasquez	National Urban Policies					
Urban Economy		Douglas Ragan	Urban Youth Research Network					
		Eric Luguya	Urban Youth Fund					

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		Mutinta Munyati	One Stop Youth Resource Centers
		Daniel Adom	Water and Sanitation
Urban Basic Services		Debashish Bhattacharjee	Mobility
		Vincent Kitio	Energy
		Mohamed El-Sioufi	Global Housing Strategy (overarching project for the below)
		Kerstin Sommer	Slum Upgrading (PSUP etc)
Housing and Slum		Katja Dietrich	Housing Strategy and Policy
Upgrading		Roberto Carrion	Housing Finance
opgrading		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	
Possarch and Canacity		Claudio Acioly	Habitat Universities
Research and Capacity Building		Edlam Yemeru	Urban Futures Initiative
Dunung		Asa Isacson	Online tools
Global Initiatives, Regional Offices etc.	Advocacy, Outreach and Communications	Christine Auclair	World Urban Campaign

PART B: Outputs

1. Description and frequency of outputs:

USF and the partners recognize that there is a need for research, education, professional development, policy advice and knowledge management for advancing urban development and integrated urban resource management. Details of the anticipated major outputs are described in the table below.

The major anticipated outputs outlined below will be developed in close collaboration with partner institutions involved in the Hub. All outcomes produced in the Hub will be available through the online HPUI platform.

OUTPUT	DESCRIPTION/ SPECIFICATION
1 Open Access Graduate Course Repository	 The open access repository is a suite of graduated courses provided by the Hub partners. Students from all HPUI partner institutions can take these courses. Develop a common template for the courses Draft a MoU for all participating institutions to address administrative questions (where do students pay their fees, recognition of credit points etc.) Following existing graduate courses will be included in the course repository: GIS (Georgia Tech) Economic evaluation techniques (Nottingham) Energy efficient buildings (Nottingham) Building design for hot climates (Biskra) Systems thinking for sustainability (PCGS) Financing sustainability (PCGS) Online courses tailored for the specific conditions in developing countries (CEPT)

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2	Open Access Project Repository	Repository of case studies, project reports and student projects in the area of integrated urban resource management Identify categories for the project repository (e.g. urban farming, transport, renewable energy, water, infrastructure) Develop a template for the case studies to ensure that the projects will be presented in a comparable manner.
3	UN-Habitat Summer Research School	 Organize a joint summer school to train graduate students in interdisciplinary and multidisciplinary urban issues Host institutions Formal UN-Habitat recognition Topic of summer school Credits for participating summer school The summer school will be hosted by one of the African partner institutes and can be
		visited from students of all partner institutions.
4	Training Toolkit	Develop a short course on 'Integrated Urban Water Management' to build the capacity of urban practitioners. The short course will be developed by PCGS in partnership with professional development trainers from GWP, WRC, ICLEI and WBI.
5	Short Technical & Policy Briefs Series	Develop a series of short papers that quickly and effectively inform the reader about the key issues relating to a particular topic associated with integrated urban resource management Goal is to strengthen the interchange between the research institutions in the Hub, the UN-Habitat branches and the practitioners in the cities.
6	Research Atlas	PCGS will develop a 'Africa Water Atlas' showing the potential for Integrated Urban Water Management in African cities Georgia Tech is planning to present the 'What if' land use simulation model on an online platform.
7	UN-Habitat Guidelines	Building on the position papers develop some UN-Habitat guidelines to help cities around the world with a transition to a new sustainable resource management paradigm

	TIMELINE	2013						2014																		
	OUTPUT	J	F	Μ	А	Μ	J	J	А	S	0	Ν	D	J	F	М	А	М	J	J	А	S	0	Ν	D	
1	Open Access Graduate Course Repository																									
2	Open Access Project Repository	_																								
3	UN-Habitat Summer Research School																									
4	Training Toolkit																									
5	Short Technical & Policy Briefs Series																									
6	Research Atlas																									
7	UN-Habitat Guidelines																									

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

An overview of the anticipated outcomes is already presented above. The outcomes that will be presented at the seventh world urban forum in 2014 and Habitat III in 2016 will be identified in the detailed work plan, which will be developed after the establishment of the Hub in close consultation with UN-Habitat.

PART C: Governance

1. Proposed Hub Coordinator:

Dr. Kalanithy Vairavamoorthy, Dean of the Patel College of Global Sustainability (PCGS) at the University of South Florida will be the Coordinator of "Urban Futures Hub". In addition, he is the Chair of the Steering Committee of the 'Habitat Partner University Initiative'.

