

## **World Social Science Fellows seminar**

### **Sustainable Urbanization- Transformations to Sustainability in Urban Contexts**



The seminar 'Sustainable Urbanization- Transformations to Sustainability in Urban Contexts' took place from 2 to 8 November 2014 in Taipei, Taiwan, as part of the ISSC's World Social Science Fellows Programme. It was co-organized by the ISSC, the IRDR-ICoE (the Integrated Research on Disaster Risk programme's International Center of Excellence in Taipei), the Academia Sinica and National Taipei University, in partnership with the Comparative Research Programme on Poverty (CROP) and the Urbanization and Global Environmental Change (UGEC) project.

The thematic focus of this second seminar in the series on Sustainable Urbanization was on understanding the drivers of social transformations to sustainability and the social-environmental interactions at stake in urban areas. Twenty Fellows from all over the world were selected through a competitive process to come to Taipei and develop new, joint research perspectives in this area.

Departing from the "traditional" format of academic gatherings, the seminar was structured around discussions between Fellows, facilitated by four senior scientists. During the first two days of the seminar, the Fellows addressed a number of themes, from global and regional trends in urbanization, to challenges of scales and poverty reduction, and smart/ eco- / zero-carbon cities. These themes were discussed in larger and smaller groups.



During the second half of the five day-event, Fellows then picked up on concerns and themes that emerged, to explore how they could form the basis for joint research. This move towards the planning of research products was an explicit objective of the seminar from the outset, and had also framed discussions during the first days. Fellows also participated in a number of sessions of the 2<sup>nd</sup> International UGEC Conference: *Urban Transitions and Transformations: Science, Synthesis and Policy*.

The groundwork was laid for three articles, and a plan of work was designed for the immediate next steps on each of the articles. Outlines of two of the articles can be found below, the third one will be added as soon as it is available. Fellows also agreed to continue the collaboration of the group as a whole by organizing periodic webinars on themes of interest to the whole group.



Participants evaluated the meeting positively, welcoming the open space for the exchange of ideas and the invitation to look at the issue of sustainable urbanization across disciplinary boundaries. The third, and final, seminar in the series will be held in Durban, South Africa, in September 2015.

*The World Social Science Fellows programme is funded by the Swedish International Development Agency (Sida).*

## **Outlines of articles coming out of the seminar**

### **Outline 1: Sustainable urbanization and displacement of the urban poor**

This article analyzes the relationship between sustainable urbanization plans and displacement of the urban poor. It is argued that displacement processes are often intended consequences of sustainable urban planning. A case study approach is applied and Urban Development Plans of cities in different world-regions are discussed.

The case studies include the flood plan of Jakarta, Indonesia; the requalification plan of Maputo, Mozambique; the zoning plan of Bogotá, Colombia; the Masterplan of Delhi, India; as well the sanitation plan of Buenos Aires, Argentina and the urban regeneration plans of Salford, UK. In all cases, displacement is taking place where the urban poor are often the population group most affected. If sustainable urban development in the future necessarily displaces the urban poor, how do the goals of sustainability have to be redefined to minimize suffering to displaced communities?

The phenomenon of displacement has been historically linked and continues to be linked to urbanization, sustainable or otherwise. This paper will explore the driving forces of displacement to question the tradeoffs that might need to be made for a realistic approach to sustainable urbanization and the role of planning. The article builds on the discussions which took place during the World Social Science Fellows Seminar in Taipei in November 2014 and contains an interdisciplinary and international view on sustainable urbanization and displacement in the Global South and the Global North.

### **Outline 2: Making sense of sustainable urbanization in Africa, Asia and Latin America from a poverty and inequality perspective**

Patterns of urbanisation have resulted in different situations of poverty and inequality in the regions of the Global South. Unravelling the complexity of urbanisation through an analysis of its several dimensions becomes necessary for a better understanding of current and potential future conditions. This article looks at how poverty and inequality have been shaped by urbanisation. These themes are examined through the lens of five cross-cutting dimensions of sustainable urbanisation: political, socio-cultural, spatial, economic and environmental.

The current situations of poverty and inequality are analysed in six countries of the Global South: Kenya and Nigeria in Africa, China and India in Asia and Chile and Mexico in Latin America. The regional comparison allows for a depth understanding of how poverty and inequalities are influenced by urbanisation identifying similarities and differences among these regions. The regional analysis shows how in some areas there has been a shift from the analysis of poverty as central for development to the analysis of inequality. The article also provides trends on urbanisation and how sustainable this process is and will be if current conditions remain.

This article presents a threefold contribution to the debate on sustainable urbanisation. First, it operationalizes the concept of sustainable urbanisation following five dimensions that help to address sustainability in a comprehensive form. Second, it examines poverty and inequality as shaped by urbanisation. Third, by analysing poverty and inequality in six countries of three regions of the Global South, it provides a comparison on the similarities and differences of poverty and inequality through the lens of urbanisation.

## **List of participants**

(Biographical information correct at the time of the seminar)

### **Fellows:**

#### **Sohail Ahmad**

Sohail Ahmad is currently working on the nexus between carbon dioxide emissions and urban development at the Mercator Research Institute on Global Commons and Climate Change (MCC) (Germany) after serving as Assistant Professor in School of Planning and Architecture (SPA)-Vijayawada (India). Sohail's work has been described by the Green Talents 2013 jury as 'application-oriented research on sustainable urban planning' and praised for sustainable concepts of mobility and the use of energy in Asian cities. He has published on housing and energy aspects of urbanization in journals such as *Urban Studies* and *Cities*. Ahmad holds a PhD in City Planning from Seoul National University (South Korea), a Master of Planning (Urban Planning) from SPA-Delhi (India) and a Bachelor of Architecture (Hons.) from Aligarh Muslim University (India).

#### **Lorraine Ambole**

Lorraine Ambole has a background in industrial design and is currently a tutorial fellow at the School of the Arts and Design, University of Nairobi, Kenya. Given her enduring interest in social and sustainability issues in design, Lorraine applied and got accepted into a Transdisciplinary doctoral programme at Stellenbosch university in South Africa, where she is researching on the design of sustainable sanitation for informal settlements. Her research focus on informal settlements is motivated by the spread of unplanned urbanization in Africa and other parts of the global South. As such, Lorraine sees the need to orient her research and work as a designer towards the real needs of the urban majority. She has been able to do this by collaborating with other like-minded researchers, as well as with the informal settlement dwellers themselves, who are now becoming the experts on life in the modern Southern city.

#### **Aliyu Barau**

Aliyu Barau is a research fellow for the Earth System Governance Project – the world's largest social science research network on governance and global environmental change hosted by Lund University Sweden. He is also Research Associate, Urbanization and Global Environmental Change Project, hosted by Global Institute of Sustainability Arizona State University. His PhD research at the Department of Urban and Regional Planning, Universiti Teknologi Malaysia focuses on human dimensions of landscape change in special economic zones of emerging economies. He has strong interest in Urbanization in the Anthropocene and interdisciplinarity in sustainability while his research geography is mainly West Africa, Middle East and South East Asia. His BSc and MSc degrees in geography from Bayero University Kano in Nigeria focus on urbanization and rural land use change.

#### **I-Chun Catherine Chang**

I-Chun Catherine Chang is completing her PhD in Geography at the University of Minnesota, US. She strives to contextualize sustainable urbanism and green capitalism in a globalizing Asia,

challenging the asserted symbiosis between ecology and economy underlying many contemporary sustainability projects. Her dissertation research examines the spatio-temporal variegation and transnational circulation of two Chinese eco-city models across Shanghai, Tianjin, London and Singapore. Building on this work, Catherine continues to investigate the financialization of eco-urbanism production, trace the inequality implication of Chinese/Asian eco-cities, examine the role of transnational sustainable urban planners in policy exchanges, and explore the interrelations between environmental sciences, sustainable urban policies and planning principles.