The Patel College of Global Sustainability at the University of South Florida is a newly established college (January of 2013). The College was established based on the success of the Patel School of Global Sustainability, which was launched in the fall of 2010. PCGS, a public body corporate, provides cutting-edge research and education in global sustainability in addition to running an M.A. program in global sustainability and spearheading sustainability practices at USF through its Office of Sustainability. It is an inclusive and holistic College based on interdisciplinary research, design, and education. Its research generates innovations and new knowledge that will help cities around the world, including those in developing countries, to reduce their ecological footprint, while improving their form and function to make them healthier, more livable and resilient. Through its research, PCGS influences global practice and policy and has become the Hub of a global network of sustainability experts.

Dr. Vairavamoorthy is an internationally recognized expert in water resource management and urban water systems. His main research areas include design, operation and management of integrated urban water systems operating under future global change pressures and its implications to water governance issues. He is the Founding Dean of the Patel College of Global Sustainability and a tenured Professor in the Department of Civil and Environmental Engineering, at the University of South Florida. Dr. Vairavamoorthy is also Professor of Sustainable Urban Water Systems at UNESCO-IHE and TU Delft, in the Netherlands. Prior to moving to the United States, he was a full professor and Chair of Water Engineering at University of Birmingham, UK. Dr. Vairavamoorthy was also the Director of SWITCH, a €25M EU research project for Sustainable Water Management for the City of the Future, which is one of the largest EU research projects in the area of water. He Co-Chairs IWA's 'Cities of the Future' program and has a strong international profile of working closely with the World Bank, UN-Habitat, UNEP, UNESCO-IHP, IWA and the European Union. He was recently named a "Water Hero" (2012) by Impeller Magazine (a list of 25 individuals who have made an exemplary contribution to the water sector). He has published more than 80 peer-reviewed papers in academic journals and conference proceedings, published 2 books, edited 3 books, and given more than 20 keynotes in high impact international conferences. He is a member of 6 International Scientific Committees and member of 14 International Conference Scientific Committees (incl. Stockholm World Water Week and Singapore International Water Week).

2. Hub Committee, and other involved individual members

As the 'Urban Futures Hub' has a regional focus on integrated urban resource management in Africa, including African partners will be central to the committee. However, this does not exclude other international partners from participating in the Hub committee. The members of the Hub committee will include USF in close collaboration with other potential partners of the Hub and UN-Habitat. The membership of the Hub committee was discussed with the partners listed below, but is still waiting final confirmation. Kindly see the table below for the proposed Hub Committee members.

REGION	COUNTRY/ STATE	INSTITUTION/ ORGANIZATION	NAME
Africa	Uganda	Makerere University	Dr. Shuaib Lwasa
	Ethiopia	Bahir Dar University	Dr. Michael Mehari Moges
	Tanzania	Dar es Salaam University	Dr. Richard Kimwaga
	Burkina Faso	The International Institute for Water and Environmental Engineering (2ie)	Dr. Amadou Hama Maiga
	Algeria	University of Biskra	Dr. Noureddine Zemmouri
Arab States			

Asia-Pacific	India	University of Madras	Dr. Jaganathan Ramasamy
	India	CEPT University Ahmedabad	Dr. Saswat Bandyopadhyay
	New Zealand	University of Auckland	Dr. Dory Reeves
Latin America			
Caribbean			
United States	Florida	Patel College of Global Sustainability at University of South Florida	Dr. Kalanithy Vairavamoorthy
	Georgia	Georgia Institute of Technology	Dr. Subhro Guhathakurta
Canada			
Europe	Norway	NTNU Norges Teknisk- Naturvitenskapelige Universitet	Dr. Hans Skotte
	UK	University of Nottingham	Dr. Patrizia Riganti
	Sweden	Gothenburg University	Dr. Merritt Polk

NOTE: The above is a list is of proposed Hub Committee members, participation is only determined once UN-Habitat has received a Letter of Commitment from the Hub Coordinator, with signatures of all committee Hub Committee members.

The individual members of the Hub will be identified in close collaboration with all potential partners.

Universities we would like to involve in the 'Urban Futures Hub' are:

- KNUST Kwame Nkrumah University of Science and Technology, Ghana, Dr. Samuel Nii Odai (snodai@yahoo.com)
- University of Zimbabwe, Dr. Innocent Nhapi (i_nhapi@yahoo.com)

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

Kalanithy Vairavamoorthy: vairavk@usf.edu

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