### **Jenna Condie**

Jenna Condie is an Environmental Psychologist and Lecturer in Psychology at the University of Salford, UK. She has worked at the University of Salford since 2007, initially as a research assistant within the Sustainable Housing and Urban Studies Unit. She joined the Directorate of Psychology and Public Health in 2011. Jenna completed her doctoral research (EPSRC-funded) on residents' experiences of living alongside railways, which was linked to the UK government funded project 'Human Response to Vibration in Residential Environments' (NANR209, Defra, 2011). Jenna is currently applying the concepts of 'place' and 'identity' to understand how people adapt to increasingly urban contexts. She tweets [@jennacondie](#)

### **Peter Omu Elias**

Peter Omu Elias holds a B.Sc and an M.Sc (Geography) from the University of Lagos and a Master of Urban and Regional Planning (MURP) and a PhD (Geography) from the University of Ibadan, Nigeria. He currently teaches and conducts researches at both the postgraduate and undergraduate levels at the Department of Geography, University of Lagos. His research and publications cut across natural and human environment, including urban land use analysis, urban planning, urban soil ecology, urban livelihoods and adaptation planning, urban governance and social service delivery systems among others.

### **Florian Koch**

Florian Koch is Professor for European Studies and Regional Development at the Universidad del Norte in Barranquilla, Colombia and holds a long-term lectureship of the DAAD – German Academic Exchange Service. He is director of the Institute for European Studies at Universidad del Norte and coordinator of the EU-Jean Monnet Module on Sustainable Development in Latin America and the European Union. Florian studied spatial planning in Dortmund and Rome and holds a PhD in Social Science from Humboldt University Berlin. He is author of books and articles on topics related to Multi-Level-Governance, urban and regional studies, EU-Latin-American relations and the local politics of climate adaptation.

### **Yangfan Li**

Yangfan Li's work integrates urbanization, environmental change and social-ecological system resilience in China's coastal cities, and he hopes to use his understanding in these areas to influence the decision-making of the Chinese government. In the end, he wants to make a positive contribution to the lives of the Chinese people. Yangfan has published more than 60 papers and two books in his research area and received numerous awards for outstanding papers, for example

the 2011 Green Talents Sustainability Prize by the German Federal Ministry of Education and Research. He was granted several important research projects on urban sustainability including projects on landscape security thresholds and resilience in coastal urban sprawl areas, which were funded by the National Natural Science Foundation of China. Yangfan, who is now an associate professor in the College of the Environment & Ecology, Xiamen University, is also a joint professor in the Coastal and Ocean Management Institute (COMI), Xiamen University, a member of the Scientific Steering Committee on Environmental Planning of the Chinese Society of Environmental Sciences and member of the Scientific Steering Committee on Eco-City Research at the Chinese Society of Urban Studies in China.

### **Domingos Macucule**

Domingos Macucule is lecturer at the Faculty of Architecture and Physical Planning, Eduardo Mondlane University, Maputo, Mozambique. He holds a Master's degree in Land Management and a PhD in Geography and Spatial Planning from the New University of Lisbon, Portugal.

### **Thaddeus Miller**

Thaddeus Miller is Assistant Professor at the Nohad A. Toulan School of Urban Studies and Planning and a Faculty Fellow at the Institute for Sustainable Solutions at Portland State University, USA. He is also an affiliate of the Consortium for Science, Policy, and Outcomes at Arizona State University, USA. His research explores the social and political dimensions of science, technology and sustainability. His forthcoming book, [Reconstructing Sustainability Science: Knowledge and Action for a Sustainable Future](#) (Routledge), provides an analysis of emerging research agendas for sustainability and their epistemic, normative and socio-political implications. Thaddeus' current research explores how sustainability is interpreted and contested and how it is settled and materialized in infrastructure design and public policy. He tweets [@Thad\\_Miller](#)

### **Rodrigo Mora**

Rodrigo Mora is lecturer in Urban Form and research coordinator at the School of Architecture, Diego Portales University, Chile. He is an architect and holds PhD and MSc degrees from The Bartlett School of the Built Environment, University College London, UK.

### **Leon Morenas**

Leon Angelo Morenas is Associate Professor of Architecture at the School of Planning and Architecture, Delhi. He is an architect with a Master's in Urban Design from the School of Planning and Architecture, Delhi and a PhD in Architectural Sciences— with a specialization in Informatics— from the Rensselaer Polytechnic Institute, Troy, New York. Leon's research explores architecture, urban design and urban planning through the lens of science and technology studies. He is presently converting his doctoral research into a book manuscript that examines the technological undergirding of the Delhi Master Plan and how this apparatus has evolved into a spatial fix creating a metropolitan dystopia of ever increasing unevenness between the urban poor and the metropolitan rich. He is also working on a set of essays that attempt to answer the question; "Is there an Indian way of thinking about Technology?" using the foils of history, metaphysics and literature.

### **Liz Ileana Rodriguez-Gamez**

After Liz Rodriguez-Gamez finished her PhD in Geography in the School of Geography and Development at the University of Arizona in 2012, she returned as a professor and researcher to *El Colegio de Sonora*, a social science research center in Mexico. Her dissertation research investigates urban structure, spatial distribution of employment, and commuting patterns in Northwestern Mexican cities; these were analyzed through spatial geo-statistics. Most recently these studies were the base to develop a research proposal on "Public transportation in Obregon Mexico" (2013 grant by *Promep-SEP*) and make links between urban economics, participatory Geographic Information Systems (GIS), and social science.

### **Briony Rogers**

Briony Rogers is a Research Fellow with Monash University's School of Social Sciences, the Monash Water for Liveability Centre and the Cooperative Research Centre for Water Sensitive Cities, based in Melbourne, Australia. Her research explores processes of change across organisations, institutions and infrastructure sectors, with the ultimate aim of supporting the system-wide transformations in policy and practice needed to create more sustainable, liveable, resilient and equitable cities. Briony has an interdisciplinary background, with a PhD in Environmental Sociology, a Bachelor of Civil Engineering (Honours) and Bachelor of Science, as well as experience as an engineering consultant on water infrastructure projects in Australia and Vietnam.

### **Sonia Roitman**

[Sonia Roitman](#) is an urban sociologist and planner from Argentina. She is a Lecturer in Development Planning, in the School of Geography, Planning and Environmental Management, at the University of Queensland (Australia). Her research interests relate to urban social inequalities, poverty and development, housing policies, governance and gated communities. Her research project examines community participation and empowerment in decision-making processes on housing policies. It looks at strategies developed in Indonesia and Argentina tackling poverty and social exclusion. Sonia is an Elected Board Member of the RC21 (Research Committee on the Sociology of Urban and Regional Development, ISA) and the UQ Focal point in the UNI-Habitat partnership.

### **Andy Simarmata**

Andy Simarmata is a certified urban planner who is also a lecturer and researcher in *Universitas Indonesia*. His professional and academic works focus in examining the linkage between spatial planning, urban resilience, and sustainable development. Currently, as a PhD candidate at *Zentrum für Entwicklungsforschung (ZEF) Universität Bonn*, he examines how locally embedded adaptation pathway of urban poor has been constructed and institutionalized in their community. He has a deep interest in the discourse of micro-sustainability, especially on how the locally embedded adaptation planning can be a driver to the transformation process of urban sustainability.

### **Debora Swistun**

Debora Swistun is a professor of Environmental Sociology at Universidad Nacional de Avellaneda and a Social Anthropology PhD candidate at CONICET – Universidad Nacional de San Martín

(Buenos Aires), studying the resettlement of population in environmental risk areas in the Matanza-Riachuelo river's basin in Buenos Aires. She deepened her training both in field work and academic thought regarding urban concerns in developing countries through the Master in Sciences "International Cooperation and Urban Development" in TU-Darmstadt (Germany) and the Institut d'Urbanisme de Grenoble (France). Her academic production about first hand living experiences in "environmental suffering" in a flammable shantytown (Dock Sud, Buenos Aires) has received awards from several North American and Latin American institutions and inspired a number of public administration interventions in the area. She has learnt from the communities she worked with that the present and future threats facing society will be solved by recovering social networks for and into society. Specifically at a local level, residents of barrios and settlements develop social infrastructure and technological settings to become more resilient to confront climate events. It is her aim to make these strategies visible so they can be useful for other communities in similar conditions.

### **Qian Zhang**

Qian Zhang is Assistant Professor of geography and urbanization at the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. Prior to joining IGSNRR, CAS, she was a Postdoctoral Associate at Yale Urbanization and Global Environmental Change group during 2011-2013. Qian's research is on land use/cover change and land use policy, especially on China's urbanization. Her expertise includes urban remote sensing, spatial econometrics, and spatial-explicit urban modelling.

### **Senior scientists:**

#### **Roberto Sanchez Rodriguez**

Roberto Sanchez-Rodriguez is a Professor at the Department of Urban and Environmental Studies at El Colegio de la Frontera Norte, in Tijuana Mexico. His research focuses on global environmental change, sustainable urban development, transboundary development, urban responses to climate change, and disaster risk prevention and reduction.

#### **Shu-Li Huang**

Shu-Li Huang is a native of Taipei City. Upon receiving a Ph.D from University of Pennsylvania in 1983, he accepted a teaching position with the Graduate Institute of Urban Planning, National Taipei University (Formerly College of Business and Laws of National Chung-Hsing University), Taiwan and has been with the Institute since then. His teaching and research focus includes ecological land use planning, ecological energetic analysis of urbanization, urban simulation, and urban sustainability assessment.

#### **Peter Marcotullio**

Peter Marcotullio is Professor in the Department of Geography, Hunter College, City University of New York (CUNY). Dr. Marcotullio moved into this full-time position from a Hunter College Distinguished Lectureship (2007 – 2009), where he taught in the Department of Urban Affairs and Planning, the Department of Geography and in the CUNY Macaulay Honors College. He is also co-

Director of the Environmental Studies Program at Hunter College and the co-Deputy Director of the CUNY Institute for Sustainable Cities.

### **Darryn McEvoy**

Darryn McEvoy is professor at RMIT University, Melbourne, Australia. A qualified geographer, with an interest in interdisciplinary 'solutions-oriented' action research, Dr Darryn McEvoy's expertise covers climate risk assessment and adaptation, innovative adaptation practice (both institutions and technologies), institutional adaptive management (and adaptation as a process), vulnerability assessment, the building of local adaptive capacity, and the synergies and conflicts between the adaptation and mitigation agendas.

### **Selected as Fellows but unable to attend the seminar:**

#### **Nihan Akyelken**

Nihan Akyelken is a Research Fellow at the Transport Studies Unit in the School of Geography and Environment at Oxford since 2008. Nihan holds a DPhil degree from Oxford University, and undergraduate and master degrees from the LSE in the areas of Economics and Philosophy and European Political Economy. Nihan's research interests span economic and urban geography, political economy and development planning and policy.

#### **Natasha Kuruppu**

Natasha Kuruppu is a climate change adaptation specialist on Small Island Developing States (SIDS) in the Pacific. Her doctoral thesis, which was completed at the Environmental Change Institute at the University of Oxford, England, examined the interactions between climate change and water management systems in both urban and rural settings in the Micronesian atoll nation of Kiribati. Since then, Natasha has continued to lead climate adaptation research projects in Australia. Natasha currently works as a Senior Researcher at the Institute for Sustainable Futures –University of Technology, Sydney Australia where she is a lead thematic researcher on transformational adaptation on a multi-year project focussing on adaptive pathways for communities in urban and rural spaces in the State of New South Wales, Australia (more information [here](#)). She is also working on a project with the International Geosphere Biosphere Program looking at the needs of Least Developed Countries under global environmental change. Here, she leads the synthesis work and policy briefs on SIDS.